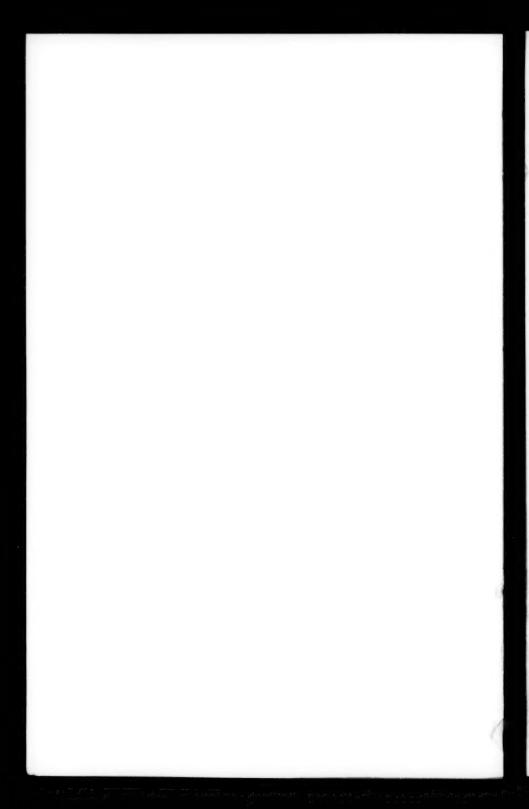
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1996



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FOREWORD

The 1996 ASCE Annual Combined Index provides guide to the material appearing in publications of the American Society of Civil Engineers published during 1996. This includes papers and technical notes from ASCE technical and professional journals, eature and news articles from Civil Engineering-ASCE, Manuals and Reports on Engineering Practice, books, and conference papers appearing in conference publications.

In the subject index, the user will find all articles and papers dealing with specific subject areas listed under one or more appropriate subject headings suggested by the content and

applications of the paper.

The author index contains entries indexed under the names of editors, authors, co-authors, discussers, and committees or task forces preparing reports. Also in the author index, entries are supplemented with information concerning discussions, errata, and closures, if any. (If there is more than one author for the original paper, this supplementary information is given with the entry for the primary author.) To find what discussion, if any, there has been for a paper or article located in the subject index, the user should look under the entry for the first named author of the paper. When a paper from a prior year is discussed, entries for the original paper are repeated in this Index.

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For conference papers appearing in special publications

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For special publications (books)

 Meeting the Challenge: Rebuilding Inner City Airports, 2. Prianka Seneviratne, ed., 3. 1996,
 0-7844-0179-9, 5. 300pp. Title of book, 2. Author(s), editor(s) or corporate author, 3. Year of publication. 4. ISBN
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1. Abdalla, Hany

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 disc: P. A. A. Laura and R. F. Rossi, ST Sept.

6. disc: P. A. A. Laura and R. E. Rossi, ST Sept 96, p.1124 clo: ST Sept 96, p.1124 Author's name. 2. Title of paper. 3. Journal code. 4. Month and year of journal. 5. Pagination.
 Discussion note including author(s) of discussion, journal issue, and pagination.

Sample subject index entries For journal papers, technical notes, and magazine articles

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Abbreviations used in this index

disc-discussion
err-errata
clo-closure
ltr-letter to the editor which does not refer to a previously
published article
ed-editor

Journal Codes

AE Journal of Architectural Engineering

AS Journal of Aerospace Engineering

BE Journal of Bridge Engineering

CE Civil Engineering-ASCE

CF Journal of Performance of Constructed Facilities

CO Journal of Construction Engineering and Management

CP Journal of Computing in Civil engineering

CR Journal of Cold Regions Engineering

EE Journal of Environmental Engineering EI Journal of Professional Issues in Engineering

Education and Practice EM Journal of Engineering Mechanics

ET Emerging Technology

EY Journal of Energy Engineering

GT Journal of Geotechnical Engineering

HE Journal of Hydrologic Engineering

HY Journal of Hydraulic Engineering

IR Journal of Irrigation and Drainage Engineering

IS Journal of Infrastructure Systems

ME Journal of Management in Engineering

MT Journal of Materials in Civil Engineering

NE ASCE News

SC Practice Periodical on Structural Design and

Construction

ST Journal of Structural Engineering

SU Journal of of Surveying Engineering TE Journal of Transportation Engineering

UP Journal of Urban Planning and Development

WR Journal of Water Resources Planning and

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Managing Multi-Degree-of-Freedom Systems in Structural Fuzzy Control, Fabio Casciati and Lucia Faravelli, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p306-309

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A New Semi-Active Control Device for Seismic Response Reduction, S. J. Dyke, B. F. Spencer, Jr., M. K. Sain and J. D. Carlson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p886-889.

Optimal Polynomial Control of Seismically Excited Linear Structures, Anil K. Agrawal and Jann N. Yang, EM Aug.

96, p753-761.

Optimization Sensing and Control in Design of Antennas, Mehdi S. Zarghamee and Joseph Antebi, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p147-153. Robust H. Control Considering Actuator Saturation. I: The-ory, J. Geoffrey Chase and H. Allison Smith, EM Oct.

96, p976-983.

Robust H., Control Considering Actuator Saturation. II: Applications, J. Geoffrey Chase, H. Allison Smith and Tetsuo Suzuki, EM Oct. 96, p984-993.

Rule-Based Control Algorithm for Active Tuned Mass Dampers, Masato Abé, EM Aug. 96, p705-713.

Seismic Active Control by a Heuristic-Based Algorithm, Yu Tang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p232-235.

Su. 1990), p.232-233.
Seismic Response Assessment of Active-Controlled Multi-Story Buildings with Soil-Foundation Influence, F. Y.
Cheng, S. Suthiwong and P. Tian, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p.1155-1163.
Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST
Sapt 94, 62583-2601.

Sept. 94, p.2583-2601.
Simple ATMD Control Methodology for Tall Buildings Subject to Wind Loads, Seshasayee Ankireddi and Henry

T. Y. Yang, ST Jan. 96, p83-91.

Stability of Actively Controlled Civil Engineering Structures with Actuator Saturation, Anil K. Agrawal, Ashish

Das and Jann N. Yang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p756-759.

A Strategy for Active Control of Tall Civil Structures Using Regenerative Electric Actuators, A. C. Nerves and R. Krishnan, (Engineering Mechanics, Y. K. Lin and T.

C. Su, 1996), p503-506.

Structural Control: Basic Concepts and Applications, Y. Fujino, T. T. Soong and B. F. Spencer, Jr., (Building an International Community of Structural Engineers, S. K. International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1277-1287.

Theoretical and Experimental Studies on Hybrid Control of Seismic Structures, F. Y. Cheng, P. Tian, V. Rao, K. Martin, F. Liou and J. H. Yeh, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p322-338.

Time Delayed Control of Classically Damped Structures,

R. Kumar and F. E. Udwadia, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p751-755.

Verifying the Timing Requirements of Multiprocessor Control Systems, John W. Baugh, Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), q278-285.
Vibration Control of Tall Buildings under Seismic and Wind Loads, Lih-Shing Fur, Henry T. Y. Yang and Seshasayee Ankireddi, ST Aug. 96, p948-957.

Active earth pressure

Difference between Load-Transfer Relationships for Laterally Loaded Pile Groups: Active P-Y or Passive P-δ, M. F. Bransby, GT Dec. 96, p1015-1018.

Adaptive systems

BALANCE - A Method for Traffic Adaptive Signal Control Field Trial and Simulation Studies, Bernhard Friedrich and Hartmut Keller, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Comparative Assessment of Prediction Strategies for Adaptive Control, R. Ghanem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p134-137

Evaluation of Vehicle-Specific Information in Traffic Control Systems, Alireza Kamyab, T. H. Maze and Reginald R. Souleyrette, TE Nov/Dec. 96, p421-429.

Gain-Scheduled Adaptive Control of a Hybrid Structure, Moises A. Abraham, James R. Morgan and Alexander G. Parlos, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p260-261.

Multicriteria Traffic Control with Video Feedback, Andrzej Adamski, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996., p620-627.

Parallel Eigenvalue Algorithms for Large-Scale Control-Optimization Problems, A. Saleh and H. Adeli, AS July

96, p70-79.

The Resonance Drives with Adaptive Control, Teodor S. Akinfiev, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p947-950.

Adhesive bonding

Attachment Strength of Zebra Mussels on Natural, Polymeric, and Metallic Materials, Josef Daniel Ackerman, Catherine M. Cottrell, C. Ross Ethier, D. Grant Allen and Jan K. Spelt, EE Feb. 96, p141-148.

Improving the Performance of Epoxy-Coated Rebar, Robert D. Lampton, Jr. and Dieter Schemberger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1209-1218

Pullout Simulation of Postinstalled Chemically Bonded Anchors, Michael McVay, Ronald A. Cook and Kailash Krishnamurthy, ST Sept. 96, p1016-1024.

Reinforced Glued Laminated Timber, Bruce D. Pooley,

P.E., CE Sept. 96, p50-53.

Thermal-Sprayed Zinc Anodes for Cathodic Protection of Reinforced Concrete Structures, B. S. Covino, Jr., S. D. Cramer, G. R. Holcomb, S. J. Bullard, G. E. McGill and C. B. Cryer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1512-1521.

Administration

Electronic Signatures Are Revolutionizing Highway Programs, Michael J. Vecchietti and Lawrence I. Neff, CP Oct. 96, p264-266.

Major Changes to the AAA's Construction Arbitration Rules, George H. Friedman, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p10-20.

On Housing Administration and Legislation of Egypt, A. S. Elnashai and M. M. Soliman, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.. 1997), p280-281.
Optimal Structures for Decentralized Provision of Roads.

Frannie Humplick and Azadeh Moini-Araghi, IS Sept. 96, p127-138.

Scientists Discover New Element, SC May 96, p67-68.

Concrete/Reinforcing Steel Bond Strength of Low-Temperature Concrete, Herbert P. Schroeder and Thom-

as B. Wood, CR June 96, p93-117.

Design and Construction of a Bonded Fiber Concrete Overlay of CRCP, Hadi H. Shirazi, Masood Rasoulian and Bill King, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1647-1658.

Effects of an Extended Set-Control Admixture on the Properties of Fresh and Hardened Concrete, Steven A. Ragar (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1617-1626.

Evaluation of Crumb Rubber (CRM) as a Smart Additive in Asphalt Concrete Mixes, Gary Gowda, Kevin Hall and Robert Elliott, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p612-621. Experimental Study of Durability of Reactive Powder Con-cretes, N. Roux, C. Andrade and M. A. Sanjuan, MT

Feb. 96, p1-6.

Freeze-Thaw Durability of Concrete Cured Below 0°C Using Antifreeze Admixtures, Michael R. Mason and Herbert P. Schroeder, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Impera-tive for the 21st Century, Robert F. Carlson, ed., 1996), p185-195.

High-Strength, Rapid-Setting Concrete with Blended Ce-ment, Billy D. Neeley, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1627-1636. Investigation of Lignite-Based Bottom Ash for Structural

Concrete, Nader Ghafoori and Jeffrey Bucholc, MT Aug. 96, p128-137.

New Applications for Gypsum Products, Semyon Shimano-vich and Christian Meyer, (Materials for the New Millen-

nium, Ken P. Chong, ed., 1996), p1687-1693. No-Fines Concrete Pavements, Nader Chafoori and Shivaji Dutta, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1637-1646.
Progress in Chemical Admixtures: Where Are We?
Mosongo Moukwa, CE Mar. 96, p6.

The Use of Xypex Admixture to Concrete as an Inhibitor to Reinforcement Steel Corrosion, Robert J. Scancella, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1276-1280.

Utilization of Recycled Fibers in Concrete, H. C. Wu, Y. M. Lim, V. C. Li and D. J. Foremsky, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p799-808.

Adrian, Ronald J., Bazant, Zdenek P., Buffington, Jack E., Busch, Paul L., Levy, Matthys P., Marcuson, Wil-liam F., III, Roberts, James E.

Seven ASCE Members Elected to NAE, CE Aug. 96, p67.

Feasibility of Fullerene Waste as Carbonaceous Adsorbent. Theodore G. Cleveland, Sanjay Garg and William G. Rixey, EE Mar. 96, p235-238.

Regeneration of Adsorbents Using Heterogeneous Photoca-talytic Oxidation, Junbiao Liu, John C. Crittenden, David W. Hand and David L. Perram, EE Aug. 96, p707-713.

Adsorption
Desorption of Soil Contaminants Due to Rainwater
Infiltration, Anand Prakash, HY Sept. 96, p523-525.
A Diffusion-Type Adsorption Batch Test Method for Determination of Benzene Adsorption on Regina Clay, Xiao
Zhang, S. Lee Barbour and John V. Headley, (NonAqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p175-186.

ed., 1996), p175-186. Editor's Note, Thomas L. Theis, EE Mar. 96, p168. Editor's Note, Thomas L. Theis, EE Oct. 96, p888. Evaluating Paint-Sludge Chars for Adsorption of Selected Paint Solvents, Byung R. Kim, Edward M. Kalis, Irving T. Salmeen, Carl W. Kruse, Ilham Demir, Stephen L. Carlson and Massoud Rostam-Abadi, EE June 96, p532-

Feasibility of Fullerene Waste as Carbonaceous Adsorbent, Theodore G. Cleveland, Sanjay Garg and William G. Rixey, EE Mar. 96, p235-238.

Intraparticle Mass Transport Mechanism in Activated Carbon Adsorption of Phenols, E. G. Furuya, H. T. Chang, Y. Miura, H. Yokomura, S. Tajima, S. Yamashita and K. E. Noll, EE Oct. 96, p909-916.

Model of Electrodialysis Process Associated with Organic Adsorption, Thawach Chatchupong and Robert J. Mur-

phy, EE Feb. 96, p154-161.

Niche for Steam Stripping in Treating Dilute SOC-Contaminated Waters, Bruce I. Dvorak, Desmond F. Lawler and Gerald E. Speitel, Jr., EE Sept. 96, p871-874.

Predicting Dynamic Response of Adsorption Columns with Neural Nets, Imad A. Basheer and Yacoub M. Najjar, CP

Jan. 96, p31-39.

Rational Design and Operation of Packed Bed Adsorption Reactors, Federico G. A. Vagliasindi and David W. Hen-dricks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p553-558.

Removal of Arsenic From Ground Water Using Granular Activated Carbon, Brock D. Buche and Lawrence P. Owens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1173-1177.

Selection Among Aqueous and Off-Gas Treatment Technologies for Synthetic Organic Chemicals, Bruce I. Dvorak, Christopher J. Herbeck, Claire P. Meurer, Desmond F. Lawler and Gerald E. Speitel, Jr., EE July 96,

Shock and Transient Loading on Anaerobic Reactor Coup-led with Adsorber, Peter Fox and Makram T. Suidan, EE

Jan. 96, p18-24.

Studies on Herbal Desalination, Godavarthy Ramprasad and Varanasi Kaliprasad, (North American Water and Environment Congress & Destructive Water, Chen-

Environment Congress & Destructive water, Chen-chayya Bathala, ed., 1996), p1015-1020.

Surface Thermodynamics of an Organoclay, Muniram Budhu and Rossman Giese, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p17-30.

Transport and Sorption of Water Vapor in Activated Car-bon, Tsair-Fuh Lin and William W. Nazaroff, EE Mar.

96, p176-182.

Treatability of s-Triazine Herbicide Metabolites Using Powdered Activated Carbon, Craig D. Adams and Tam-my L. Watson, EE Apr. 96, p327-330.

Treatment of Metal Industrial Wastewater by Fly Ash and Cement Fixation, C. H. Weng and C. P. Huang, EE Nov./Dec. 94, p1470-1487.

Advective-Diffusive Contaminant Migration in Unsaturated Sand and Gravel, R. Kerry Rowe and K. Badv, GT Dec.

96, p965-975.

BAYMAP: A Simplified Embayment Flushing and Transport Model System, J. Craig Swanson and Daniel Mendelsohn, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p570-582.

Chaotic Advection in a Bioengineering System, Ahmet C. Omurtag, Victor Stickel and Rene Chevray, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p450-453

Conservative Characteristics-Based Schemes for Mass Transport, C. W. Li and T. S. Yu, HY Sept. 94, p1089-

Modeling Low Velocity/High Dispersion Flow in Water Distribution Systems, David H. Axworthy and Bryan W.

Karney, WR May/June 96, p218-221.

Simulating the Transport of an Algae Bloom off the West Coast of Vancouver Island, M. G. G. Foreman, J. F. R. Gower, R. E. Thomson and J. Y. Cherniawsky, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and

Ralph T. Cheng, 1996), p180-191.

Solution of the Advection-Dispersion Equation: Continuous Load of Finite Duration, Robert L. Runkel, EE Sept. 96,

p830-832

Aeration

Aerated Concrete Finds First U.S. Commercial Application, CE June 96, p14.

Aeration of Reservoirs and Releases TVA Porous Hose Line Diffuser, Mark H. Mobley and W. Gary Brock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1311-1316.

piji1-1316.
Bubbleless Fiber Aerator for Surface Waters, Peter T.
Weiss, Bryan T. Oakley, John S. Gulliver and Michael J.
Semmens, EE July 96, p631-639.
Corrosion Control of Drinking Water Using Tray Aerators,
Enrique J. La Motta and Srinivas Chinthakuntla, EE July 96, p640-648.

90, po40-048.
90, po40-048.
Eliminating Backflow in Retrofit BNR Systems, Gregory J. Daviero and Terry W. Snarm, EE Oct. 96, p950-954.
The Importance of Water Depth for Sparger Performance, Charles Clauss, John S. Gulliver and Steven C. Wilhelms, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1305-1310.

Modification of Design Approach to Aerated Lagoons, Lin-vil G. Rich, EE Feb. 96, p149-153. Performance Evaluation of the Aeration Curtain at Hill Air

Force Base, Utah, Paul R. Bitter and David A. Hoffman, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface En vironment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p776-787.

Recreational Impoundments Retrofit of Existing and Design of New Facilities, Dream L. Atallah and Michael P. Ru-dinica, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2945-2950.

A Technique for the Direct Measurement of the Aerated Zone Resulting from Field Air Sparging Operations, Lee D. Morton, Ron W. Falta, David S. Henderson and Chris A. Kern, (Non-Aqueous Phase Liquids (NAPLs) in Sub-

A. Kern, (Non-Aqueous Phase Liquids (NAPLs) in Sub-surface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996, p127-138. Wastewater Treatment Facility Aeration Project, Gary L. Eddy, (Cold Regions Engineering: The Cold Regions In-frastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996, p506-517. Weir Aeration: Models and Unit Energy Consumption, Ning H. Tang, N. Nirmalakhandan and R. E. Speece, EE Feb. 95, p196-199.

Aeration tanks

Changes in Bacterial Aerosols with Height Above Aeration Tanks, Bernard Sawyer, K. C. Rao, Parnell O'Brien, Gilbert Elenbogen, David R. Zenz and Cecil Lue-Hing, EE May 96, p368-373.

Editor's Note, Thomas L. Theis, EE May 96, p340.

Optimal Geometric Shape of a Surface Aeration Tank, Achanta Ramakrishna Rao and U.S Laxmi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p800-805.

relation Designs for Environmental Protection— Application in India, Subijoy Dutta, Dennis A. Haag and Jon B. Kraft, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3722-3727.

Corrosion Control of Drinking Water Using Tray Aerators, Enrique J. La Motta and Srinivas Chinthakuntla, EE July 96, p640-648.

Aerial photographs Supermaps Help Fight Fires, CE Dec. 96, p20.

Aerial photography Photogrammetric Mapping, U.S. Army Corps of Engineers, 1996, 0-7844-0143-8, 332pp.
Remote Sensing of the Polish Coasts Morphology, Kazimierz Furmańczyk and Stanisłław Musielak, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1018-1023.

Aerobic processes

Model for Effective Diffusivities in Aerobic Biofilms,
Roger K. Hinson and Walter M. Kocher, EE Nov. 96, p1023-1030.

Parametric Sensitivity of Comprehensive Model of Aerobic Fluidized-Bed Biofilm Process, A. B. Shahalam, R. El-Samra, G. M. Ayoub and A. Acra, EE Dec. 96, p1085-

Aerobic treatment

Aerobic treatment
Modeling Bacterial Decay Coefficient During SSDML
Process, T. R. Sreekrishnan, R. D. Tyagi, J. F. Blais, N.
Meunier and P. G. C. Cambell, EE Nov. 96, p995-1002.
Oxygen Transfer Efficiency in Small Diffusers, Mark A.
Tumeo and Tamar J. Stephens, EE Jan. 96, p55-57.
Oxygen Utilization of Trickling Filter Biofilms, Steven W.
Hinton and H. David Stensel, EE Sept./Oct. 94, p1284-

1297

Titusville Cleans Up, CE Aug. 96, p18,20.

Aerodynamic forces

Adhesion and Aerodynamic Resuspension of Fibrous Parti-cles, Nurtan A. Esmen, EE May 96, p379-383.

The Aerodynamic Forces on Low-Rise Structures: The Effects of Incident Turbulence, H. W. Tieleman, M. R. Hajj and T. A. Reinhold, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p975-978.

Aerodynamics

Aerodynamic Considerations for Rooftop Helideck Design, César Farell and M. Mohamed Sitheeq. (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl 245-1251.

Analytical Solution for Galloping Oscillations, Mykhaylo I. Kazakevych and Oleksiy H. Vasylenko, EM June 96, p555-558.

p555-558. Coupled Flutter and Buffeting Analysis of Long-Span Bridges, Anurag Jain, Nicholas P. Jones and Robert H. Scanlan, ST July 96, p716-725. A Finite Element Model for the Aeroelasticity Analysis of Hypersonic Panels, Part II: Determination of Flutter Boundary, Ji Y. Shen and Lonnie Sharpe, Jr., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1148-1154. [Jennifecting of Aeroelynamic Indicial Functions Partha P. Johnson, ed., 1996].

Jonnson, ed., 1790, p.148-1134. Identification of Aerodynamic Indicial Functions, Partha P. Sarkar and Mehmet Metin Kose, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p.1127-1130. Mechanism of Bluff Body Aerodynamics and Its Stabiliza-

tion, Masaru Matsumoto and Fumitaka Yoshizumi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p74-77.

Numerical Modeling of Wind-Structure Interactions, Da-

Numerical Modeling of Wind-Structure Interactions, Dahai Yu and Ahsan Kareem. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1005-1012.
Random Fields and Airplane Loads, Ludomir M. Laudanski, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p684-687.

The Response of Long Span Bridges to Wind Action, Robert L. Wardlaw, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p66-69.

Structural Aerodynamics (Available only in Focus on Structures Special Edition), Bob Lang and Hugh Muir-

head, CE Jan. 96, p3A-7A.

Wind-Induced Accidents of Train/Vehicles and their Countermeasures, Tatsuo Maeda, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p70-73.

Coupled Flutter and Buffeting Analysis of Long-Span Bridges, Anurag Jain, Nicholas P. Jones and Robert H. Scanlan, ST July 96, p716-725.

Identification of Aerodynamic Indicial Functions, Partha P. Sarkar and Mehmet Metin Kose, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1127-1130.

Identification of Vortex-Induced-Response Parameters in Time Domain, Himanshu Gupta, Partha P. Sarkar and Kishor C. Mehta, EM Nov. 96, p1031-1037.

Medical-Technical Problems of Human Protection, Victor S. Koscheyev, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1002-

Octave Chanute: One of the First in Flight, David T. Biggs, NE Feb. 96, p15.

Aerosols

Changes in Bacterial Aerosols with Height Above Aeration Tanks, Bernard Sawyer, K. C. Rao, Parnell O'Brien, Gilbert Elenbogen, David R. Zenz and Cecil Lue-Hing, EE May 96, p368-373.

Measurement of Indoor Bioaerosol Levels by a Direct Counting Method, Demetrios J. Moschandreas, Daniel K. Cha and Jon Qian, EE May 96, p374-378.

Thermal Response of Bare Steel Roof Assemblies to Fire Environments in Aerosol Storage Facilities, S. P. Hunt, J. L. Scheffey and R. G. Gewain, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p365-372.

Aerospace engineering

Editorial, Manohar P. Kamat, AS July 96, p63.

Free Vibration of Stiffened Composite Laminates, Meiwen Guo and Issam E. Harik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1163-1166.

Launch Vibration Isolation System, Eugene R. Fosness, Rory R. Ninneman, Paul S. Wilke and Conor D. Johnson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p228-231.

p228-231.

Mechanical Response of Woven Graphite/Copper Composites, Brett A. Bednarcyk, Christopher C. Pauly and Charles, Y. K. Marek-Jerzy Pindera, (Engineering Mechanics, Lin and T. C. Su, 1996), p628-631.

Probabilistic Finite Element Analysis of Aerospace Structures, M. R. Khalessi, H.-Z. Lin, T. Y. Torng, Y. Zhang and A. D'Angelo, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p648-651

Reliability/Cost of Adaptive Intraply Hybrid Fiber Composite Structures, Christos C. Chamis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p644-647.

Shape Memory Release Device Experiment, Bernie F. Carpenter, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p76-79.

Structural Redundancy and Fracture in Composite Lattice/ Skin Structures, A. K. Maji, E. Fosness and D. Satpathi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p641-644.

Aerospace industry

Health Monitoring Studies on Composite Structures for Aerospace Applications, George James, Dennis Roach, Bruce Hansche, Raul Meza and Nikki Robinson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1127-1133. Terrestrial Applications of a Composite Lattice Space Structure, Arup K. Maji, Keith Donnelly and Michelle Salas, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1122-1126.

Aerospace transport
Artificial Gravity, Zachary Zutavern, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1315-1318.

Discovery of Abundant, Accessible Hydrocarbons Nearly Everywhere in the Solar System, A. Zuppero, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p791-799.

Japanese Rocket Society's Space Tourism Study Program, Patrick Collins, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p399-

Microgravity's Effects on the Muscular System of the Human Body, Susie Newton, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1298-1302.

Sea Launch: Commercial Launch Competitiveness, Derek E. Lang, Darrel L. Choate and Marcus L. Nance, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p419-425.

Space Applications of Surplus Ballistic Missiles, Matthew A. Bille, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p406-412.

Space Sickness, Thienga Nguyen, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1303-1306.

Analysis of Exceptional Meteorological Conditions on July and August in Conakry, Mamadou Tounkara, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl 144.

Better Management in the Water Supply Sector Through Indigenous Institutions, Paula Donnelly-Roark, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2970-2975.

Effective Management and Control of Urban Flood Disasters in West Africa, S. O. Ojo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3705.

Environmental Improvement in Southern Africa, Daniel P. Miller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1069-1074.

Water Balance of the Niger Basin, D. R. Maidment, F. Olivera, Z. Ye, S. M. Reed and D. C. McKinney, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3411-3416.

Aggradation
Calibration of Sediment Transport Model for the Upper
End of Elephant Butte Reservoir, Mohammed A. Samad,
Drew C. Baird and Frank P. Montoya, (North American
Water and Environment Congress & Destructive Water,
Chenchayya Bathala, ed., 1996), p2288-2293.

Aggregate gradation

Performance of Hot Mix Asphalt Using Coarse and Skip Graded Aggregates, Moses Karakouzian, Michael R. Dunning, Robert L. Dunning and Jerold D. Stegeman, MT May 96, p101-107.

ASR Behavior of Class C Fly Ash Modified Cement, Anil Misra, H. P. Niu, Bryan R. Becker and Jinshi Liu, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p348-355.

Behavior of Crumb Rubber Modified Hot Mix Asphalt, Anil Misra, H. P. Niu and Yi-Herng Lee, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p144-

Composite Action of Foamed and Lightweight Aggregate Concrete, Yasser M. Hunaiti, MT Aug. 96, p111-113.

Constitutive Relationships of Mortar-Aggregate Interfaces in High Performance Concrete, Oral Büyüköztürk and Brian Hearing, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p452-461.

The Effect of the Interfacial Transition Zone on Concrete Properties: The Dilute Limit, E. J. Garboczi and D. P. Bentz, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1228-1237.

Effect of Transition Zone on the Pre-Peak Mechanical Behavior of Mortar, G. Ramesh, E. D. Sotelino and W. F. Chen, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1238-1245.

Fractals of Aggregates Correlated with Creep in Asphalt Concrete, Mohan Yeggoni, Joe W. Button and Dan G. Zollinger, TE Jan./Feb. 96, p22-28.

Improving the Ductility of High Performance Concrete Through Mortar-Aggregate Interfaces, Oral Büyüköztürk and Brian Hearing, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1337-1346.

Investigation of Lignite-Based Bottom Ash for Structural Concrete, Nader Ghafoori and Jeffrey Bucholc, MT Aug.

96, p128-137.

90, p128-137.
A Micromechanical Model for Asphalt Materials, C. A. Plaxico, W. Uddin and R. M. Hackett, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p761-770.
Performance of Hot Mix Asphalt Using Coarse and Skip Graded Aggregates, Moses Karakouzian, Michael R. Dunning, Robert L. Dunning and Jerold D. Stegeman, MT May 96, p101-107.
Physichopyusym Slas Aggregate, Based Asphaltic Concrete

Phosphogypsum Slag Aggregate-Based Asphaltic Concrete Mixes, Paul T. Foxworthy, Raju S. Nadimpalli and Roger K. Seals, TE July/Aug. 96, p300-307.

Premature Deterioration of Concrete Structures-Case Study, Ishtiaque Ahmed and M. Zakaria Ahmed, CF Nov. 96, p164-170.

State-of-the-Art of Roller Compacted Concrete Pavement, Kwabena Ofori-Awuah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1439-1448.

Use of Recycled Aggregates for Pavement, S. Abdol Chini, Timothy J. Sergenian and Jamshid M. Armaghani, (Ma-terials for the New Millennium, Ken P. Chong, ed., 1996), p154-162.

Aggregation

Disaggregation Modeling Process for Climatic Time Series, Susan Firor, Brad A. Finney, Robert Willis and John A. Dracup, WR May/June 96, p205-212.

Reaction Products Formed in Lime-Stabilized Marine Clays, S. Narasimha Rao and G. Rajasekaran, GT May 96, p329-336.

Aging

Age, Deformation, and Temperature Effects of Viscoelastic Materials Under Large Deformations, Ashok Gurjar, Tianxi Tang, Dan Zollinger and Kenneth Slavick, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1398-1407.

Aging and Low-Temperature Cracking of Asphalt Concrete Mixture, Julie E. Kliewer, Huayang Zeng and Ted S. Vinson, CR Sept. 96, p134-148.

Aging Effects on Temperature Susceptibility of Polymer Modified Asphalts, Shin-Che Huang, Jung-Do Huh, Raymond E. Robertson and Mang Tia, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1367-1378.

Comparative Analysis of Bridge Superstructure Deteriora-tion, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136.

Computational Modeling of Early Age HPC, Rob ter Steeg, Jan Rots and Ton van den Boogaard, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p542-553.

Dynamic Mechanical Properties of SBR Modified Asphalt, Fariborz Gahvari and Imad L. Al-Qadi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p133-

Laboratory Aging Methods for Simulation of Field Aging of Asphalts, Shin-Che Huang, Mang Tia and Byron E. Ruth, MT Aug. 96, p147-152.

Probabilistic Simulation of Decomposition of Liquid Propellant, N. R. Moore, N. W. Ferraro, D. H. Ebbeler, L. E. Newlin, J. J. Blandino, R. A. Beaudet, C. M. Moran and S. H. Moore, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p640-643.

Reliability Framework for Managing Risk of Aging Struc-tures, Bruce Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, p590-597.

Setup and Relaxation in Glacial Sand, Donald L. York, Walter G. Brusey, Frank M. Clemente and Stephen K. Law, GT Sept. 94, p1498-1513.

Agreements
ASCE and American Red Cross Sign Pact on Disaster Aid, NE Oct. 96, pl.

The Importance of Contract Clarity Clarified, Michael C. Loulakis and William L. Cregger, CE Mar. 96, p32. An Irresistible Offer, Max D. Crumit, P.E., Wafic M. Arnoush, P.E. and Scott L. Montgomery, P.E., CE Aug. 96, p40-43.

Mediation Does Not Abrogate Arbitration, CE Oct. 96, p30. NAFTA Pact May Change as U.S. Engineers Mull Licens-ing Details, NE May 96, p16.

Agricultural economics

Economic Incentives Encourage Improvements In Farm-Economic Incentives Encourage Improvements in rarm-Level Water Management Practices, David Cone, Laurie Houston and Dennis Wichelns, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p406-411. Optimum On-Farm Irrigation Efficiency for Sustainable Agriculture, B. Davidoff, E. Craddock, M. Roos and F. Karajeh, (North American Water and Environment Con-terness & Destructive Water, Chenchayva Bathala, ed.

gress & Destructive Water, Chenchayya Bathala, ed., 1996), p189-194.

Planning Biosolids Land Application Rates for Agricultural Systems, David M. Crohn, EE Dec. 96, p1058-1066. Precipitation and Water-Table Effects on Agricultural Pro-

duction and Economics, Jorge A. Ramírez and Bryce Finnerty, IR May/June 96, p164-171.

Research Agenda on Sustainability of Irrigated Agriculture, Luis S. Pereira, James R. Gilley and Marvin E. Jensen, IR May/June 96, p172-177.

Agricultural engineering
Current Status of the Demonstration Management Improvement Program, G. J. Butler and R. E. Ware, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3476-3479. Integrated Resources Management for Irrigated Agriculture: Practical Lessons in Water Management and Congression from the Artisona Management Improvement

servation from the Arizona Management Improvement Program, Thomas Carr, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3486-3489.

The Management Improvement Program: A Model to Improve the Performance of Irrigated Agriculture, A. R. Dedrick, E. Bautista and S. A. Rish, (North American Water and Environment Congress & Destructive Water,

Chenchayya Bathala, ed., 1996), p3470-3475.
The Management Improvement Program: An Irrigation District's Perspective of the Demonstration Program, Brian M. Betcher and Gary Sloan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3480-3485.

Regional Economic Impacts of a Land Fallowing Program
-- The Palo Verde Test Land Fallowing Program Case Study, Fadi Z. Kamand, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4030-4035.

Agricultural wastes

These Straw Houses Won't Blow Down, CE Nov. 96, p13-

Agricultural watersheds

Alachlor Transport in Laboratory Soil Columns, Mutasem El-Fadel, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p1999-2004.
BMP for Control of Agricultural Nonpoint Source Flow, E.
K. O'Brien and J. C. Guitjens, (North American Water

K. Destructive Water Chem.

and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1489-1494. A DEM Based Hydrologic and Sediment Transport Model, Menghua Wang and Allen Hjelmfelt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2695-2700. Effect of Surface Water and Ground Water Interaction on Atrazine Transport to Pumping Wells, Chittaranjan Ray, David Soong, Deva K. Borah and George R. Roadcap, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Effects of Spatial Data Resolution and Subarea Size on a Distributed Runoff Model, Thomas A. Seybert and Chin Y. Kuo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2701-2706.

An Evaluation of Drainage Conditions in the San Joaquin Valley, M. Manucher Alemi and George Nishimura, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p177-182.

Impact of Agricultural Water Conservation on Water Quali-ty in Arid Irrigated Areas, James E. Ayars, Kenneth K. Tanji and Thomas J. Trout, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p905-910.

Modeling of Rattlesnake Creek Watershed Using "Swat" Model, S. R. Ramireddygari, J. K. Koelliker and R. S. Govindaraju, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3241-3246.

Non-point Source Policies for Agricultural Drainage, Dennis W. Westcot, Joe Karkoski and Rudy Schnagl, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p875-880.

Regional Economic Impacts of a Land Fallowing Program

-- The Palo Verde Test Land Fallowing Program Case Study, Fadi Z. Kamand, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4030-4035.

A Regional Management Plan to Improve Water Quality in the Grassland Basin, Dennis Wichelns, Laurie Houston, Dan Nelson and Joseph McGahan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p655-660.

Simulating Atrazine Transport with HSPF in an Agricultural Watershed, Anne-Marie Laroche, Jacques Gallichand, Robert Lagacé and Alain Pesant, EE July 96, p622-630.

Use of Artificial Neural Networks for Agricultural Chemi-cal Assessment of Rural Private Wells, Chittaranjan Ray and Kristopher K. Klindworth, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1687-1692.

Agroforestry as a Method of Salt and Selenium Manage ment on Irrigated Land in the San Joaquin Valley, Rebecca F. Muñoz and Vashek Cervinka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p400-405.

Analysis of Long-term Supply-demand Planning of Water Resources in Taiwan, Shiang-Kueen Hsu, Nien-Sheng Hsu and William W-G. Yeh, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3153-3157.

Challenges and Opportunities in Egypt's Integrated Water Resources Strategy, Mona El-Kady, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1051-1056.

Climate Variability Impact on the Water Resources of Ancient Andean Civilizations, Kenneth R. Wright, John A. Dracup and Jonathan M. Kelly, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1840-1845.

CO₂ and Temperature Effects on Evapotranspiration and Irrigated Agriculture, Jorge A. Ramírez and Bryce Finnerty, IR May/June 96, p155-163.

Drainage Recirculation Project for Water Quality, Kevin Johansen and Robert Stoddard, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl 105-1110.

Eastern San Joaquin County Groundwater Management, Monique B. Magolske and Miguel A. Marino, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2781-2786.

Eastern San Joaquin County Groundwater Resource Planning Model Development and Calibration, Najmus Sa-quib, Young Yoon and Mike Cornelius, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3509-3514.

Economic Issues Regarding Water Quality Objectives in the Grassland Basin, Dennis Wichelns and Laurie Houston, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Efficiencies of Drainage Systems and Improved Water Management, I. C. Tod and M. E. Grismer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2136-2144.

Inundation Studies in Case of Failure of King Talal Dam, Ahmed Kassem, M. Hanif Chaudhry and Muhammad R. Shatanawi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1924-1929.

Response to Floods and Mitigation Measures in Bangla-desh, Paul Thompson and Mustafa Alam, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p103-104.

Sources and Circulation of Salt in the San Joaquin River Basin, Leslie F. Grober, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p649-654. Southern San Joaquin Drainage Water Management, Doug-las E. Davis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p382-387.

Vulnerability of Water Resources to Global Climate Change in the Agricultural Midwest- Ecological, Economic, and Regulatory Aspects, J. Wayland Eheart and Edwin E. Herricks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2145-2150.

Water Resources Investigation Along Salt River in Phoenix and Tempe Area, James Chieh, Jody Fischer and Dennis Marfice, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p1399-1405.

Zoning is Arbitrary, CE Apr. 96, p28.

Editor's Note, Thomas L. Theis, EE Dec. 96, p1049.

Planning Biosolids Land Application Rates for Agricultural Systems, David M. Crohn, EE Dec. 96, p1058-1066.

Air conditioning

Postoccupancy Indoor Environmental Quality Evaluation of an Institutional Building, Brian A. Rock, P.E. and Craig A. Hillman, AE Sept. 96, p88-94.

Frost Resistance of Roller-Compacted High-Volume Fly Ash Concrete, Michael Pigeon and V. Mohan Malhotra, MT Nov. 95, p208-211.

Air Convection Embankments for Roadway Construction in Permafrost Zones, Douglas J. Goering, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p1-12.

Analysis of Air Permeability Tests at Yucca Mountain, Nevada, Dave O. Cox and Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p160-162.

Analytical Solution for Galloping Oscillations, Mykhaylo I. Kazakevych and Oleksiy H. Vasylenko, EM June 96, p555-558

Another Person Cures Galloping, Ray G. Barney, CE June 96, p27-28.

Applications of CFD Flow Modelling in Building Design, J. R. Sinclair, P. A. Irwin, K. M. Matsui, M. Vanderheyden and F. Kriksic, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p997-1004.

Atmospheric Flow Indices and Interannual Great Salt Lake Variability, Young-Il Moon and Upmanu Lall, HE Apr. 96, p55-62.

A Finite Element Model for the Aeroelasticity Analysis of Hypersonic Panels, Part II: Determination of Flutter Boundary, Ji Y. Shen and Lonnie Sharpe, Jr., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1148-1154.

Natural Ventilation of an Exothermic Waste Repository, George Danko and Steven Saterlie, (High Level Radioac-tive Waste Management, Technical Program Committee,

1996), p426-428.

Numerical Simulation of Flow Field Around Buildings, Da-hai Yu and Ahsan Kareem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p490-493.

A Radiological Disadvantage for Siting a Repository at Yucca Mountain, Peter Spiegler, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p178-180.

Air Force

Air Force Cadets Learn while Doing, NE Feb. 96, p9.

Innovative Bioventing System Construction/Operation in Cold Regions, Kimberly K. Stricklan and Randall L. Mattzela, (Cold Regions Engineering: The Cold Regions Infrastructure—An International imperative for the 21st Century, Robert F. Carlson, ed., 1996), p351-359.

Air Sparging Experiments on a Two Dimensional Sand Box with DNAPLs: Multiphase Investigation with Electrical Impedance Tomography, Jong Soo Cho, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p369-380.

Analysis of Air Permeability Tests at Yucca Mountain, Nevada, Dave O. Cox and Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p160-162.

Ground-Water Treatments Gain Ground, Rafat A. Abbasi,

CE Feb. 96, p53-55.

Numerical Simulation of Field Air Sparging Operations, Andrew G. Larson and Ronald W. Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Asand Remediation, Lakshmi N. Reddi, ed., 1996), p551-562.

Performance Evaluation of the Aeration Curtain at Hill Air Force Base, Utah, Paul R. Bitter and David A. Hoffman, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p776-787.

Review of Factors Affecting In Situ Air Sparging, Daniel M. Baker and Craig H. Benson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p292-

A Technique for the Direct Measurement of the Aerated Zone Resulting from Field Air Sparging Operations, Lee D. Morton, Ron W. Falta, David S. Henderson and Chris A. Kern, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p127-138.

Automobile Emissions Under Arctic Conditions Using Unleaded and 10 Percent Ethanol Admixed Gasolines, R. J. Andres, J. D. Goldbach and F. L. Williams, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p792-803.

Computerized I&M Programs for Oil-Fired Space Heating Boilers, Alexander P. Economopoulos, EY Aug. 96,

p61-74.

Energy from Paper Sludge: Criteria and Hazardous Air Pol-lutants, Amy K. Zander, Thomas L. Theis and Michael Brennan, EE Aug. 96, p758-760.

Engineering Model for Fixed-Film Bioscrubbers, Hanneke F. Ockeloen, Thomas J. Overcamp and C. P. L. Grady,

Jr., EE Mar. 96, p191-197

Production of Nitrous Oxide Gas under Sequencing Batch Reactor System, Cheng-Nan Chang, Jih-Gaw Lin, Jin-Yuan Chen and Fong-Bing Hsu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p782-787.

Risk Assessment of Vapors in Cold Regions, Robert A. Perkins, (Cold Regions Engineering: The Cold Regions

Perkins, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p360-371.Source Apportionment Study of Nitrogen Species Measured in Southern California in 1987, Meng-Dawn Cheng, Ning Gao and Philip K. Hopke, EE Mar. 96, p183-190.Volcanic Hazards and Aviation Safety, Thomas J. Casadevall, Theodore B. Thompson and John W. Ewert, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p363-364.

Air pollution control

Air pollution control
Cool Roofs and Pavements to Help Hot Smoggy Cities, Arthur H. Rosenfeld, Hashem Akbari, Haider Taha and
Melvin Pomerantz, (Materials for the New Millennium,
Ken P. Chong, ed., 1996), p1-13.
Critical Issues in the Monitoring and Control of Toxic Air
Contaminants at POTWs, Federico G. A. Vagliasindi and

Vincenzo Belgiorno, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p81-86.

VOC Inventory at New York City Wastewater Treatment
Plants, Richard Pope, Bert Aubrey and Demetrios Moschandreas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p75-80.

Air quality
Air Quality at a Zinc/Lead Mine in Arctic Alaska, Charlotte MacCay and Jack Coutts, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p804-815.

1990, p804-813.
Environmental Linkages between Urban Form and Municipal Solid Waste Management Infrastructure, Tony Di Nino and Brian W. Baetz, UP Sept. 96, p83-100.
Indoor Air Quality Cost Comparisons in Three Typical Buildings, Peter Rojeski, Jr. and Harmohindar Singh, AE

Sept. 96, p107-114.

Indoor Environmental Quality Needs Warrant Multi-Faceted Actions, David A. Harris, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p77-83.

Wind Tunnel Modeling of Atmospheric Dispersion in the Vicinity of Buildings, P. Saathoff, H. Wu and T. Statho-poulos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1131-1134.

Air quality standards

Marine Engines Emissions for Vessels of the United States Coast Guard, Zoltan C. Mester, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3355-3356.

Air stripping Ground-Water Treatments Gain Ground, Rafat A. Abbasi,

CE Feb. 96, p53-55.

The Importance of Water Depth for Sparger Performance, Charles Clauss, John S. Gulliver and Steven C Wilhelms, (North American Water and Environmen Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1305-1310.

Niche for Steam Stripping in Treating Dilute SOC-Contaminated Waters, Bruce I. Dvorak, Desmond F. Lawler and Gerald E. Speitel, Jr., EE Sept. 96, p871-874.

Selection Among Aqueous and Off-Gas Treatment Tech-nologies for Synthetic Organic Chemicals, Bruce I. Dvorak, Christopher J. Herbeck, Claire P. Meurer, Desmond F. Lawler and Gerald E. Speitel, Jr., EE July 96, p571-580.

Water-Treatment Plant Helps Clean the Air of Jupiter, CE Mar. 96, p82.

Air temperature

Probability Distributions Used in 100-Year Return Period of Air-Freezing Index, Peter M. Steurer, CR Mar. 96, p25-35.

Air traffic

A Decision Support System for Minimizing the Distur-bance of Airfield Construction (SFIA Case Study), Adib Kanafani and Manar Shami, (Meeting the Challenge: Re-building Inner City Airports, Prianka Seneviratne, ed., 1996), p234-245.

Enhanced Movements Estimation Methods for High Resolution Airport Surface Radar Images, P. F. Pellegrini, A. Boccellari, E. Piazza and R. Valenti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p92-98

The EURATN Project, Jean-Michel Crenais, (Applications of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi,

ed., 1996), p159-165.

No More Flapping in the Wind, CE Aug. 96, p14.

Operation of Airport Security Checkpoints Under Increased Threat Conditions, Christopher A. Chung and Hidayat Nyakman, TE July/Aug. 96, p264-269.

Start-Ups, CE Feb. 96, p8.

Toward a Generic Kernel for Air Traffic Management System, C. Dujardin, G. Joly, D. Hollinger and O. Palmade, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p87-91.

Air transportation

Air Transportation: A Systems Approach, Harry A. Kinnis-on, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p246-253.

Grounded by History: Airports and Historic Resources, Charlene K. Roise, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996),

p223-233

Methodological Framework for Air-Travel Demand Fore-casting, Matthew G. Karlaftis, Konstantinos G. Zografos, Jason D. Papastravrou and John M. Charnes, TE Mar./ Apr. 96, p96-104.

Perspectives of Rebuilding Inner City Airports in the Emerging Post-Soviet Environment, V. L. Khazanet, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p34-44.

Solving Aviation and Intermodal Transportation Related Issues — "A New Prototype for the 21st Century", Clifford Bragdon and Carl Berkowitz, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p212-222.

Volcanic Hazards and Aviation Safety, Thomas J. Casadevall, Theodore B. Thompson and John W. Ewert, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p363-364.

Ground and Airborne Magnetic and Electromagnetic Surveys at a Hazardous Waste Site, Jonathan E. Nyquist, Les P. Beard and Don Johnson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p1-

Active Vibration Control of Double Wall Composite Shells to Random Inputs, Chen-Ying Wang and Rimas Vaicai-tis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p842-845.

1990), pea2-843.
Aerodynamic Considerations for Rooftop Helideck Design, César Farell and M. Mohamed Sitheeq, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1245-1251.
A Corotational Total Lagrangian Finite Element Analysis with Application to the Aircraft Tire, James M. Greer, Jr. and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1108-1114.

1990), p1108-1114.
Health Monitoring Studies on Composite Structures for Aerospace Applications, George James, Dennis Roach, Bruce Hansche, Raul Meza and Nikki Robinson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1127-1133.

W. Johnson, ed., 1990), p1127-1153.
The Importance of Maintaining Smooth Airport Pavements,
Tony Gerardi, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p295-305.

Random Fields and Airplane Loads, Ludomir M. Laudan-ski, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p684-687.

Volcanic Hazards and Aviation Safety, Thomas J. Casade-vall, Theodore B. Thompson and John W. Ewert, (Natu-ral Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p363-364.

Aircraft technology

Arcraft technology Using Fuzzy Logic in Aircraft Navigation Systems, A. Lopes Pereira, A. K. Achaibou and F. Mora-Camino, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p99-103.

Airfields

Airfield Pavement Reconstruction at DFW International Airport, Dwain K. Brown and Darryl Boyd, (Meeting the Airport, Dwain K. Brown and Darryi Boyd, orseeting ine Challenge: Rebuilding Inner Cir Airports, Prianka Seneviratne, ed., 1996), p140-150. Apron Reconstruction at Kansas City International Airport, John R. Anderson and Renita M. Mollman, (Meeting the

John R. Anderson and Remta M. Monthan, Owering ine Challenge Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p158-169. A Decision Support System for Minimizing the Distur-bance of Airfield Construction (SFIA Case Study), Adib Kanafani and Manar Shami, (Meeting the Challenge: Re-building Inner City Airports, Prianka Seneviratne, ed., 1996), p234-245.

Frost Action, Dennis E. Pufahl, (Roads and Airfields in

Frost Action, Dennis E. Putahl, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p57-86.
Low Temperature Cracking and Rutting in Asphalt Concrete Pavements, Ted S. Vinson, R. Gary Hicks and Vincent C. Janoo, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Marchell 1990, 2023. Haas, ed., 1996), p203-248.

Haas, ed., 1990), p203-246. Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996, 0-7844-0179-9, 300pp. Moisture-Induced Pressures in Concrete Airfield Pavements, C. A. Kodres, MT Feb. 96, p41-50.

Pavement Design at Louisville: Optimizing Local Practice, Darren L. Piedmonte, (Meeting the Challenge: Rebuild-ing Inner City Airports, Prianka Seneviratne, ed., 1996), p187-198

Road and Airfield Design for Permafrost Conditions, David C. Esch, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas,

Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p121-150.

Road and Airfield Development in the Subarctic and Arctic, Alaska and Northwest Canada, James W. Rooney and Ted S. Vinson, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p1-22.

H. Haas, ed., 1970), p1-22.
Road and Airfield Maintenance, John C. Becker and David C. Esch, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas,

ed., 1996), p249-270.

Roads and Airfields in Cold Regions, Technical Council on Cold Regions Monograph, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996, 0-7844-Rooney, ed. a 0191-8, 330pp.

Route Location/Siting: A Review of Practices, Robert L. Schraeder, Charles H. Riddle and Willard H. Slater, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p23-56.

Temporary Snow and Ice Pavement Structures, Robert L. Scher, (Roads and Airfields in Cold Regions, Ted S. Vin-son, ed., James W. Rooney, ed. and Wilbur H. Haas, ed.,

1996), p87-120.

Thermo-Micromechanical Damage Modeling of Airfield Concrete Pavement, J. W. Ju and Y. Zhang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p727-730. Use of Geosynthetics in Road and Airfield Construction in

Cold Regions, Thomas C. Kinney, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p271-288.

Airlines

Containing Spills and Fire, William E. Wiley, CE Mar. 96, p53-55

Lessons Learned from Planning and Developing New Denver International Airport, Norman D. Witteveen, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p45-52.

Sewer Crossing of Creek with Bridge Widening, Surendra Anketell, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p275-281.

Airport construction

Lessons Learned from Planning and Developing New Denver International Airport, Norman D. Witteveen, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p45-52.

Pub-Priv Partnership for New JFK Terminal, CE Oct. 96,

Airport control towers

No More Flapping in the Wind, CE Aug. 96, p14.

Tall, Taller, Tallest, Norman D. Witteveen, P.E., CE Oct.

Tallest Control Tower Wins Award, CE Aug. 96, p12,14.

Airport design

Airport design Lessons Learned from Planning and Developing New Den-ver International Airport. Norman D. Witteveen, (Meet-ing the Challenge: Rebuilding Inner City Airports, Prian-ka Seneviratne, ed., 1996), p45-52.
Meeting the Challenge: Rebuilding Inner City Airports, Pri-anka Seneviratne, ed., 1996, 0-7844-0179-9, 300pp.

Pub-Priv Partnership for New JFK Terminal, CE Oct. 96,

Reconstruction of Bergstrom Air Force Base to Austin-Bergstrom International Airport, James P. Amick and John Almond, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p1-11.

Airport runways

Airfield Pavement Reconstruction at DFW International Airport, Dwain K. Brown and Darryl Boyd, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p140-150. Concrete Cures Runway Woes by Morning, CE May 96,

Coupled Nonlinear Analysis of Airport Pavements, T. E. Fenske, K. P. Boone and D. Liu, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p435-443.

Decatur Airport Off-Peak Construction Allows Airport to

Continue Operations, Charles A. Hagloch, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p115-127.

Enhanced Movements Estimation Methods for High Resolution Airport Surface Radar Images, P. F. Pellegrini, A. Boccellari, E. Piazza and R. Valenti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p92-98

Evaluation of Potential Impacts to Endangered Species That Use Wetland Areas: A Case Study, Andrea Rosenthal, David Reutter, Roger Menendez and Barbara Michael, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2033-2038.

Extending the Limits—San Jose Runway, Loy Warren, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p151-157.

The Importance of Maintaining Smooth Airport Pavements, Tony Gerardi, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p295-305. Reader Thanks All, John T. Fowler, CE Oct. 96, p32

Reconstruction of Bergstrom Air Force Base to Austin-

Reconstruction of Bergstrom Air Force Base to Austin-Bergstrom International Airport, James P. Amick and John Almond, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), pl-11. Rehabilitation of Taxiway "NB" at IAH with Concrete Overlay, Adil Godiwalla, Keith E. Chapman, Charles Juhasz, William Stamper and Wayne Overman, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p170-186.

Airport terminals

Lessons for Rail Access to Airports, Hanan A. Kivett, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p96-105.

Lessons Learned from Planning and Developing New Denver International Airport, Norman D. Witteveen, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p45-52.

Planning for Intermodal Access at American Airports, Phil-lip S. Shapiro, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p78-88.

Pub-Priv Partnership for New JFK Terminal, CE Oct. 96,

Reconstruction of Bergstrom Air Force Base to Austin-Bergstrom International Airport, James P. Amick and John Almond, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p1-11.

Air Transportation: A Systems Approach, Harry A. Kinnison, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p246-253.
Analysis of Changes in Airport Ground Access Mode Use, Geoffrey D. Gosling, (Meeting the Challenge: Rebuild-

ing Inner City Airports, Prianka Seneviratne, ed., 1996),

Apron Reconstruction at Kansas City International Airport, John R. Anderson and Renita M. Mollman, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka

Seneviratne, ed., 1996), p158-169.

Balancing Aviation, Highway, and Development Needs: Multimodal Planning at Indianapolis International Air-port, John W. Myers, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p24-33

Capital Facelift Takes Flight, Richard Cullerton and Albert J. Gravallese, CE Apr. 96, p40-43. Florida Department of Transportation Aviation Office

Statewide Pavement Maintenance Management Program, J. David Scherling. (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p263-272

Grounded by History: Airports and Historic Resources, Charlene K. Roise, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996),

p223-233.

Joint Development Planning for Inner City Airport Capital Improvements, Orikaye G. Brown-West, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p199-211.

Seneviraine, ed., 1990), p199-211.
Lessons for Rail Access to Airports, Hanan A. Kivett,
(Meeting the Challenge: Rebuilding Inner City Airports,
Prianka Seneviratne, ed., 1996), p96-105.
Mechanistic Design of Asphalt Concrete Pavements in
Cold Regions, Ted S. Vinson and James W. Rooney,
(Roads and Airfields in Cold Regions, Ted S. Vinson,
ed., James W. Rooney, ed. and Wilbur H. Haas, ed.,
1996), p151-202.
A New Amproach to Airport Security, Sal Deparamete

A New Approach to Airport Security, Sal DePasquale,

A New Approach to Auport Security, Sal DePasquale, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p53-62.
The O'Hare International Airport Pavement Management System, Margaret Broten, George Schwandt and William Weiss, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p273-283.
Operation of Airport Security Checkpoints Under Increased Threat Conditions. Christopher A. Chune, and Hidayar

Threat Conditions, Christopher A. Chung and Hidayat Nyakman, TE July/Aug. 96, p264-269.

Pavement Design at Louisville: Optimizing Local Practice, Darren L. Piedmonte, (Meeting the Challenge: Rebuild-ing Inner City Airports, Prianka Seneviratne, ed., 1996),

Pavement Design for Rehabilitation and Minimizing Construction Effects on Aircraft Operations, R. Barry Pierce and Lino H. Neri, Jr., (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996). p128-139.

Performance of Stabilized Base Course at DFW, William P. Grogan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p308-317.

Perspectives of Rebuilding Inner City Airports in the Emerging Post-Soviet Environment, V. L. Khazanet, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p34-44.

Planning and Analysis of Airport Access Using GIS: SLCIA Example, John Bergener, Massoud Javid and Pri-anka Seneviratne, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p89-95.

Planning for Intermodal Access at American Airports, Phillip S. Shapiro, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p78-88.

Ponding Study of January 1993 Storm Event within Airport Industrial Park, Oceanside, California, George Hsu and Yen-Hsu Chen, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2282-2287.

Pub-Priv Partnership for New JFK Terminal, CE Oct. 96.

Reader Thanks All, John T. Fowler, CE Oct. 96, p32.

San Francisco International Airport Light Rail System, William Leder and Gene Bordegaray, (Meeting the Challenge: Rebuilding Inner City Seneviratne, ed., 1996), p106-114. City Airports,

Solving Aviation and Intermodal Transportation Related Issues — "A New Prototype for the 21st Century", Clifford Bragdon and Carl Berkowitz, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p212-222.

The Strategic/Master Plan at Boeing Field: A Means of Op-timizing Airport Utilization at an Inner City Airport, Ju-lie Rodwell, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p12-23.

Tall, Taller, Tallest, Norman D. Witteveen, P.E., CE Oct.

96, p39.

Alahama Flooding in Southeastern United States From Tropical Storm Alberto, July 1994, T. C. Starney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p245-246.

Resolution of the ACT-ACF Water dispute with a Federal-State Partnership, N. D. McClure, IV, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3417-3422.

The World's Oldest Civil Engineering Professor, Daniel S. Turner, (Civil Engineering History: Engineers Make His-tory, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p13-

1994 Alaska Flood Recovery Project Management of a Disaster Recovery by a General Contractor, David S. Westhaver and Alison H. Boyce, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p111-112.

Air Quality at a Zinc/Lead Mine in Arctic Alaska, Charlotte MacCay and Jack Coutts, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed.,

1996), p804-815.

Big Tunnel Talk, CE Jan. 96, p8. Coating of Steel Structures in Cold Regions, Yuji Nakamu-ra, Taiichi Inaba and Akihiro Tamada, (Cold Regions Engineering: The Cold Regions Infrastructure-An Interna-

tional Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p173-184.

Cold Weather Testing of Outdoor Gas-Fired Heaters, De-bendra K. Das, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p410-

Comparison of Static and Dynamic Test Results for Driven ompanison or statue and Dynamic 1est Results for Driven Steel Pipe Piles in Highly Saline Permafrost, Kelly S. Merrill and Richard E. Riker, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p238-253.

Disposal of Drilling Wastes in Permafrost Prudhoe Bay, Alaska, Paul Hansen, Michael Snyder and Per Alaska, Paul Hansen, Michael Snyder and Per Wangstrom, (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p327-338.

Geotechnical Study and Remediation Design for Coal Mine Spoil Instability in Discontinuous Permafrost—A Case Study, Andrew J. Hardy, Patrick G. Corser and Daniel C. Graham, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p712-723. Innovative Bioventing System Construction/Operation in Cold Regions, Kimberly K. Stricklan and Randall L. Mattzela, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p351-359.

Life Cycle Cost Analysis of a Storburn Propane Combu tion Toilet, Paul Ritz and Herbert P. Schroeder, Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p816-827.

Mechanistic Design of Asphalt Concrete Pavements in Cold Regions, Ted S. Vinson and James W. Rooney, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed.,

1996), p151-202.

1990), p131-202.
Modeling of Contaminant Transport in Groundwater in Areas of Discontinuous Permafrost, Ron Johnson, Doug Kane, Larry Hinzman, Greg Light and Ann Farris, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p82-93.

Moisture Conditions and Control in Buildings in Fairbanks, Alaska, Ross Adkins, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p372-383.

Municipal Solid Waste Characterization in a Cold Remote Region, Abigail A. Ogbe and Christina Behr-Andres, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p780-791.

Carrison, ed., 1990, p700-191.
Occurrence and Significance of Cryptosporidium parvum and Giardia lamblia in Surface Waters on Alaska's North Slope, Michael R. Pollen, Cindy L. Christian, Craig D. Nordgren and Jonathan D. Pollen, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p494-505.

Cartson, ed., 1790, 1957-303.

Pavement Distress Caused by Deep Heave in Anchorage, Alaska, Rupert G. Tart, Jr., Mark R. Musial and Michael E. Krueger, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p923-934.

Performance of a Passively Refrigerated Gravel Pad Foundation in Fairbanks, Stephen Adamczak, Jr., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p13-22.

Performance of a Triodetic Foundation Near Fairbanks, Alaska, Thomas C. Kinney, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p291-302.

Petroleum Hydrocarbon Removal via Volatilization and Biodegradation at McGrath, Alaska, Paul C. Ramert and Wayne L. Eberhardt, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996),

p.94-105.
A Pilot-Scale Study of In Situ Hydrocarbon Remediation of Contamination in Soil and Groundwater at Fort Wainwright, Alaska, Timothy F. Gould and Mark Wallace, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p106-115.
Behaltitizing Aestic Tunden in Alaska, Iau D. McKen.

Rehabilitating Arctic Tundra in Alaska, Jay D. McKendrick, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p764-769.

Road and Airfield Development in the Subarctic and Arctic, Alaska and Northwest Canada, James W. Rooney and Ted S. Vinson, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p1-22.

H. naas, cu., 1990, pr 22.
Shakwak Highway Project—Construction Challenges, Robin Walsh, Donaldson MacLeod and Dennis Cook, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p640-651.

Solid Waste Management in Rural Alaska, Henriette Mol-berg Hansen and Howard P. Thomas, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p769-779.

Thermal and Vapor Performance of Insulated Assemblies. Axel R. Carlson, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p384-

Transportation of Alaska North Slope Natural Gas to Mar-ket, Donald A. Lannom, David O. Ogbe, Akanni S. Lawal and F. Lawrence Bennett, (Cold Regions Engineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p226-237.

Upheaval Buckling of a Pipeline in an Arctic Environment, T. Bartlett Quimby and Michael R. Fitzpatrick, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p215-225.

Using Spaceborne Imaging Radar to Identify Lake Water Resources on the Alaskan North Slope, M. O. Jeffries, K. Morris and G. E. Liston, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p855-865.

Vehicle Traction Performance Comparison for Alaska Winter Seasons, J. John Lu, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996),

Wastewater Treatment Facility Aeration Project, Gary L. Eddy, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p506-517.

West Dock Causeway Bridge Piers, A. B. Christopherson, T. Nottingham, J. W. Pickering and K. W. Braun, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p315-326.

Automobile Emissions Under Arctic Conditions Using Unleaded and 10 Percent Ethanol Admixed Gasolines, R. J. Andres, J. D. Goldbach and F. L. Williams, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p792-803.

Biodegradation of Nonionic Surfactants and Effects of Oxidative Pretreatment, C. D. Adams, S. Spitzer and R. M.

Cowan, EE June 96, p477-483.

Compositional Modeling Study of Alcohol Flooding for Recovery of DNAPL, Stanley Reitsma and Bernard H. Kueper, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p526-537.

A Field Test of NAPL Removal by High Molecular Weight Alcohol Injection, Ronald W. Falta, Scott E. Brame, Cin-dy M. Lee, John T. Coates, Charles Wright, Sarah Price, Patrick Haskell and Eberhard Roeder, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p257-268.

Removal of DNAPL Pools Using Upward Gradient Ethanol Floods, Stuart Lunn and Bernard Kueper, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: As-sessment and Remediation, Lakshmi N. Reddi, ed.,

1996), p345-356.

Alfalfa Power, CE Nov. 96, p8.

Dormant Season Alfalfa Water Balance on the NIIP, Brian Boman, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p231-236.

Modification of Design Approach to Aerated Lagoons, Lin-vil G. Rich, EE Feb. 96, p149-153.

Simulating the Transport of an Algae Bloom off the West Coast of Vancouver Island, M. G. G. Foreman, J. F. R. Gower, R. E. Thomson and J. Y. Cherniawsky, (Estua-rine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p180-191.

Simulation of Perilithic Algae as a Biofilm and its Interaction with the Water Column, Stephen A. Breithaupt, Ian P. King and Gerald T. Orlob, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1620-1625.

Algorithms

- Advances in System Identification Using Output Measurements, N. P. Jones, J. H. Ellis and K. Pan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p160-163.
- An Al Agent Construct for Space and Planetary Science Applications, Lee Plansky and Nancy Linarez-Royce, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p341-348.
- Analysis of Disjoint Two-Dimensional Particle Assemblies, Tuong X. Tran and Richard B. Nelson, EM Dec. 96, p1139-1148.
- Approach to Failure Mode Analysis of Large Structures, naowen Shao and Yoshisada Murotsu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p704-707.
- An Automatic System for the Definition of the Setting Rules for Speed Diagrams, Francesco Saverio Capaldo and Rodolfo Grossi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p193-197.
- A Boolean Material Property Database, S. Dobson, M. Noori and A. Crespo, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p673-676.
- Calibration of a Water Quality Model Using the Influence Coefficient Algorithm, Kyung Soo Jun and Kil Seong Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4010-4015.
- Characterization of a Nonlinear Polymer-Based Composite Material System, R. M. Hackett and P. I. Rodriguez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p771-780.
- Civil Engineering Applications of Genetic Algorithms, Weng-Tat Chan and David K. H. Chua, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p1072-1078.
- Say, ed., 1990, p.1072-1076.
 Classifying Vehicles Using Their Auditory Signature Based on an Auditory Model, Denis McKeown, Stephen Hadland, Howard Kirby, Mark Dougherty, Luke Ibbetson, Louis Lopes and Peter Roach, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), 2017. p711-715.
- Closed-Form Back-Calculation of Rigid-Pavement Parameters, Li Shuo, T. F. Fwa and K. H. Tan, TE Jan./Feb. 96,
- Co-Evolution of Design Specifications and Design Solu-tion, Mary Lou Maher and Josiah Poon, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p77-83.
- Coast, T. M. Peck, R. J. M. Sweet, H. N. Southgate, S. Boxall, A. Matthews, R. Nash, J. Aiken, H. Bottrell and R. Wilson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1024-1034.
- Collapse Analysis of Steel Frame Structures Under Earth-quake Loading, Scott C. Martin and Roberto Villaverde, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),
- Comparative Assessment of Prediction Strategies for Adaptive Control, R. Ghanem, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p134-137.
- Comparison of Algorithms for Nonlinear Integer Optimiza-tion: Application to Monitoring Network Design, Yuh-Ming Lee and J. Hugh Ellis, EE June 96, p524-531.

- Comparison of LQR and H., Algorithms for Vibration Control of Structures in Seismic Zones, H. Allison Smith and J. Geoffrey Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1164-1171.
- Comparison of Some Simulation Algorithms on Basis of Distribution, Marc P. Mignolet and Maruvada V. Harish, EM Feb. 96, p172-176.
- Computational Experiments with a Combined Traffic As-signment and Control Model with Asymmetric Cost Functions, Claudio Meneguzzer, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p609-614.
- Conceptual Design Optimization of Structural Systems, Donald E. Grierson, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p99-110.
- Constraint Based Reasoning Using Grobner Bases, Sivand Lakmazaheri, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p559-564.
- Construction Resource Scheduling with Genetic Alog-rithms, Weng-Tat Chan, David K. H. Chua and Govindan Kannan, CO June 96, p125-132.
- dan Kannan, Covine 96, pt. 22-132.

 A Decision Support System for Dynamic Pre-Trip Route Planning, Nagui M. Rouphail, S. Ranji Ranjithan, Wael El Dessouki, Timothy Smith and E. Downey Brill, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p325-329.
- Design Case Adaptation Using Genetic Algorithms, Mary Lou Maher and Andrés Gómez de Silva Garza, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p294-300.
- Design of Prestressed Concrete Transmission Poles: Opti-mization Approach, Fatma Y. Kocer and Jasbir S. Arora, ST July 96, p804-814.
- Effects of Tow Sequencing on Capacity and Delay at a Waterway Lock, Ching-Jung Ting and Paul Schonfeld, WW Jan/Feb. 96, p16-26.
- An Enhanced Kalman Filtering Algorithm for Dynamic Freeway OD Matrix Estimation and Prediction, Samer Madanat, James Krogmeier and Shou-Ren Hu, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p423-428.
- Enhancing Creativity when Solving Contradictory Techni-cal Problems, Sergey Drabkin, El Apr. 96, p78-82.
- Evaluation of System Downstream Control, Zihui Lin and David H. Manz, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1893-1898.
- Evolving Design Genes as well as Design Solutions, John S. Gero, Vladimir A. Kazakov and Thorsten Schnier, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p84-90.
- Expected Moments Alogrithms for Flood Frequency Analysis, William L. Lane and Timothy A. Cohn, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2185-2190.
- An Extended Relaxation Technique for Unsteady Flows in Networks, J. M. Lewis, D. L. Fread and Ming Jin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p195-200.
- Fast and Robust Algorithm for General Inequality/Equality Constrained Minimum Time Problems, B. Driessen and N. Sadegh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1215-1224.
- Finite Element Transient Analysis (FETA) of Solids and Structures Including Soil-Fluid-Structure Interaction, D. C. Rizos, D. L. Karabalis, G. J. Cokkinides, J. L. Tassou-las and J. S. Mulliken, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p480-486.
- FORM/SORM Search Algorithms in the Presence of Inadmissible Domains, Roger Sindel and Rüdiger Rackwitz, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p570-573

Fuzzy Logic Based Control for Sliding Structures, Andrei M. Reinhorn, Ravi S. Subramaniam and Michael A. Riley, (Analysis and Computation, Franklin Y. Cheng,

ed., 1996), p298-309.

Genetic Algorithm Design of Piped Irrigation Systems, Graeme Dandy, Angus Simpson and Laurie Murphy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p364-369.

Genetic Algorithms for the Design of Groundwater Remediation Systems, Daene C. McKinney and Min-Der Lin, (North American Water and Environment Congress & Destructive Water, Chenchavva Bathala, ed., 1996).

p842-847.

Genetic-Algorithm Programming of Road Maintenance and Rehabilitation, T. F. Fwa, W. T. Chan and C. Y. Tan, TE May/June 96, p246-253.

Groundwater Remediation Design When Pretty Good is Good Enough, J. Wayland Eheart, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p848-853.

A Hydrodynamic FVM Algorithm on Arbitrary Grids, Jinglian J. Liu, Billy H. Johnson, Bharat K. Soni and Victor L. Zitta. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3668-3673.

Image Monitoring on Motorway: Pedestrian Detection Using Image Processing, Salah Bouzar, Roland Glachet, Jean-Marc Blosseville and François Lenoir, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p124-128.

The Impact of Numerical Precision on Optimal Ground-water Hydraulic Control, David P. Ahlfeld and R. Guy Riefler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p618-621.

Implicit Integration Procedures and Consistent Tangent Operators for Bounding Surface Plasticity Models, P. Rahulkumar and S. Saigal, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p140-143.

Improving Robustness of Algorithms to Implement HiSS models in FEM, G. W. Wathugala and S. Pal, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p144-147.

Increasing Computational Accuracy of Radial Gate Flows, Brian Henning and Timothy F. Kacerek, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3592-3597.

Integrated Planning Decision Support System (IPDS), Mario Mejía-Navarro and Luis A. García, (*Natural Dis-aster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p189-190.

Laying Sequence Planning for Continuous Girder Rein-forced Concrete Floor System by Genetic Algorithms, Y. Natsuaki, S. Mukandai, K. Yasuda and H. Furuta, (Anal-ysis and Computation, Franklin Y. Cheng, ed., 1996).

Micromechanical Simulation of Geotechnical Problems using Massively Parallel Supercomputers, David W. Washington and Jay N. Meegoda, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p717-721.

Mode Search Algorithm for System Reliability under Earthquake Load, Hideki Idota and Tetsuro Ono, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Modeling Groundwater Contaminant by Unstructured FVM, Jinglian J. Liu, Bharat K. Soni and Victor L. Zitta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Nondestructive Evaluation of Elastic Constants and Crack ondestructive Evaluation of Elastic Constants and Concrete Using Transient Elastic Waves, T.-T. Wu and J.-S. Fang, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p861-868.

Nonlinear Systems with Poisson White Noise, Mircea Grigoriu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p120-123.

Numerical Morphodynamic Modelling of Keta Lagoon, Tim J. Chesher, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p927-938.

On the Development of a Selective Algorithm in Advanced Monte Carlo Simulation, Helmut J. Pradlwarter, Napat Harnpornchai and Gerhart I. Schuëller, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol,

ed. and Mircea D. Grigoriu, ed., 1996), p14-17.
On-Line Motion Planning for the Three-Link Revolute Arm in an Unknown Three-Dimensional Environment, Sanjay Tiwari and Brandon Kroupa, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p1-7. Optimal Land Grading Based on Genetic Algorithms, Srinivasa L. Reddy, IR July/Aug, 96, p183-188.

Optimal Reliability-Based Design of Check Dam Structure, Satoshi Katsuki, Nobutaka Ishikawa and Kazuo Itoh, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p91-98.

Optimization of Graphical Models, Jeanine Graf, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p97-103.

Optimization of Groundwater Remediation with DES, Jae-Heung Yoon and Christine A. Shoemaker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p622-627. Path-Storing Equilibration Algorithms for Several Traffic

Assignment Models, Fabien Leurent, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed.,

1996), p633-638.

1996), p633-638.
Preliminary Features of a Decision Support System for Incident Detection. John Hourdakis and Athanassios P. Chassiakos. (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p227-232.
Probabilistic Stability Analysis of Shallow Arches, R. P. Nordgren and K. S. Hussain, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p124-127.
Real-Time Traffic Control for Alternative Route Guidance Systems Based on the Dynamic Assignment Model.

Systems Based on the Dynamic Assignment Model, Reinhart D. Kühne, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p563-567.

Refined Three-Dimensional Finite Element Model for End-Plate Connection, Chang-Koon Choi and Gi-Taek Chung, ST Nov. 96, p1307-1316.

Seismic Active Control by a Heuristic-Based Algorithm, Yu Tang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p232-235.

Su, 1990), p.252-253.
Seismic Response Assessment of Active-Controlled Multi-Story Buildings with Soil-Foundation Influence, F. Y. Cheng, S. Suthiwong and P. Tian, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p.1155-1163.
A Sequential Handbook Testing Report Engineery.

A. Sequential Hypothesis-Testing Based Freeway Incident Response Decision-Making System, Samer M. Madanat, Hua-Liang Teng and Pen-Chi Liu, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p286-291.

Simple and Efficient Traffic Vision Algorithms, T. N. Tan, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p129-133.

Single-Criteria Genetic Optimization for Design and Detail-ing of Concrete Structures, W. M. Kim Roddis, Warren Lucas and Vorathum Chunnanond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p91-96

Single-Station Incident Detection Algorithm (SSID) for Sparsely Instrumented Freeway Sites, Charalambos N. Antoniades and Yorgos J. Stephanedes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p218-221.

Solving Mathematical Programming Problems Using Genetic Algorithms, Siripong Malasri, Jennifer R. Martin and Ricardo A. Medina, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p233-239. State of Delaware - Scour Evaluation Program, Thomas M. Heil, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Stochastic Prediction and Control of Uncertain Nonlinear Dynamical Systems, R. Ghanem and M. Grigoriu, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), p277-280.

Subcatchment Parameterization for Runoff Modeling Using Digital Elevation Models, Jurgen Garbrecht, Lawrence W. Martz and David C. Goodrich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2689-2694.

Two-Dimensional Parallel Computing Solution of Coupled Heat and Moisture Flow in Unsaturated Soil, Hywel Rhys Thomas and Chi Leung Welkin Li, CP July 96,

p236-247

Use of SID Method for Site Characterization, P. W. Jayawickrama, K. G. K. Jayakody and K. A. Rainwater, (Uncertainty in the Geologic Environment: from Theor to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p897-911.

Wavelet Transforms for Incident Detection on Motorways, Simon Cohen and Bian-shun ling. (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p222-226.

Deformation, Alignment, and Vibration in Large Turbine-Generator Set, W. F. Teskey, J. W. Lovse and N. N. Al-Hanbali, SU May 96, p65-79.

Impact of Freeway Geometric and Incident Characteristics on Incident Detection, H. M. Al-Deek, S. S. Ishak and A. A. Khan, TE Nov./Dec. 96, p440-446.

Long-Term Leaching of Metals from Concrete Products, Matthew T. Webster and Raymond C. Loehr, EE Aug. 96, p714-721.

Alloys

Corrosion Test on Candidate Waste Package Basket Materials for the Yucca Mountain Project, Richard A. Van Konynenburg and Paul G. Curtis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p464-467

Impacts of Cathodic Protection on Waste Package Performance, Joel E. Atkins, Joon H. Lee and Robert W. Andrews, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p459-461.

In-Situ Corrosion Testing of Selected HLW Container Materials, E. Smailos, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p462-

Microbiological Influenced Corrosion (MIC) of Carbon Steel Utilized in the Construction of Nuclear Waste Can-isters, Dave Bergman, Pati Castro, Beth Pitonzo, Penny Amy and Denny Jones, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p12-18.

New Alloy Prevents Corrosion, ET Oct./Nov. 96, p1,9.

Pitting Corrosion of Container Materials in Anticipated Re-pository Environments, Ajit K. Roy and R. Daniel McCright, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p454-456.

Review of Constitutive Equations for Shape Memory Alloys, Victor Birman, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p792-795.

Shape Memory Release Device Experiment, Bernie F. Carpenter, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p76-79.

Water Vapor Effects on the Corrosion of Steel, John C. Es-till and Gregory E. Gdowski, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p457-458.

Alluvial channels

Alluvial Channel Geometry: Theory and Applications, Pi-erre Y. Julien and Jayamurni Wargadalam, HY Apr. 95, p312-325.

Application of Regime Theory in Practice: A Case Study, ames A. Turpin and Martin J. Teal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1663-1668.

Bed Configuration and Hydraulic Resistance in Alluvial-Channel Flows, Fazle Karim, HY Jan. 95, p15-25.

Estimation of Bed Material Transport Capacity, Henry M. Fehlman and Ruh-Ming Li, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1033-1038.

Modeling Non-Uniform-Sediment Fluvial Process by Characteristics Method, Keh-Chia Yeh, Shian-Jang Li and Wen-Lin Chen, HY Feb. 95, p159-170.

Stream Instability in Loess Base Channels, Jon A. Zellars, Rollin H. Hotchkiss and Thomas Franti, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3369-3374.

Alluvial Fan: Proposed New Process-Oriented Definitions for Arid Southwest, Richard H. French, Jonathan E. Fuller and Steve Waters, WR Sept./Oct. 93, p588-598.

Debris Basin Design Procedures, J. J. DeVries and T. V. Hromadka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1657-1662.

Mitigation of Flood Hazard on Alluvial Fans, Julianne J. Miller and Richard H. French, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2324-2329.

Uncertainty and Risk Analyses for FEMA Alluvial Fan Method, Bing Zhao and Larry Mays, (Risk-Based Deci-sion Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p180-190.

Uncertainty and Risk Analyses for FEMA Alluvial-Fan Method, Bing Zhao and Larry W. Mays, HY June 96, p325-332

Numerical Model of Flow Ice-Covered Channel, J. Y. Yoon, V. C. Patel and R. Etterna, HY Jan. 96, p19-26.

Numerical Model of Turbulent Flow over Sand Dune, J. Y. Yoon and V. C. Patel, HY Jan. 96, p10-18.

Prediction of Effects of Woody Debris Removal on Flow Resistance, F. Douglas Shields, Jr. and Christopher J. Gippel, HY Apr. 95, p341-354.

Streambed Armoring, C. O. Chin, B. W. Melville and A. J. Raudkivi, HY Aug. 94, p899-918.

Anchorage Behavior of Shaft Anchors in Alluvial Soil, H. J. Liao, C. D. Ou and S. C. Shu, GT July 96, p526-533.

Coordination of Empirical and Rational Alluvial Canal Formulas, Shrikrishna V. Chitale, HY June 96, p357-359.

Venting Test Analysis Using Jacob's Approximation, Kenneth B. Edwards, EE Mar. 96, p232-234.

Aluminum Has History, Kurt P. Thompson, CE Sept. 96,

Developments in Sandwich Beam Theory and Practice, James C. LaBelle, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1017-1026.

Hot-Spot Fatigue Design of Aluminum Joints, Maurice L. Sharp, Glenn E. Nordmark and Craig C. Menzemer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1027-1036.

More Aluminum Than You Know, John J. Ahlskog, CE May 96, p27-28.

New Aluminum Decks Cut Loads, Add Life, CE Aug. 96, p12

Advancing Freezing Front, Philip J. Parker, Anthony G. Collins and John P. Dempsey, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p757-768.

Ambient air quality

Dry Deposition of Polycyclic Aromatic Hydrocarbons in Ambient Air, Hwey-Lin Sheu, Wen-Jhy Lee, Chun-Ching Su, How-Ran Chao and Yi-Chin Fan, EE Dec. 96,

American Association of Engineering Societies

68,000 New Jobs Projected for CEs over Next 10 Years, NE May 96, p5.

Alternative to CBOD5-Based Load Allocation Studies on Low-Dilution-Ratio Streams, Gary G. Rott, EE July 96, p669-671.

Gas-Phase Removal of H2S and NH3 with Dielectric Barrier Discharges, Moo Been Chang and Tian Deng Tseng, EE Jan. 96, p41-46.

Amplification

Diffraction of SH-Waves by Subsurface Inclusions of Arbi-trary Shape, Michael E. Manoogian and Vincent W. Lee, EM Feb. 96, p123-129.

Observations of Seiche Forcing and Amplification in Three Small Harbors, Michele Okihiro and R. T. Guza, WW Sept./Oct. 96, p232-238.

Analytical Solution for Galloping Oscillations, Mykhaylo I. Kazakevych and Oleksiy H. Vasylenko, EM June 96,

Experimental Investigation of Tuned Liquid Dampers, Dorothy A. Reed, Harry Yeh, Jinkyu Yu and Sigurdar Gardarsson, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p215-216. Looking for Wave Groups in the Surf Zone, Merrick C. Haller and Robert A. Dalrymple, (Coastal Dynamics '95,

William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p81-92.

Amron, Irving

Irving Amron, Civil Engineer Who Was Former ASCE Staff Editor, Dies at 78, NE July 96, p15.

Fish Passage Pool Bedding Analysis, Louis S. Coletta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3818-3823.

Anaerobic digestion

Anaerobic Biodegradation of High Energetics in Digestion Sewage Sludge, Sung-Hyun Kwon, Frank J. Y. Shiu and Teh Fu Yen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, 2004, 2004, 2004, 2004. ed., 1996), p794-799.

Pilot Study Shows Higher Methane Yields, CE May 96, p14-15.

Anaerobic filters

Anaerobic Degradation of Cornstarch in Wastewater in Two Upflow Reactors, Tin Sang Kwong and Herbert H. P. Fang, EE Jan. 96, p9-17. Editor's Note, Thomas L. Theis, EE Jan. 96, p3.

Anaerobic Bacterial Quantitation of Yucca Mountain, Nevada Doe Site Samples, William W. Clarkson, Lee R. Krumholz and Joseph M. Suflita, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p39-40.

Anaerobic Degradation of Cornstarch in Wastewater in Two Upflow Reactors, Tin Sang Kwong and Herbert H.

P. Fang, EE Jan. 96, p9-17.

Anaerobic Removal of Pentachlorophenol in Presence of Zinc, Peikang Jin and Sanjoy K. Bhattacharya, EE July 96, p590-598.

Anaerobic Treatment of High-Sulfate Wastewater and Substrate Interactions with Isopropanol, Peter Fox and Swamy Ketha, EE Nov. 96, p989-994.

Brewery Wastewater Treatment in UASB Reactor at Ambient Temperature, Yue-Gen Yan and Joo-Hwa Tay, EE June 96, p550-553.

Degradation and Toxic Effects of Acrylic Acid on Anaero-bic Systems, Mingbo Qu and Sanjoy K. Bhattacharya, EE Aug. 96, p749-756.

Effects of Media Characteristics on Performance of Upflow Anaerobic Packed-Bed Reactors, Joo-Hwa Tay, Kuan Yeow Show and S. Jeyaseelan, EE June 96, p469-476.

ORP Measurement in Anaerobic Systems Using Flow-Through Cell, Munish Gupta, Ashutosh Gupta, Makram T. Suidan, Gregory D. Sayles and Joseph R. V. Flora, EE Nov/Dec. 94, p1639-1645.

Substrate Consumption Kinetics in Anaerobic Biofilm Flu-idized Bed Reactor, Enrique J. La Motta and Patricio Cascante, EE Mar. 96, p198-204.

17

Expedition Applications to Long Duration Space Missions, Gloria R. Leon and Victor S. Koscheyev, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p997-1001.

Analysis

Algebraic Methods For Creep Analysis of Continuous Composite Beams, Luigino Dezi, Graziano Leoni and Angelo Marcello Tarantino, ST Apr. 96, p423-430.

Analytical and Measured Strains in Sunshine Skyway Bridge. II, Mohsen A. Shahawy and M. Arockiasamy,

BE May 96, p87-97.

Analytical Model for Heterogeneous Reactions in Mixed Porous Media, K. Hatfield, D. R. Burris and N. L. Wolfe, EE Aug. 96, p676-684.

Analytical Solutions for Two-Dimensional Transport Equa-tion with Time-Dependent Dispersion Coefficients, Mus-tafa M. Aral and Boshu Liao, HE Jan. 96, p20-32.

Analytical Solutions of Seepage Into Ditches From Ponded Fields, Gautam Barua and K. N. Tiwari, IR Nov/Dec. 95, p396-404.

Arching in Piled Embankments, B. K. Low, S. K. Tang and V. Choa, GT Nov. 94, p1917-1938.

Between the Devil and the Deep Blue Sea: A Tale of Two Scientific (?) Analyses, T. R. Muraleedharan, El Jan. 96, p1-5.

Claims Analysis from Risk-Retention Professional Liability Group, Jack R. Janney, C. Roy Vince and Jack D. Mad-sen, CF Aug. 96, p115-122. Coefficient of Permeability from AC Electroosmosis Ex-periments. II: Results, R. J. Finno, K. Chung, J. Yin and J. R. Feldkamp, GT May 96, p355-364. Computer Application of CLM Lateral Load Analysis to Piles and Drilled Shafts, Tracy Brettmann and J. Michael Duncan, GT June 96, p496-498. Claims Analysis from Risk-Retention Professional Liability

Design of Microirrigation Submain Units, Yaohu Kang and Soichi Nishiyama, IR Mar./Apr. 96, p83-89.

EBEF Method for Distortional Analysis of Steel Box Girder Bridges, Yao T. Hsu, C. C. Fu and David R. Schelling, ST Mar. 95, p557-566.

Editor's Note, David Darwin, ST Dec. 96, p1393.

HEC-RAS (River Analysis System), Gary W. Brunner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3782-3787.

Inverse Transient Analysis in Pipe Networks, James A. Liggett and Li-Chung Chen, HY Aug. 94, p934-955.

Large-Displacement Analysis of Elastoplastic Thin-Walled Frames. I: Formulation and Implementation, B. A. Izzuddin and D. Lloyd Smith, ST Aug. 96, p905-914.

Large-Displacement Analysis of Elastoplastic Thin-Walled Frames. II: Verification and Application, B. A. Izzuddin and D. Lloyd Smith, ST Aug. 96, p915-925.

A Layer-Wise Formulation for Progressive Failure Analysis of Laminated Composite Beams, Julio F. Davalos and Youngchan Kim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1150-1159.

Nonunique Water-Surface Profiles in Open Channels, Sub-hash C. Jain, HY Dec. 93, p1427-1434.

Practical Advanced Analysis for Braced Steel Frame De-sign, Seung-Eock Kim and Wai-Fah Chen, ST Nov. 96, p1266-1274.

Practical Advanced Analysis for Unbraced Steel Frame De-sign, Seung-Eock Kim and Wai-Fah Chen, ST Nov. 96, p1259-1265.

Solution of the Advection-Dispersion Equation: Continuous Load of Finite Duration, Robert L. Runkel, EE Sept. 96, p830-832.

Static Analyses of Beams and Plates by Spline Collocation Method, Charles W. Bert and Youngkwang Sheu, EM Apr. 96, p375-378.

Thermogravimetric Analysis of Fiber Reinforced Plastics, Luca Prian, Ritsuko Pollard and Aaron Barkatt, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Uniqueness in Analysis of Semirigid Frames, S. T. Ariarat-nam and L. Xu, ST Jan. 96, p110-111.

Analytical techniques
Analytic Approach Helps Firm Expand Business, CE Dec. 96, p22.

Analytical Approaches for the Design of Base-Isolated Structures, Vahid Sattary and Mason T. Walters, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p224-235.

Contraction Scour at Bridges: Analytic Model for Coarse-Bed Channels, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3706-3715.

Energy-Based Modeling of High Damping Rubber Seismic Isolators for Dynamic Analysis, Peter W. Clark and James M. Kelly. (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p200-211.

Estimating Transverse Strength of Masonry Infills, Richard Angel and Joseph Uzarski, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p101-111.

Evaluation of a Bi-Directional Aluminum Honeycomb Impact Limiter Design, Marvin J. Doman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p357-359.

Forecasting House Rental Levels: Analytical Rent Model versus Neural Network, Heng Li and Vera Li, UP Dec.

96, p118-127.

Guidelines and Benchmarks for Analysis of Isolated Buildings, Harry W. Shenton, III and Andrew W. Taylor, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p236-245.

Nonlinear Static and Dynamic Analysis from Research to Practice, Filip C. Filippou, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p31-42.

Response of Base Isolated USC Hospital Building in the 1994 Northridge Earthquake, Satish Nagarajaiah and Xiaohong Sun, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p212-223.

Fatigue Testing of Anchor Bolts, James P. Van Dien, Mark R. Kaczinski and Robert J. Dexter, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p337-344.

Plate Anchor Groups Pulled Vertically in Sand, James D. Geddes and Edward J. Murray, GT July 96, p509-516.

Anchorage Behavior of Shaft Anchors in Alluvial Soil, H. J. Liao, C. D. Ou and S. C. Shu, GT July 96, p526-533.

Model Uncertainty in Anchorage Design for Anchored Bulkheads, Anurag Varde, Thomas C. Sandford and Ha-bib J. Dagher. (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p727-745.

Oscillations of Bridge Stay Cables Induced by Periodic Motions of Deck and/or Towers, A. Pinto da Costa, J. A. C. Martins, F. Branco and J. L. Lilien, EM July 96,

p613-622

Sacramento River Pedestrian Bridge, Charles Redfield and Jiri Strasky, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p153-160.

Anchored bulkheads

Model Uncertainty in Anchorage Design for Anchored Bulkheads, Anurag Varde, Thomas C. Sandford and Ha-bib J. Dagher, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p727-745.

Anchoring

Lunar Regolith, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p630-638.

Anchorage Behavior of Shaft Anchors in Alluvial Soil, H. J. Liao, C. D. Ou and S. C. Shu, GT July 96, p526-533.

Anchoring a Landfill Expansion, Max Kroschel, Michael S. Snow and Thomas A. Williamson, CE May 96, p64-66.

Creep Test Results Confirmed, Toby D. Leamon, P.E., CE Sept. 96, p30.

Creeping Suspicion, Michael P. Bruen, Nicholas Pansic and M. I. Schwartz, CE May 96, p60-63.

Evaluation of Grout Materials for Anchor Embedments in Hardened Concrete, Willie E. McDonald, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p958-

Grouted Anchors for Carbon FRP Tendon, Antonio Nanni and Jay Thomas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p527-534.

Not So Suspicious, H. Nierlich, CE Sept. 96, p30-31.

Pullout Simulation of Postinstalled Chemically Bonded Anchors, Michael McVay, Ronald A. Cook and Kailash Krishnamurthy, ST Sept. 96, p1016-1024.

Vertical Uplift Capacity of Horizontal Anchors, Kanaka-pura S. Subba Rao and Jyant Kumar, GT July 94,

p1134-1147.

Vibratory Excavation and Anchoring Tools for the Lunar Surface, J. Ledlie Klosky, Stein Sture, Hon-Yim Ko and Frank Barnes, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p903-

Wind Protection Tie-Downs for Manufactured Homes, John E. Pearson, Anatol Longinow and Donald F. Meinheit, SC Nov. 96, p126-140.

Wind-Resistant Tie-Downs for Mobile Homes, Anatol Lon ginow, Donald F. Meinheit and John E. Pearson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

Suspicious" Implications Allayed, William F. Powers, III, Kerry B. Allen and Michael P. Bruen, CE Sept. 96, p31-

Andrews, Earle T.

Earle T. Andrews, ASCE's 98th President, Dies at 94, NE Sept. 96, p15.

Anelasticity

Anelastic Strain Recovery of Deep Cores with Presence of Pore Pressure, Y. Abousleiman and A. H-D. Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p935-938.

Anemometers

Anemometers
Flow Over Vortex Ripples: Models and Experiments,
Lewis A. W., E. Hitching, G. Perrier, E. Asp Hansen, H.
Earnshaw, K. Eidsvik, C. Greated, M. Sumer and A.
Temperville, (Coastal Dynamics '95, William R. Dally,
ed. and Ryszard B. Zeidler, ed., 1996), p686-697.

An Update on Surface Renewal Estimation of Evapotranspiration, R. L. Snyder, D. Spano, P. Duce and K. T. Paw U., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p430-435.

Wind-Induced Accidents of Train/Vehicles and their Countermeasures, Tatsuo Maeda, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p70-73.

Angle section

Development of Column Curve for Steel Angles, Seshu Madhava Rao Adluri and Murty K. S. Madugula, ST Mar. 96, p318-325.

Flexural Buckling of Steel Angles: Experimental Investiga-tion, Seshu Madhava Rao Adluri and Murty K. S. Madugula, ST Mar. 96, p309-317.

Testing on the Web, CE Oct. 96, p11.

Anisotropic materials

Consistent Infinitesimal Finite-Element Cell Method for an Anisotropic Unbounded Medium, Chongmin Song and John P. Wolf, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p306-309.

Plane Solutions of Interface Cracks in Anisotropic Dissimilar Media, Chien-Ching Ma and Jyi-Jiin Luo, EM Jan. 96, p30-38.

Anisotropic soils

Analytical Solutions of Seepage Into Ditches From Ponded Fields, Gautam Barua and K. N. Tiwari, IR Nov/Dec.

Cracks in Poroelastic Materials with a Highly Anisotropic Fluid Response, C. Atkinson and R. V. Craster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p212-215.

Ditch Drainage Theories for Homogeneous Anisotropic Soil, Gautam Barua and K. N. Tiwari, IR Sept./Oct. 96.

Fabric Anisotropy and Its Relationship to Macroscopic Constitutive Behavior of Clays, A. Anandarajah, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

Theories of Ditch Drainage in Layered Anisotropic Soil, G. Barua and K. N. Tiwari, IR Nov /Dec. 96, p321-330.

Anisotropic Coefficients of Poroelasticity, A. H-D. Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Anisotropic Plasticity with Anisotropic Hardening and Rate Dependence, Raymond D. Krieg and Kevin H. Brown, EM Apr. 96, p316-324.

Anisotropic Thermal Expansion Causes Deformation of Marble Claddings, Clemens Widhalm, Elmar Tschegg and Walter Eppensteiner, CF Feb. 96, p5-10.

Anisotropy Effect on One-Dimensional Consolidation, L. Cui, Y. Abousleiman, A. H-D. Cheng and J.-C. Roegiers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p471-474.

Hydrodynamic Behavior of Partly Vegetated Open Chan nels, Dan Naot, Iehisa Nezu and Hiroji Nakagawa, HY Nov. 96, p625-633.

Unstable Patterns in Partly Vegetated Channels, Dan Naot, Iehisa Nezu and Hiroji Nakagawa, HY Nov. 96, p671-

Variation of Fabric Anisotropy of Kaolinite in Triaxial Loading, A. Anandarajah, N. Kuganenthira and D. Zhao, GT Aug. 96, p633-640.

Annular shear tests

Centrifugal, Gravity and Side-wall Effects in Annular Shear Cells, Cliff K. K. Lun, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p104-107.

Constructional and Environmental Aspects of Structural Materials at Antarctica and Indian Himalayas, R. C. Pathak, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p968-977.

Control of Legged Robots, S. T. Venkataraman, (Robotics for Challenging Environments, Laura A. Demsetz, ed.,

1996), p100-106. Guest Editorial, Pat Langhorne, CR Mar. 96, p1-5.

Temporary Snow and Ice Pavement Structures, Robert L. Scher, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p87-120.

Utilities and Systems for the New U.S. South Pole Station, Amundsen-Scott Station, Antarctica, Steven Theno and Dick Armstrong, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p424-435.

Connections of Large Steerable Antennas, Joseph Antebi and Mehdi S. Zarghamee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p505-509

Minimum-Time Design of a Slewing Flexible Beam, Xiao-jian Liu and David W. Begg, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1205-1214.

1996), p1205-1214.
Optimization Sensing and Control in Design of Antennas, Mehdi S. Zarghamee and Joseph Antebi, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p147-153.
Self Deployable Mechanism for Large Disk Antenna Using Centrifugal Force, Takanori Sato, Shinji Matsumoto, Haruyuki Namba, Kenji Takagi, Hisashi Tadokoro, Hiroshi Yamakawa, Takao Oura, Kenji Nozaki and Nobuyuki Kaya, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1155-1161

Investigation of Design Profession Closes, CE May 96, p8.

Anton, Walter F.

Anton, Public-Works Engineer, Dies at 59, CE Apr. 96,

Externally Bonded Carbon Fiber for Strengthening Concrete, Jay Thomas, Thomas Kline, Peter Emmons and Howard Kliger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p924-931.

FRP Applications in Geotechnical Engineering, J. A. R. Ortigao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p535-544.

Smart Materials and Structures: A Review, C. Shakeri, M. N. Noori and Z. Hou, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p863-876.

Use of Recycled Aggregates for Pavement, S. Abdol Chini, Timothy J. Sergenian and Jamshid M. Armaghani, (Ma-terials for the New Millennium, Ken P. Chong, ed., 1996), p154-162.

pproximation

Modal Coupling and Accuracy of Modal Strain Energy Method, Alessandra Zambrano, José A. Inaudi and James M. Kelly, EM July 96, p603-612.

Simulation of Three-Dimensional, Non-Hydrostatic Free-Surface Flows for Estuaries and Coastal Seas, Vincenzo Casulli and Stelling Guus S., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng,

Approximation methods
An Approximate Method for Assessment of Seismic Damage on Buildings, Mario Paz and Jeffrey S. Janover, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p428-434.

Approximate Riemann Solvers in FVM for 2D Hydraulic Shock Wave Modeling, D. H. Zhao, H. W. Shen, J. S. Lai and G. Q. Tabios, III, HY Dec. 96, p692-702. Approximate Solutions to Nonlinear Random Vibration Problems and the Fokker-Planck-Kolmogorove Equation.

David C. Polidori and James L. Beck, (Probabilistic Me-

David C. Polidori and James L. Beck, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p94-97.
An Approximation Method for Estimating Extremes of Narrow-Band Non-Gaussian Random Vibration, Arvid Naess and Tor Espen Hagen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p90-93.
Dynamic Analysis of Tall Building Using Reduced-Order Continuum Model, Michael J. Chajes, Liyang Zhang and James T. Kirby, ST Nov. 96, p1284-1291.
Error Estimates for FORM and SORM Computations of

James 1. Killy, S. I. Nov. 90, p1284-1291.
Error Estimates for FORM and SORM Computations of Failure Probability, Jean-Claude Mitteau, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p562-565.

Fiber Orientation in Composite Structures for Optimal Resistance to Creep Failure, David N. Robinson and Wei Wei, EM Sept. 96, p855-860.

Wei, EM Sept. 96, p855-860.
Implications of Using Approximate Expressions for Well Function, Rajesh Srivastava, IR Nov/Dec. 95, p459-462.
A Multiperiod Approach for the Solution of Groundwater Management Problems using the Outer Approximation Method, George P. Karatzas, Alexander A. Spiliotopoulos and George F. Pinder, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p129-134.

Nonlinear Dynamic Response of Frames Using Lanczos Modal Analysis, Steven M. Vukazich, Kyran D. Mish and Karl M. Romstad, ST Dec. 96, p1418-1426.

Practical Formulas for Estimation of Cable Tension by Vibration Method, Hiroshi Zui, Tohru Shinke and Yoshio

Namita, ST June 96, p651-656.

Runoff Forecasting Using a Local Approximation Method, A. W. Jayawardena, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2535.

Semianalytical Solutions to Griffith Fracture Under Variable Pressure, Albert T. Yeung, EM June 96, p580-584.

Simplified Response-Spectrum Seismic Analysis of Nonlinear Structures, Roberto Villaverde, EM Mar. 96, p282-

Ultimate Compressive Strength of Orthogonally Stiffened Steel Plates, Ichizou Mikami and Kazuhisa Niwa, ST June 96, p674-682.

Variational Principles Developed for and Applied to Analysis of Stochastic Beams, I. Elishakoff, Y. J. Ren and M. Shinozuka, EM June 96, p559-565.

Apron Reconstruction at Kansas City International Airport, John R. Anderson and Renita M. Mollman, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p158-169.

Telling Florida's Water Story, David W. Landis and Blair K. Hanuschak, CE Feb. 96, p40-43.

Aquatic environment

Adhesion Kinetics of Fuel Oil #6 and Oil-in-Water Emulsions on Marine Sediments under Turbulent Mixing Conditions, Rudolf Jaffé, Hector R. Fuentes, Vassilios A. Tsihrintzis and Liduo Shen, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4389-4394.

Modeling Combined Stresses on Aquatic Ecosystems, Jam-ie D. Anderson, Ian P. King and Gerald T. Orlob, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3998-4003.

Modeling Natural Hydrodynamic Systems with a Differential-Turbulence Column, Brett Brunk, Monroe Weber-Shirk, Anna Jensen, Gerhard Jirka and Leonard W. Lion, HY July 96, p373-380.

Aquatic habitats

Channel Restoration of Incising, Mixed Grain Size Streams: Lessons Learned, F. D. Shields, Jr., M. W. Doyle, S. S. Knight and C. M. Cooper, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3363-3368.

Design Guidance - Instream and Bank Restoration Struc-tures, J. Craig Fischenich, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3079-3084.

An Evaluation of Drainage Conditions in the San Joaquin Valley, M. Manucher Alemi and George Nishimura, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Hydraulic Studies for a Large Wetland, Stephane Asselin, Phillip R. Mineart and Pierre-Yves Saugy, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p512-517.

Impacts of Reservoir Sedimentation on Decommissioning of Dams, George W. Annandale, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2114-2119.

Numerical Modeling on the Ofunato Bay Ecosystem In-cluding the Oyster Farming, Tomohiko Terasawa, Kisa-buro Nakata and Koichi Taguchi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng,

1996), p530-541.

Overview of the US Army Corps of Engineers Flood Con-trol Channels Research Program, Ronald R. Copeland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1501-1506.

Quail Creek: A Case Study of Restoration Using Native Materials, James W. Gracie, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2891-2896.
Scour at Culvert Outlets: Considerations Present and Fu-

ture, Steven R. Abt and Phillip L. Thompson, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3927-3931.

Telesleeve Crossing, David E. Comfort and Paul F. Lucas, (Pipeline Crossings 1996, Lawrence F. Catalano, ed.,

1996), p139-146.

Vulnerability of Water Resources to Global Climate Change in the Agricultural Midwest- Ecological, Economic, and Regulatory Aspects, J. Wayland Eheart and Edwin E. Herricks, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2145-2150.

Wetland Restoration in Southern North Sea Coastal Areas: The Experience of Britain and The Netherlands, Henk Smit and John S. Pethick, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3740-3745. Zoo Treats Aquatic Exhibits with Ozone, CE Nov. 96, p8.

Aquatic plants

Effects of Sewage Effluent Irrigation on Paddy, S. Krish-namoorthi, K. Shyamala and P. Govindan, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2372-2377.

Protecting Dredged Material Containment Levees Along the Houston Ship Channel, Deron N. Austin and Marc S Theisen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3121-3128.

Aqueducts

Aqueduct in Los Angeles Is ASCE Landmark, NE Jan. 96,

Effect of Pump-Ins on California Aqueduct Water Quality, B. Auchard, C. Edwards, M. Morris, J. R. Phillips, L. A. Soo and Sun Liang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4004-4009.

Montgomery C. Meigs: The Eclectic Engineer, Dean A. onigomery C. Megs. The Exterior Engineer, Dean A. Herrin, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p66-

Aquifer characteristics

Application of a Three-Dimensional Model to Assess Sea-water Intrusion in the South San Diego Embayment, David Huntley, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p4072-4077.

In., (d., 1996), Piot 2-407.
Process Upscaling of Nonaqueous Phase Liquid Behavior in Heterogenous Aquifers, Tissa H. Illangasekare, John E. Ewing and Kris O. Pytte, (Non-Aqueous Phase Liquids (NAPL)s) in Suburface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p25-45.

2-D Experimental Investigation of Surfactant Mobilization of Light Nonaqueous Phase Liquid, Lizette R. Chevalier, Roger B. Wallace, David C. Wiggert and Mohsen D. Shabana, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p357-368.

Application of a Three-Dimensional Model to Assess Seawater Intrusion in the South San Diego Embayment, David Huntley, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p4072-4077.

la, ed., 1996), p4072-4077.
Aquifer Transmissivity Computations Based on Data from Pump-and-Treat Facilities, Walter Z. Tang, Dean F. Radeloff and Vassilios A. Tsihrintzis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1273-1278.
Artificial Recharge in the Oakes Test Area, Arden W. Freitag and Dale R. Esser, (North American Water and Environment Congress & Destructive Water, Chen-

Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2335-2340.

Artificial Recharge of a Buried Glacial Aquifer in South Dakota, Vernon R. Schaefer and Delvin E. DeBoer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Destructive Profession of Salem, Oregon, Joe Glicker and Paul Eckley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

Biological Clogging and Rehabilitation of Drains and Well Systems and the Implications on Groundwater Quality, George Alford and D. Roy Cullimore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p34-39.

CHEMFLO Modeling of Aquifer Bioremediation in Va-dose Zone, Avdhesh K. Tyagi, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2516-2521.

chayya Bathaia, ed., 1990), p.2310-2321. Control of Seawater Intrusion through Injection-Extraction Well System, A. Mahesha, IR Sept./Oct. 96, p314-317. Coupled and Uncoupled Poroelastic Solutions to Land Sub-sidence due to Groundwater Withdrawal, Giuseppe Gam-

bolati, Mario Putti and Pietro Teatini, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p483-486. Deciphering LNAPL Migration Pathways in a Heterogeneous Hydrogeologic Setting, Mark K. Levorsen and Chris-tine Dreier Bynum, (Non-Aqueous Phase Liquids

(NAPLs) in Subsurface Environment: Assessment (Remediation, Lakshmi N. Reddi, ed., 1996), p836-847 A Discussion of Two SVE/Bioventing Pilot Studies, Robin D. Wankum, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation,

akshmi N. Reddi, ed., 1996), p751-761.

DNAPL Recovery System at a Railroad Tie Treating Facility, Richard Broad, III, David F. Atwater and Riaz Ahmed, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p743-750.

Eastern San Joaquin County Groundwater Management, Monique B. Magolske and Miguel A. Marino, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2781-2786. Economic Impact of Managing Sea Water Intrusion, Doug-las D. Parker and Tracy Hart, (North American Water

and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4317-4322.

chayya Bathata, ed., 1990, ps.317-4322.
Effects of Ignoring Well Losses on the Specific Capacity Function, Otto J. Helweg and Timothy Mays, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2224-2229.

tive Water, Chenchayya Bathata, ed., 1996), p.223-2229. Field-Scale Application of In-Situ Cosolvent Flushing: Evaluation Approach, M. D. Annable, P. S. C. Rao, R. K. Sillan, K. Hatfield, W. D. Graham, A. L. Wood and C. Enfield, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p212-220.

Framework for a Screening Model for DNAPL Contamina-tion of Porous Media, Clinton S. Willson, James W. Weaver, Tissa Illangasekare and Randall J. Charbeneau, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N.

Reddi, ed., 1996), p407-418. Genetic Algorithms for the Design of Groundwater Remediation Systems, Daene C. McKinney and Min-Der Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p842-847

Hydrologic Theory of Dispersion in Heterogeneous Aqui-fers, Sergio E. Serrano, HE Oct. 96, p144-151.

Management of Stream-Aquifer Systems in the 21st Century, Babs Makinde-Odusola, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2787-2792. Modeling Pumping of Saline Water from Two-Layer Aqui-fer, Andrzej Sawicki, HY June 96, p341-347.

A Multiperiod Approach for the Solution of Groundwater Management Problems using the Outer Approximation Method, George P. Karatzas, Alexander A. Spilioto-poulos and George F. Pinder, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p129-134. Nonsteady-State Drawdowns in Two Coupled Aquifers, Louis H. Motz, IR Jan./Feb. 96, p19-23.

Numerical Modeling of Deep Well Injection Near a Fault, Peikang Jin and Michael E. Barber, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p912-926.

Object-Oriented Pumping-Test Expert System, Driss Oua-zar, Alexander H-D. Cheng and Abdu Diore Kizamou,

CP Jan. 96, p4-9.

Optimal Management of a Coastal Aquifer in Southern Turkey, Khosrow Hallaji and Hasan Yazicigil, WR July/ Aug. 96, p233-244.

Optimal Well Locations for Groundwater Mound Control. Maili Wang and Kevin Lansey, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p940-945.

Process Upscaling of Nonaqueous Phase Liquid Behavior in Heterogenous Aquifers, Tissa H. Illangasekare, John E. Ewing and Kris O. Pytte, (Non-Aqueous Phase Liq-uids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p25-45.

Rate-Controlled Micellar Solubilization of an LNAPL in Aquifer Materials, Dianne J. Luning Prak, Kurt D. Pennell, Linda M. Abriola and Walter J. Weber, Jr., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p639-648.

Regression and Inverse Analyses in Regional Ground-Water Modeling, Andrew R. Piggott, A. Ghosh Bobba and Kent S. Novakowski, WR Jan/Feb. 96, p1-10.

Scaling Bacterial Filtration Rates in Different Sized Porous Media, Michael J. Martin, Bruce E. Logan, William P. Johnson, David G. Jewett and Robert G. Arnold, EE May 96, p407-415.

A Screening Level Model for Estimation of Vadose Zone Leaching and Saturated Zone Mixing: VLEACHSM, Sang B. Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1736-1741.

SEAM2D: A Numerical Model for Two-Dimensional Solute Transport and Sequential Electron Acceptor-Based Bioremediation of LNAPL-Contaminated Aquifers, Dan W. Waddill, Mark A. Widdowson and J. Steven Brauner, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p466-477.

Seawater Intrusion Solutions for the Salinas Valley, Howard Lauran L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p4312-4316.

Sensitivity Analysis of Flow in Multilayered Leaky Aquifer Systems, Peter Indelman, Gedeon Dagan, Alexander H.-D. Cheng and Driss Ouazar, HY Jan. 96, p41-45.

Steady-State Effect of Freshwater Injection on Seawater In-trusion, A. Mahesha, IR May/June 96, p149-154.

Strategies for Operation of Orange County Water District Talbert Seawater Intrusion Barrier, California, Kevin McGillicuddy and Timothy Sovich, (North American Water and Environment Congress & Destructive Water, Chenchayy

Stream-Aquifer Interaction Model with Diffusive Wave Routing, Samuel P. Perkins and Antonis D. Koussis, HY Apr. 96, p210-218.

Successful Free Product Removal of NAPLs, Daniel S. Sauvé and Jeffrey L. Pintenich, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p233-

Swelling of DNAPL by Cosolvent Flooding to allow its Re-moval as an LNAPL, Eberhard Roeder, Scott Eppes Brame and Ronald William Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p333-

Tide-Induced Ground-Water Flow in Deep Confined Aqui-fer, Ko-Fei Liu, HY Feb. 96, p104-110.

Transient Effect of Battery of Injection Wells on Seawater Intrusion, A. Mahesha, HY May 96, p266-271.

Two-Dimensional Hydraulics of Recirculating Ground-Water Remediation Wells in Unconfined Aquifers, W. M. Stallard, K. C. Wu, N. Shi and M. Yavuz Corap-cioglu, EE Aug. 96, p692-699. Use of 8¹⁰O and 8D to Define Seawater Intrusion, John A.

Izbicki, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4306-4311.

Use of SALQR Optimization in Large Aquifer Cleanup, Christopher M. Mansfield and Christine A. Shoemaker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p135-139.

The Use of Surfactants to Remediate NAPL-Contaminated Aquifers, Kurt D. Pennell, Linda M. Abriola and Laura E. Loverde, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p221-232.

Using Cavity Well to Determine Aquifer Thickness and Constants, Mohammad Saleem, IR May/June 94, p504-

519.

Volumetric Leaky-Aquifer Theory and Type Straight Lines, Zekai Şen, HY May 96, p272-280.

Watershed Management for a Limited Coastal Aquifer System, James P. Rhodes, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1087-1092.

Wellhead Protection Area Predictions and Implications for the Biscayne Aquifer in Miami, Florida, Hector R. Fuentes, Vassilios A. Tsihrintzis and Jose H. Olivo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p960-965.

Japan Shows the Way with Aramids, CE Mar. 96, p14-15.

ADR, 25 Years of Progress, Robert A. Rubin, (Civil Engi-neers Influencing Public Policy, Maureen K. Cotton, ed.,

1996), p21-29. ASCE's Role in the Work of the National Construction Dispute Resolution Committee of the American Arbitration Association, Robert F. Borg, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p1-9.

Construction Dispute Resolution Endorsed, CE June 96, p8. Major Changes to the AAA's Construction Arbitration Rules, George H. Friedman, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p10-20.

Mediation Does Not Abrogate Arbitration, CE Oct. 96, p30. Twenty-First Century Partnering and the Role of ADR, Robert S. Miles, ME May/June 96, p45-55.

Author Responds to Accusations of Carelessness, Mark L. Peckham and David A. Sutter, CE July 96, p28-29. Mapping History, Rebecca Balcom, CE Oct. 96, p54-56.

The Return of Masonry as a Structural Material, Daniel P. Abrams, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), pl-12.

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, p2288-2309.

Comparison of ASD and LRFD Design of an Office Build-ing Supported by Arches, King-le Chang and Shuang Chen, (Building an International Community of Structur-al Engineers, S. K. Ghosh, ed. and Jamshid Mahammadi, ed., 1996), p550-557.

Dynamic Response of Hagia Sophia, A. S. Cakmak, C. L. Mullen and M. N. Natsis, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p200-210.

Editor's Note, David Darwin, ST July 96, p715. In-Plane Inelastic Buckling and Strengths of Steel Arches, Yong-Lin Pi and N. S. Trahair, ST July 96, p734-747.

Looping Behavior and Strength of Prestressed Arches, Zefang Xu and Amir Mirmiran, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p366-369.

Parameter Models for Estimating In-Situ Tensile Force in Tie-Rods, Stefano Sorace, EM Sept. 96, p818-825.
Probabilistic Stability Analysis of Shallow Arches, R. P. Nordgren and K. S. Hussain, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p124-127.

Response of Lime Mortar Joint Arches to Moving Loads, Barry T. Rosson, Thomas E. Boothby and Ketil Søyland, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p.223-232.

Stability of Shear Deformable Thin-Walled Space Frames and Circular Arches, Sung-Pil Chang, Sung-Bo Kim and Moon-Young Kim, EM Sept. 96, p844-854.

Thin-Walled Curved Beams. II: Analytical Solutions for Buckling of Arches, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2102-2125.

Arching in Piled Embankments, B. K. Low, S. K. Tang and V. Choa, GT Nov. 94, p1917-1938.

Punching Shear Failure in Concrete Decks as Snap-Through Instability, Michael F. Petrou and Philip C. Per-dikaris, ST Sept. 96, p998-1005.

Architect/engineers

A/E Firms See Future in the Web, ME May/June 96, p11. Architectural Office Standards and Practices: A Practical Users Guide by Larry D. Jenkins et al. Frederick S. Mer-ritt, AE Mar. 96, p41.

ASCE Publishes Guide to Federal A/E Contracts, CE May 96, p72-73.

Congress Approves New Design-Build Law, Michael Charles, CE Mar. 96, p100.

Cooperation Can End Bid Evils, David R. Chapman, P.E., CE July 96, p32.

CE July 96, p52.

The Design of Building Structures by Wolfgang Schueller, Bijan Mohraz, AE June 96, p82-83.

Design-Build Joint Venture Liability, Michael C. Loulakis and William L. Cregger, CE May 96, p32.

Engineers Seek Better Way to Market New Building Technology, CE Sept. 96, p26-27.

Frequent "Failure Modes" an A/E/C Might Expect in Their Business, William M. Hayden, Jr., ME Sept./Oct. 96,

How Strategies Happen: A Decision-Making Framework, Karen Lee Hansen and C. B. Tatum, ME Jan./Feb. 96,

In Defense of Design Engineers, Burton A. Lewis, CE Sept. 96, p32.

Join the EMPN, Gary D. Bates, ME July/Aug. 96, p4-5. Let the Buyer (and Seller) Beware, Gary Gough, CE Sept.

96, p68-69. Marketing and Selling A/E and Other Engineering Services, Scott C. Gladden and Arnold Olitt, 1996, 0-7844-0100-4,

120pp. Myron Goldsmith, Structural Engineer, Architect, Dies at 77, CE Oct. 96, p78.

A User's Guide to Federal Architect - Engineer Contracts, 2nd edition, James B. Goodowens, 1996, 0-7844-0145-4,

Architects

Architect Chooses Slenderwall for Gothic Church, CE July

The Digital Architect: A Common-Sense Guide to Using Computer Technology in Design Practice by Saunders, Frederick S. Merritt, AE Mar. 96, p42.

Editor's Note, Kenneth L. Carper, CF Aug. 96, p89. Interface Problems between Building Owners and Designers, Abdul-Mohsen Al-Hammad and Ibrahim Al-Hammad, CF Aug. 96, p123-126.

Partnering: Building a Stronger Design Team, Richard G. Weingardt, AE June 96, p49-54.

Seeking Structural Solutions, Virginia Kent Dorris, CE Nov. 96, p46-49.

TQM and ISO 9000 for Architects and Designers by Charles Nelson, Frederick S. Merritt, AE June 96, p81.

Architectural engineering
Architect Gives Precast Care to Nursing Center, CE Sept. 96, p96.

Architectural Engineering Program at University of Miami, David A. Chin and Michael K. Phang, AE June 96, p78-79.

Chanel Fashions Stylish Building, CE Sept. 96, p25-26. Investigation of Design Profession Closes, CE May 96, p8.

New on the Web, CE Sept. 96, p11.

Plans for Embassy Appear in Show, CE Nov. 96, p23.

Practitioners' Forum, AE Sept. 96, p85-87.

William Claire, 84, Editor of ASCE's Urban Planning Guide, NE July 96, p15.

Architecture

'Super-Element' to Represent the Behavior of Architectural Stud Partition Walls, Vicki L. Vance, H. Allison Smith and Luciana R. Barroso, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), pl 106-1109.

Architectural Considerations in Design of Lunar-Based Astronomical Observatories, Stewart W. Johnson, Koon Meng Chua, Milton Schwartz and Jack O. Burns, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p871-880.

Architecture on the Moon: The Importance of Human Factors Considerations in the Design of a Lunar Base, John Bergquist, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1038-1044.

The Art of the Structural Engineer by Bill Addis, Wolfgang Schueller, AE Dec. 96, p145-146.

A Concept of Driving on Orbital Station, M. Malenkov, V. Gorbunov, S. Vidaykin, V. Zhivoglotov, R. Beglov and V. Syromyatnikov, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), n559-565.

First Mars Outpost Architectural Study, Jun Okushi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p928-934.

A Gatehouse for Johnson, Pedro Sifre and David Harrison, CE Feb. 96, p44-47.

Inflatable Habitat Option for a Human Lunar Return Mission, Kriss J. Kennedy, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1076-1082.

The Limitations of Independent Controller Design for a Multiple-link Flexible Macro-manipulator Carrying a Rigid Mini-manipulator, H. D. Stevens and Jonathan How, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p93-99.

Lunar Neighborhoods: Architecture for Extreme Environments, Milton Schwartz, Jeffrey Schwartz, John Bergquist, Carsten Keller, Preston Kelsey and Todd Stringer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1027-1031.

Multidisciplinary Product Modeling of Buildings, W. P. S. Dias, CP Jan. 96, p78-86.

Networked Multimedia Tools for Architectural Engineering, Anthony C. Webster, AE Mar. 96, p11-19.

Overview of International Space Station Extra Vehicular Robotics, Amin Rezapour, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p490-496.

Practitioners' Forum, Frederick S. Merritt, AE Dec. 96, p125-128.

San Francisco Bay's Jeweled Necklace (Available only in Focus on Structures Special Edition), Charles Seim, CE Jan. 96, p14A-16A.

Seismic Performance of Architectural Glazing Systems, Richard A. Behr, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p115-116

The Surface Extreme Environment Dwelling System (SEEDS) for Mars, Kurt Anthony Micheels, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1020-1026.

University Arts Building Presents Structural Challenge, CE Nov. 96, p10.

Vollmer, Engineer and Architect, Dies at 80, CE Apr. 96, p79. Arctic engineering

23

Coating of Steel Structures in Cold Regions, Yuji Nakamura, Taiichi Inaba and Akihiro Tamada, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p173-184.

Cold Regions Utilities Monograph, 3rd edition, Daniel W. Smith, ed., 1996, 0-7844-0192-6, 780pp.

Road and Airfield Development in the Subarctic and Arctic, Alaska and Northwest Canada, James W. Rooney and Ted S. Vinson, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p1-22.

Transportation of Alaska North Slope Natural Gas to Market, Donald A. Lannom, David O. Ogbe, Akanni S. Lawal and F. Lawrence Bennett, Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p226–237.

Arctic regions

Air Quality at a Zinc/Lead Mine in Arctic Alaska, Charlotte MacCay and Jack Coutts, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), 9804–815.

Automobile Emissions Under Arctic Conditions Using Unleaded and 10 Percent Ethanol Admixed Gasolines, R. J. Andres, J. D. Goldbach and F. L. Williams, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p792-803.

Strengthening Railroad Roadbed Bases Constructed on Icy Permafrost Soils, V. G. Kondratjev, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p688-699.

Undrained Multidirectional Direct Simple Shear Behavior of Cohesive Soil, Don J. DeGroot, Charles C. Ladd and John T. Germaine, GT Feb. 96, p91-98.

Upheaval Buckling of a Pipeline in an Arctic Environment, T. Bartlett Quimby and Michael R. Fitzpatrick, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p215-225.

Argentina

Update on Aguas Argentinas, CE July 96, p22,24.

Zonification of Areas with Inundation Risk by Means of Mathematical Modeling in the Rosario Region, Argentina, G. A. Riccardi, E. D. Zimmermann and R. A. Navarro, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), n3704

Arid lands

Alluvial Fan: Proposed New Process-Oriented Definitions for Arid Southwest, Richard H. French, Jonathan E. Fuller and Steve Waters, WR Sept./Oct. 93, p588-598.

Alternatives for Managing Shallow Ground Water in Arid Irrigated Areas, James E. Ayars, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p183-188.

Flash Floods and Their Control in the Indian Arid Zone, K. D. Sharma, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2539.

Grade Control Structures for Pipeline Crossings in the Arid Southwest, Martin J. Teal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p830-835.

Impact of Agricultural Water Conservation on Water Quality in Arid Irrigated Areas, James E. Ayars, Kenneth K. Tanji and Thomas J. Trout, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p905-910.

Threshold Precipitation Events and Potential Ground-Water Recharge, Richard H. French, Roger L. Jacobson and Brad F. Lyles, HY Oct. 96, p573-578.

Arizona

Arizona Local Government Bridge Scour Evaluation Study, Bart S. Bergendahl and Raymond C. Jordan, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p479-488.

Current Status of the Demonstration Management Improve-ment Program, G. J. Butler and R. E. Ware, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3476-3479.

Dam Engineering Exhibit Wins Prize for New Museum in Arizona, NE Dec. 96, p9.

Flood Control Studies for Arizona Communities, Philip O. Lowe and Sam Arrowood, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1870-1874.

Increasing Computational Accuracy of Radial Gate Flows, Brian Henning and Timothy F. Kacerek, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3592-3597.

Integrated Resources Management for Irrigated Agricul-ture: Practical Lessons in Water Management and Conservation from the Arizona Management Improvement Program, Thomas Carr, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bahhala, ed., 1996), p3486-3489.

The Management Improvement Program: A Model to Improve the Performance of Irrigated Agriculture, A. R. Dedrick, E. Bautista and S. A. Rish, (North American

Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3470-3475.

Plumbing the Quality of a Sewer System, Thomas M. Galeziewski, Samuel A. Edmondson and Robert Webb,

CE Jan. 96, p55-57. Riddle of the Riverbed, Kenneth D. Walsh, Robert E. Schock and Steven A. Jimenez, CE June 96, p64-67.

Riprap and Concrete Armor to Prevent Pier Scour, Lisa M. Fotherby and James F. Ruff, (North American Water and Environment Congress & Destructive Water, Chen-

Environment Congress & Destructive water, Chen-chayya Bathala, ed., 1996), p4178-4187.

Utilizing Geomorphic Analogs for Design of Natural Stream Channels, Scott Gillilan, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2799-2804.

Wave Overtopping and Pressure Dependent on Crest Eleva-tion, Tsutomu Sakakiyama, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

ASCE's Orange County Branch Reaches into Past with Historic Landmark Designations, CE Nov. 96, p74-75.

Assault Bridge Tested, CE Oct. 96, p24,26.

Collecting, Abstracting, and Compiling Review Comments: the Reviewer's Assistant and the Lessons-Learned Gen-erator, Michael C. Fu and E. William East, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p104-111.

Implementing the Knowledge Worker System (KWS) in an Engineering Environment, Bruce C. Goettel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p288-293.

Integrated Infrastructure Maintenance Management, Carol Subick and Ilker Adiguzel, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p207-213.

Aromatic hydrocarbons

Dry Deposition of Polycyclic Aromatic Hydrocarbons in Ambient Air, Hwey-Lin Sheu, Wen-Jhy Lee, Chun-Ching Su, How-Ran Chao and Yi-Chin Fan, EE Dec. 96, p1101-1109.

Influence of Sorption Mechanisms on the Bioavailability of Aromatic Hydrocarbons in Soil, William D. Burgos and John T. Novak, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p670-680.

Modeling of NOM-Facilitated PAH Transport Through Low-f_m Sediment, William P. Johnson, Gary L. Amy and Steven C. Chapra, EE June 95, p438-446.

Multicomponent NAPL Composition Dynamics and Risk, Catherine A. Peters, Paula A. Labieniec and Christopher D. Knightes, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p681-692.
Rates of Release of PAHs from DNAPL Mixtures, Suparna

Mukherii, Catherine A. Peters and Walter J. Weber, Jr., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N.

Reddi, ed., 1996), p575-582.

Removal of Arsenic from Ground Water by Iron Oxide-Coated Sand, Arun Joshi and Malay Chaudhuri, EE Aug.

96, p769-771.

Removal of Arsenic From Ground Water Using Granular Activated Carbon, Brock D. Buche and Lawrence P. Owens, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1173-1177.

Arterial highways
Central Artery Utility Crossings, Brian Brenner, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996),

Central Artery/Tunnel (CA/T) Project Environmental Permitting, Jeffrey M. Paul, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2236-2241

Geotechnical Instrumentation for Boston's Central Artery/ Tunnel Project: An Overview, John Dunnicliff, Charles Daugherty and Thom Neff, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p727-733.

and Jamshid Mohammadi, ed., 1990), p121-133.
PRIMAVERA: A Best Practice Manual for Innovative
UTC Schemes, F. O. Montgomery, A. D. May, K. A.
Fox, F. Biora, V. Mauro and S. Jones, (Applications of
Advanced Technologies in Transportation Engineering,
Yorgos J. Stephanedes, ed. and Francesco Filippi, ed.,
1996), p680-684.

PRIMAVERA: Integrated ATT Strategies for Urban Arterials, F. O. Montgomery, A. D. May, K. A. Fox, F. Biora, V. Mauro and S. Jones, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

n685-689

Artesian aquifers

Implications of Using Approximate Expressions for Well Function, Rajesh Srivastava, IR Nov./Dec. 95, p459-462.

Artificial intelligence

An Al Agent Construct for Space and Planetary Science Applications, Lee Plansky and Nancy Linarez-Royce, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p341-348.

Alternative Scenarios for Military Deployment of Un-manned Ground Vehicles, John G. Blitch and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p36-42.

Applications of Case-Based Reasoning in Construction Engineering and Management, Jyh-Bin Yang and Nie-Jia Yau, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p663-669.

Artificial Intelligence (AI) Supported Process Planning System for Construction, Md. Salim, (Analysis and Comstation, Franklin Y. Cheng, ed., 1996), p510-518.

Artificial Intelligence and Intelligent Transportation Systems, Brian L. Smith, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p978-984.

Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996, 0-7844-0182-9, 1090pp.

Design of a Freeway Control System Based on Artif telligence Methods for Travel Time Detection, Reinhart D. Kühne, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p439-443.

Fuzzy Controlled Genetic Algorithm Search for Shape Op-timization, Chee Kiong Soh and Jiaping Yang, CP Apr.

96, p143-150.

IFPATS: A Link Between Distributed AI Systems and Expert Users, G. J. Krige, CP Apr. 96, p151-156.

A Multimedia Expert System for Slurry Wall Construction, Nie-Jia Yau and Chien-Hong Lu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p600-606.

ed., 1996), poul-olo. Neural Net for Determining DEM-Based Model Drainage Pattern, Jehng-Jung Kao, IR Mar/Apr. 96, pl 12-121. Pile Driving Records Reanalyzed Using Neural Networks, Anthony T. C. Goh, GT June 96, p492-495. Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996, 0-7844-0178-0, 248pp.

Semantic Comparison of Selective and Constructive Induction, Witold Szczepanik, Tomasz Arciszewski and Janusz Wnek, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p845-851.

Strategies for Searching an Area with Semi-Autonomous Mobile Robots, Robin R. Murphy and J. Jake Sprouse, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p22-28.

Using Artificial Intelligence to Reduce High Fuel Con-sumption in Congested Cities, Ken Fox, Roy Clarke and sumption in Congested Cities, Ken Fox, Roy Clarke and Howard Kirby, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p520-524.Water-Supply System Operations: Critiquing Expert-System Approach, Anne Shepherd and Leonard Orto-lano, WR Sept./Oct. 96, p348-355.

rtificial islands

The Effects of Construction Joint in Mass Concrete, Donald D. Liou, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p193-202.

Morphological Impact Assessment of Artificial Islands for the Øresund Link Between Denmark and Sweden, Karsten Mangor, Andrew M. Driscoll, Ida Brøker and Ann Skou, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p939-950.

Artificial recharge

Artificial Recharge in the Oakes Test Area, Arden W. Freitag and Dale R. Esser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2335-2340.

ASCE Activities

Alabama-Huntsville Students Again Crowned as Concrete Canoe Champs, NE Aug. 96, p1,6.
Alaska Students Triumph in 1996 Steel Bridge Finals, CE

Aug. 96, p64. Any New Address Stress? James Donald Strong, CE Nov.

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May 96, p72. ASCE Group Is Off to Berlin This Month, CE June 96,

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ASCE's New Logo: A Case of Corporate Identity, NE June

96, p15.

ASCE's Role in the Work of the National Construction Dispute Resolution Committee of the American Arbitra-tion Association, Robert F. Borg, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), pl-9.

ASCE's Texas Section Loses Two of Its Past Presidents,

CE July 96, p72. ASCE's Two New Institutes Are Open for Business, NE

Nov. 96, p1,4.

The Birth and Success of Orange County's Hydrology and Hydraulics Technical Group, Chenchayya T. Bathala, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., p2259-2263.

Buffalo Section Works with Cub Scouts to "Build a Better

Future", CE Nov. 96, pt 24.

CERF Aids NSF in Revising Program That Reflects Needs of Construction Industry, NE July 96, p15.

CERF, U.K. Agree to Broaden Ties, CE May 96, p73.

Civil Engineer Archie Carter Remembered by Campaign Gift from Wife, NE Sept. 96, p14.

Concrete Canoe Finals Set for Wisconsin in June. CE May

Construction Forum, SC Aug. 96, p69-70. Editorial, EE Jan. 96, p1-2

Elvis, Marilyn Monroe, John Roebling, Clarence A. P. Hamerson, CE June 96, p28.

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Latest ASCE Salary Index is Released, CE Mar. 96, p69-

A National Standard for Flood-Resistant Design and Con-struction, Christopher P. Jones, Vernon K. Hagen, Chris-topher S. Hanson, Thomas C. MacAllen, David Green-wood and Clifford E. Oliver, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p339-340.

New Address for the 21st Century, Virginia Fairweather, CE Sept. 96, p42-45.

Not on Our Salary, Kimball L. Ohsiek, P.E., CE Dec. 96,

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Organizing a Local Water Resources Technical Group, Thomas G. Sands, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2254-2258.

Proud to Be a Civil Engineer, G. Andrew Reti Makes Major Gift to ASCE Building Campaign, NE Nov. 96, p2

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mony, NE Aug. 96, p14.

Two Federal Legislators Named ASCE Honorary Fellows during Society's National Policy Week, NE Apr. 96, p2. Two Social Concerns of an ASCE Subcommittee, Mario

Salvadori, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p30-34.

Web Site Correction, CE Feb. 96, p8. What's 'NEW' for 1996?, CE Jan. 96, p69.

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Nevada Test Site on Track, CE Mar. 96, p20-21.

Performance of Hot Mix Asphalt Using Coarse and Skip Graded Aggregates, Moses Karakouzian, Michael R. Dunning, Robert L. Dunning and Jerold D. Stegeman, MT May 96, p101-107.

Permanent Deformation and Fatigue Characteristics of SMA Mixtures, Louay N. Mohammad and Harold R. Paul, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p622-630.

Use of Remediated Petroleum Contaminated Soils in High way Construction, Jay N. Meegoda, Robert T. Mueller and Frank Palise, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p1-16.

A User's Experience in Design and Field Quality Control With the Superpave System, Gerald Huber, Xishun Zhang and Robin Fontaine, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p711-720.

Asphalt pavements

Application of FWD in Analyzing Finite Width Effect of Pavements, Dar-Hao Chen, Michael Murphy and Mohan Yeggoni, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1018-1021.

Asphalt Update, Rita Leahy, R. Gary Hicks and Carl L.

Monismith, CE Apr. 96, p58-61.

Design and Construction for Asphalt Pavements in Permafrost Areas: Case Study of Qinghai-Tibet Highway, Nin-gyuan Li and Ralph Haas, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p866-877.

Effect of Maxwell Binder on Two-Phase Materials, Han Zhu, Jeff W. Rish, III and William C. Dass, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p576-579.

Evaluation of Microcrack Damage Growth and Healing of Asphalt Concrete Pavements Using Stress Wave Method, Yongon Kim and Y. Richard Kim, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p612-615.

Fatigue Model of Asphalt Concrete, Jian Zhou and Robert Y. Liang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p563-567.

Su. 1990, D30-302.
Fractals of Aggregates Correlated with Creep in Asphalt Concrete, Mohan Yeggoni, Joe W. Button and Dan G. Zollinger, TE Jan./Feb. 96, p22-28.

Laboratory Study of Large Stone Asphalt Paving Mixtures, Joe W. Button, W. W. Crockford and E. G. Fernando, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p603-611.

Low Temperature Cracking and Rutting in Asphalt Con-crete Pavements, Ted S. Vinson, R. Gary Hicks and Vin-cent C. Janoo, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H.

Haas, ed., 1996), p203-248.

Mechanistic Design of Asphalt Concrete Pavements in Cold Regions, Ted S. Vinson and James W. Rooney, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p151-202.

A Micromechanical Model for Asphalt Materials, C. A. Plaxico, W. Uddin and R. M. Hackett, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p761-770.

Pavement Design for Rehabilitation and Minimizing Construction Effects on Aircraft Operations, R. Barry Pierce and Lino H. Neri, Jr., (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p128-139.

Reliability-Based Model for Predicting Pavement Thermal Cracking, Said M. Easa, Ahmed Shalaby and A. O. Abd El Halim, TE Sept./Oct. 96, p374-380.

A Uniaxial Constitutive Model Accounting for Viscoelas-ticity and Damage Evolution under Cyclic Loading, Hyun-Jong Lee and Y. Richard Kim, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p693-696.

Asphalts

Aging Effects on Temperature Susceptibility of Polymer Modified Asphalts, Shin-Che Huang, Jung-Do Huh, Ray-mond E. Robertson and Mang Tia, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1367-1378.

Asphalt-Concrete Water Barriers for Embankment Dams, Patrick J. Creegan and Carl L. Monismith, 1996, 0-7844-0141-1, 185pp.

Decatur Airport Off-Peak Construction Allows Airport to Continue Operations, Charles A. Hagloch, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p115-127.

Effect of Rest Periods on Fatigue Response of Asphalt Concrete Mixtures, Tung-Wen Hsu and Kuo-Hung Tseng, TE July/Aug. 96, p316-322.

Florida Department of Transportation Aviation Office Statewide Pavement Maintenance Management Program, J. David Scherling, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p263-272

Laboratory Aging Methods for Simulation of Field Aging of Asphalts, Shin-Che Huang, Mang Tia and Byron E.

Ruth, MT Aug. 96, p147-152.

Mult, M1 Aug. 20, 1971-1972.

Mechanical Properties Characterization of Asphalt Concrete Barrier for Radioactive Nuclear Waste Vaults, Bernard A. Vallerga, Akhtarhusein A. Tayebali, Shmuel L. Weissman and Carl L. Monismith, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1288-1297.

Pavement Design at Louisville: Optimizing Local Practice, Darren L. Piedmonte, (Meeting the Challenge: Rebuild-ing Inner City Airports, Prianka Seneviratne, ed., 1996),

Pavement Evaluation with Seismic Tomographic Imaging, S. Nazarian, D. Yuan, D. Doser and K. Dhanasekharan, (Case Histories of Geophysics Applied to Civil Engineer-ing and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p56-72.

Phosphogypsum Slag Aggregate-Based Asphaltic Concrete Mixes, Paul T. Foxworthy, Raju S. Nadimpalli and Roger K. Seals, TE July/Aug. 96, p300-307.

A Procedure for Evaluating Reflective Cracking, Shakir R. Shatnawi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1429-1438.

Significance of Tests for Highway Materials, E. Ray Brown, P. S. "Ken" Kandhal, Dah Yinn Lee and K. Wayne Lee, MT Feb. 96, p26-40.

Stiffness Reductions of Flexible Pavements due to Cumulative Fatigue Damage, A. C. Collop and D. Cebon, TE

Mar/Apr. 96, p131-139.
Toning Asphalt, ET Aug./Sept. 96, p1,7.
Validation of Rutting in the CAL/APT Program, J. Harvey,
S. Shatnawi and S. Weissman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p701-710.

Assembly-line construction

Analyses of Lunar Membrane Structures for Potential Failure Scenarios, James Day and Phil Richter, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1052-1058.

Johnson, ed., 1996), p1052-1058.
Distributed Control for Serial Assembly in Space, Frank McQuade and Colin R. McInnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1169-1175.
International Space Station (ISS) Assembly Sequence Planning, R. E. Gates, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p435-442 442

Assessments

Earthquake Hazard Assessment of Iran, Behrooz Tavakoli
and Mohsen Ghafory Ashtiany, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p301-302.

17971, p.301-302. Earthquake Hazard Assessment Through Geographic Information Systems, Stephanie A. King, Anne S. Kiremidjian and Kincho H. Law, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p123-124.

An Elevated Train Rises Again, CE Nov. 96, p10.

A Geostatistically-Based Method to Assess Potential Haz-Geostatistically-Based Method to Assess Forential Had-ardious Waste Sites Using Hard and Soft Data, Morris M. Dimberger and Richard W. Stephenson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and

Charles D. Shackerford, e.g., FIRSCHA F. (PESOH), Ed. and Mary J. S. Roth, ed. (1996), p826-847.

On Structural Identification of Constructed Facilities, A. Emin Aktan and James T. P. Yao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p651-658.

Potential-Scour Assessments at 130 Bridges in Iowa, Edward E. Fischer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1149-1155.

A Probabilistic Framework for Brittle Fracture Assess-ments of Structures —Constraint and Ductile Tearing Effects, Claudio Ruggieri and Robert H. Dodds, Jr., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p878-881.

Re-Assessment of Concrete Bridges, P. Thoft-Christensen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed.,

1996), p613-620.

Regional Groundwater Management with Health Risk As-sessment, Susan D. Pelmulder and Yung-Hsin Sun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1291-1296.

Seismic Hazard Assessment in Southeastern U.S. Paul C. Rizzo and Vaidya E. Bazan, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p127-128.

Seismic Hazard Assessment of the NPPS in the ČR, Dana

Seismic Hazaru Assessment of the NFF's in the C.R. John Procházková, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p179-180. Timberlake Dam Failure: A Hydrometeorological As-sessment, J. Warner, G. V. Loganathan, R. J. Kane, M. Gillen, D. F. Kibler and K. Kostura, (North American Water and Environment Congress & Destructive Water,

water and Environment Congress & Desarticité Water, Chenchayya Bathala, ed., 1996), p2522-2527. Uncertainty Measures in Reliability Assessment of Ship Structures, Bilal M. Ayyub and Kwan-Ling Lai, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), n621-626

"Seepage Assessments and Control Associated with Flori-da's Phosphate Industry". Wayne A. Ericson, (Uncer-tainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p866-880.

Acoustic Efficiency Analysis Using Infrasound from NEOs, Douglas O. ReVelle and Rodney W. Whitaker, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p102-108.

Acquisition of Subsurface Comet Samples, Richard Welch, Donald Sevilla, Don Noon and Albert Delgadillo, (Ro-botics for Challenging Environments, Laura A. Demsetz, ed., 1996), p129-135.

Architectural Considerations in Design of Lunar-Based Astronomical Observatories, Stewart W. Johnson, Koon Meng Chua, Milton Schwartz and Jack O. Burns, (Engineering, Construction, and Operations in Space, Stewart

W. Johnson, ed., 1996), p871-880. Astrophysical Cosmology Using a Lunar Ligo, Thomas L. Wilson, Hans-Joachim Blome and Norman LaFave, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p861-863.

Concept for a Permanent Lunar Utilities System, David G. Schrunk, Bonnie L. Cooper and Burt L. Sharpe, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p935-941.

Earth-Crossing Asteroids and Comets, Tyler Donnell, (Engineering, Construction, and Operations in Space, Stew-art W. Johnson, ed., 1996), p1278-1280.

HF Interference in Space from Terrestrial Sources, Marisa McCoy, John P. Basart and Monte Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p854-860. Issues of Landing on Near Earth Asteroids, D. J. Scheeres,

S. J. Ostro and R. S. Hudson, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed.,

1996), p54-60.

Methods of Experimental Research of Asteroid Properties in Space Missions, D. V. Petrov, V. A. Simonenko and O. N. Shubin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p68-73.

A Model of Meteoroid Atmospheric Entry with Implications for the NEO Hazard and the Impact of Comet Shoe-maker-Levy 9 on Jupiter, D. A. Crawford and M. B. Boslough, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p81-87

Nuclear Explosion Near Surface of Asteroids and Comets -II. General Description of the Phenomenon, O. N. Shu-bin, V. Z. Nechai, V. N. Nogin, D. V. Petrov and V. A. Simonenko, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p74-80.

On Exploration and Usage of Near-Earth-Missing Objects, V. A. Simonenko, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p61-

Sizes and Masses of Satellite Observed Meteoroids, Z. Ceplecha, R. E. Spalding, C. Jacobs and E. Tagliaferri, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p95-101.

Stewart W. Jonnson, ed., 1970, pp.2-101. Use of Radio Frequency Spectrum in Lunar Environment, Shayla E. Davidson and Robert M. Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p847-853.

Asymmetric structures

Inelastic Behavior of Asymmetric Multistory Buildings, Juan C. De la Llera and Anil K. Chopra, ST June 96,

Asymmetry

Validation of a Model for Cross-Shore Sediment Transport, Irene Katopodi and Nikos Kitou, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p806-817

Asymptotic series

Dynamic Stability of Viscoelastic Structures under Stochastic Loading, S. T. Ariaratnam and G. Amaniampong, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p542-545. Three-Dimensional Analysis of Doubly Curved Laminated Shells, Chih-Ping Wu, Jiann-Quo Tarn and Shu-Man Chi, EM May 96, p391-401.

Atmospheric boundary layers

Environmental Fluid Mechanics — A Review of Some Recent Results, Robert L. Street, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p30-32.

Atmospheric diffusion

Atmospheric Flow Indices and Interannual Great Salt Lake Variability, Young-Il Moon and Upmanu Lall, HE Apr. 96, p55-62.

Impact-Generated Atmospheric Plumes: The Threat to Sat-ellites in Low-Earth Orbit, M. B. Boslough and D. A. Crawford, (Engineering, Construction, and O in Space, Stewart W. Johnson, ed., 1996), p88-94

Volcanic Hazards and Aviation Safety, Thomas J. Casade-vall, Theodore B. Thompson and John W. Ewert, (Natu-ral Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p363-364.

Estimating Settlement of Sand Caused by Construction Vi-bration, S. Drabkin, H. Lacy and D. S. Kim, GT Nov. 96,

Nonlinear Soil Response—1994 Northridge, California, Earthquake, M. D. Trifunac and M. I. Todorovska, GT Sept. 96, p725-735.

Soil Fracture Technique Stops Blast Shock Waves, CE May 96, p12.

Everyday Success Pointers, Gary Bates, ME Sept./Oct. 96, pll.

Ethics, Uncertainty and Postaudits, Charles G. Gunnerson, CE Dec. 96, p27.

A Simplified Process Audit to Design an Affordable Pollu-tion Prevention and Waste Management Plan - Part 1, Ronald Zaloum and Pierre Sylvestre, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p87-92.

Validation of the Simplified Audit Process at a Roofing Tar Paper Speciality Product Manufacturer - Part 2, Pierre Sylvestre, Ronald Zaloum, Chantal Goyette and Claude Audet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p93-98.

What Is the Standard of Care? Eugene A. Miller, ME Nov./Dec. 96, p40-46.

Australia

Coastal Ocean Model Performance in Eastern Australia, William L. Peirson and Ian P. King, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p632-643.

Forecasting House Rental Levels: Analytical Rent Model versus Neural Network, Heng Li and Vera Li, UP Dec.

History of Coastal Engineering in Australia, Michael R. Gourlay, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p1-88.

Interaction Between Nearshore Natural Processes on Macro-Tidal Beaches. Case Study Along the Capricorn Coast, Australia, Jerzy Piorewicz and Paul Boswood, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p489-500.

Risk Assessment Approach to Dam Safety Criteria, David S. Bowles, Loren R. Anderson and Terry F. Glover, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p451-473.

Transferable Discharge Permits as a Function of Fluctuat-ing Stream Conditions, Norman J. Dudley, Michelle Coelli and John J. Pigram, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p272-293.

32

Austria

Flood Forecasting Model for an Alpine Drainage Basin-River Drau in Austria, D. Gutknecht, W. Kugi and F. Nobilis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p718.

Flood Trends in Austria, F. Nobilis and P. Lorenz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p917.

Hysteresis Effect of Karst Vadose Zone in Spring Kr5, Mt. Kräuterin, Austria, Dachang Zhang, Rudolf Pavuza, Karl Mais and Hans Fischer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1754-1759.

Investigation of Some Heavy Flood Hazards in Small Alpine Catchments in Austria, A. Watzinger, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p715.

Preliminary Studies of a Karst Warm Spring in Mt. Kräuterin, Austria, Dachang Zhang, Rudolf Pavuza, Hans Fischer and Karl Mais, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1279-1284.

Auto-regressive moving-average model

Method for Probabilistic Evaluation of Seismic Structural Damage, Ajay Singhal and Anne S. Kiremidjian, ST Dec. 96, p1459-1467.

Non-Gaussian Elliptically Contoured ARMA Models, Mircea Grigoriu, EM Apr. 96, p334-341.

System Identification and Its Application to Estimating Soil Properties, Steven Glaser, GT July 95, p553-560.

Automated transit vehicles

Researchers Plan First Test of Automatic Highways, CE Nov. 96, p24.

Automatic identification systems

Classifying Vehicles Using Their Auditory Signature Based on an Auditory Model, Denis McKeown, Stephen Hadland, Howard Kirby, Mark Dougherty, Luke Ibbetson, Louis Lopes and Peter Roach, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p711-715.

Evaluating the Potential of ATT Technologies in Hazardous Materials Transportation Risk Management, Konstantinos G. Zografos and George M. Vasilakis, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996, p.480-485.

Evaluation of Vehicle-Specific Information in Traffic Control Systems, Alireza Kamyab, T. H. Maze and Reginald R. Souleyrette, TE Nov./Dec. 96, p421-429.

LP Type Dynamic On-Ramp Traffic Control Model for Urban Expressway, Yasuo Asakura, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p434-438.

Automation

A/E Firms See Future in the Web, ME May/June 96, p11.

Application of an Optical Monitor in Automatic Control of Coagulation Dosing in Water Treatment Operations, Chihpin Huang and Chi-Bing Liu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2450-2455.

Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996, 0-7844-0146-2, 730pp.

Automated Code Compliance Checking for Building Inspection, Tang Hung Nguyen, Claude Bédard and Kinh Huy Ha, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1020-1026.

An Automated Design and Review Assistant: SEDAR, Michael C. Fu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p118-125.

Automated Knowledge-Based System for Stereo Video Metrology, Mohammed Taleb Obaidat and Kam W. Wong, SU May 96, p47-64. Automated On-Scene Management of Traffic Accidents, George M. Vasilakis and Yorgos J. Stephanedes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p292-295.

An Automatic System for the Definition of the Setting Rules for Speed Diagrams, Francesco Saverio Capaldo and Rodolfo Grossi, Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p193-197.

Automation-Related Quality Improvements in Power Plant Design and Operation, George V. Jones, Phillip W. Garrett, Jones Randall E. and Carl K. Toner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p487-493.

Automatized System of Runoff Forecasting for the Amudarya River Basin, L. N. Borovikova, U. G. Konovalov and S. U. Myagkov, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p454.

Bar Codes in the Design Office, Richard L. Bland, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p951-957.

Canal Control and Automation for the Central District System, Michael A. Drain and Eric R. Hixson, (North American Water and Environment Congress & Destructive Water, Chenchayva Bathala, ed., 1996), p2384-2389.

Collecting, Abstracting, and Compiling Review Comments: the Reviewer's Assistant and the Lessons-Learned Generator, Michael C. Fu and E. William East, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p104–111.

Communication Strategies for Distributed Traffic Systems, Norman Hunt, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p256-270.

Construction Automation and Robotics in Civil Engineering Education Programs, Walter W. Boles and Jing Wang, El Jan. 96, p12-16.

Construction Automation: Demands and Satisfiers in the United States and Japan, John G. Everett and Hiroshi Saito, CO June 96, p147-151.

Corps Opens Dam Center, CE June 96, p8.

Costs and Overhead Not the Same Thing, Ken Anderson, CE May 96, p28-29.

Engineering Automation Expands, CE Sept. 96, p22.

Engineering Firm Accounts for Twice the Business, ME Jan/Feb. 96, p11-13.

Entity-Relationship Modeling of Composite Materials Data, Lisa K. Spainhour and William J. Rasdorf, CP July 96, p226-235.

The EURATN Project, Jean-Michel Crenais, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p159-165.

Evaluating the Potential of ATT Technologies in Hazardous Materials Transportation Risk Management, Konstantions G. Zografos and George M. Vasilakis, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p480-484.

Evaluation of Road Maintenance Automation, Arif Osmani, Carl Haas and W. Ron Hudson, TE Jan./Feb. 96, p50-58.

Fully Automated Rebar CAD/CAM System: Economic Evaluation and Field Implementation, Ronie Navon, Ya'acov Rubinovitz and Mendi Coffler, CO June 96, p101-108.

Government Looks to Automated Future on Highways, CE Feb. 96, p16-17.

Influence of Hammer Type on SPT Results, Elliott E. Drumright, Charles W. Pfingsten and Robert G. Lukas, GT July 96, p598-599.

Intelligent On-Line Monitoring of Machine Health for Robots in Critical Environments, John P. H. Steele, Michelle Archuleta, Galen D. Brown, Tom Drouillard, Dirk Schlief and Tim D. Seifert, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p262-275. 33

An Interactive Planning Environment for Critical Operations, Kuo-Liang Lin and Carl T. Haas, CO Sept. 96, p212-222

Interport Modelling with State Automata, Maurizio Mazzucchelli, Valerio Recagno and Giuseppe Sciutto, (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p104-108.

Mapping the Future, CE July 96, p18-19.

Modeling and Control of Excavator Dynamics during Dig-ging Operation, A. J. Koivo, M. Thoma, E. Kocaoglan and J. Andrade-Cetto, AS Jan. 96, p10-18.

The Next Generation of Structural Engineering Automation Systems, Song Fong Jan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p494-500.

Pedestrian Flow Estimation in Urban Environment by Image Processing, P. Vannoorenberghe, C. Motamed, J.-M. Blosseville and J.-G. Postaire, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p119-123.

Private Company Bypasses Clogged Highway, CE Mar. 96, p10.

Real Time Positioning and Equipment Control for Hostile Environments, Yvan J. Beliveau, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p64-70. Researchers Plan First Test of Automatic Highways, CE

Nov. 96, p24.

Results from the PLEIADES Automatic Traffic Surveillance System in the Kent Sector of the Paris-London Corridor, Neil Hoose and Nigel Cox, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p233-237.

Scheduling with Computer-Interpretable Construction Method Models, Martin A. Fischer and Florian Aalami,

CO Dec. 96, p337-347.

Senior Engineers, Defining Their Place in an Electronic Office, James D. Miller, CP Oct. 96, p263.

Office, James J. Marlet, Co.C. 30, peop. A Sequential Hypothesis-Testing Based Freeway Incident Response Decision-Making System, Samer M. Madanat, Hua-Liang Teng and Pen-Chi Liu, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p286-291.

A Space Systems Testbed for Situated Agent Observability and Interaction, Sam Siewert and Gary Nutt, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p122-128.

The Standards Processing Framework Communication Language (SPF-CL), Han Kiliccote and James H. Garrett, Jr., (Computing in Civil Engineering Lands H. Garrett, Jr., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p999-1005.

Studies in Guidance, Navigation and Control for an Articu-lated-Body Mars Rover Testbed, Songjae Lee and Gordon K. Lee, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p157-163.

Telerobotic Pavement Marker Application, Rami A. Rihani and Leonhard E. Bernold, (Robotics for Challenging En-vironments, Laura A. Demsetz, ed., 1996), p171-177.

Towards Lessons-Learned Systems in the US Army, Corps of Engineers, Donald K. Hicks, Jeffrey G. Kirby and E. William East, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p112-117.

Using Computers Effectively in Today's Civil Engineering Office, John P. Menniti, CP Oct. 96, p261-262.

Venting Test Analysis Using Jacob's Approximation, Kenneth B. Edwards, EE Mar. 96, p232-234.

Vision Technique for Platoon Driving, Michel Parent, Pascal Daviet and Sofiane Abdou, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p666-675.

Vision-Based Automated Overtaking Control, Massimo Tistarelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p705-710.

Wavelet Transforms for Incident Detection on Motorways, Simon Cohen and Bian-shun Jing, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p222-226.

A Wheeled Mobile Robot for Automated Pavement Crack Sealing, K. J. Mueller, D. Hong and S. A. Velinsky, (Ro-botics for Challenging Environments, Laura A. Demsetz, ed., 1996), p178-184.

Automobiles

Automobile Emissions Under Arctic Conditions Using Unleaded and 10 Percent Ethanol Admixed Gasolines, R. J. Andres, J. D. Goldbach and F. L. Williams, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p792-803.

The Car as a Wind Shelter for Mobile Home Residents, Thomas W. Schmidlin and Paul S. King, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M.

Chung, ed., 1997), p137-138.

Change et al., 197/1, p13/-138.
Design Tools for Public Cars Transportation Systems, Chafik Allal, François Dumontet and Michel Parent, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p6-18.

Einite Elegent Parent Parent Parent

Filippi, ed., 1990), po-16.
A Finite Element Based Probability Contouring Method for Structural Analysis, David S. Riha, Harry R. Millwater, George Vellathottam and P. R. Perumalswami, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p922-925.

Radical Rebar Forges Ahead, Eric Rasmussen, ET June/ July 96, p1,8.

Rough Road Ahead, CE Aug. 96, p10.

Avalanches

Mechanism Study of Landslides, Dagang Zhang and Mostafa A. Foda, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p258-261.

Newtonian Fluid Mechanics Treatment of Debris Flows and Avalanches, Bruce Hunt, HY Dec. 94, p1350-1363.

Operational Aspects of Warning, D. D. Nurbaev and N. S. Gavrilova. (North American Water and Environment Congress & Destructive Water, Chenchavva Bathala, ed., 1996), p1552.

Awards

Alaska Students Triumph in 1996 Steel Bridge Finals, CE Aug. 96, p64.

ASCE Members Figure Prominently in ENR's List of 1995 Achievers, NE Apr. 96, p10.

Calling All Civil Engineer Inventors, CE Feb. 96, p68. Dam Engineering Exhibit Wins Prize for New Museum in

Arizona, NE Dec. 96, p9. Dan Pletta, Prominent Engineering Educator, Dies at 92, NE Oct. 96, p6.

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Nominations Due for Resources Awards for 1996, CE May 96, p72.

Tallest Control Tower Wins Award, CE Aug. 96, p12,14.

Axial compression

Flexural Buckling of Steel Angles: Experimental Investiga-tion, Seshu Madhava Rao Adluri and Murty K. S. Madugula, ST Mar. 96, p309-317.

New Damage Variable in Failure Analysis of Concrete, Woon-Kwong Yip, MT Nov. 96, p184-188.

Strain Localization in Confined High-Strength Concrete Columns, Daniel Cusson, François de Larrard, Claude Boulay and Patrick Paultre, ST Sept. 96, p1055-1061.

Design of Round Reinforced-Concrete Columns, A. Tayem and A. Najmi, ST Sept. 96, p1062-1071.

Dynamic Stability of Conducting Beam-Plates in Transverse Magnetic Fields, J. S. Lee, EM Feb. 96, p89-94.

Evaluation of Dynamic Analysis Results using Full-Scale Lattice Tower Tests, Markus Ostendorp, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p518Fatigue Testing of Anchor Bolts, James P. Van Dien, Mark R. Kaczinski and Robert J. Dexter, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p337-344.

Finite-Displacement Analysis of Laminated Composite
Strips with Extension-Twist Coupling, Erian A. Armanios, Andrew Makeev and David Hooke, AS July 96, p80-91

Behavior of Three-Span Braced Columns with Equal or Unequal Spans, Raymond H. Plaut and Yu-Wen Yang, ST June 95, p986-994.

Elastic Response of Columns After Sudden Loss of Bracing, Raymond H. Plaut and Rae-Hak Yoo, EM Apr. 96,

Investigation of Nonlinear Fluid-Structure Interaction, T. E. Fenske, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p407-415.

Long Term Behavior of Concrete Columns with CFRP, M. Arockiasamy, Ahmed Amer, S. Chidambaram and M. Shahawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1050-1053.

Nailed Tubular Connections under Axial Loading, Jeffrey

A. Packer, ST Aug. 96, p867-872.

New Analysis for Creep Behavior in Concrete Columns, Raed M. Samra, ST Mar. 95, p399-407.

A Parametric Study of Strength of Tubular Multiplanar KK-Joints, M. M. K. Lee and S. R. Wilmshurst, ST Aug. 96, p893-904.

Physical Tests and Analyses of Composite Steel-Concrete Beam-Columns, S. Ali Mirza, Ville Hyttinen and Esko Hyttinen, ST Nov. 96, p1317-1326.

Refined Second-Order Analysis of Frames with Members under Lateral and Axial Loads, Z. H. Zhou and S. L. Chan, ST May 96, p548-554.

Seismic Shear Strength of Reinforced Concrete Column M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Axial strain

Ten Year Performance of a High Performance Concrete Used to Build Two Experimental Columns, Éric Dallaire, Michel Lessard and Pierre-Claude Aitcin, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p375-384.

Limit Design of Axisymmetric Shells with Application to Cellular Cofferdams, P. de Buhan and A. Corfdir, EM Oct. 96, p921-929.

Prediction of Time-Dependent Behaviour of Remolded Soft Marine Clay in Axi-Symmetric Undrained Conditions, Satoshi Murakami, Kazuya Yasuhara and Kaoru Bessho, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p181-194.

Azarchi, Lynn

Azarchi Named to Top Management Team at ASCE, CE July 96, p72-73.

Correction, CE Apr. 96, p38.

Corrosion Effects of Cement Stabilized Backfill on Galvanized Steel Reinforcement, S. N. Popova, B. N. Popov, R. E. White, M. F. Petrou and D. Morris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p988-996

Red River U-Frame Lock No. 1 Backfill-Structure-Foundation Interaction, Robert M. Ebeling and Reed L. Mosher, GT Mar. 96, p216-225.

Backscatter

Acoustic Sediment Flux Measurements from DUCK '94, Karen M. Kohanowich, Timothy P. Stanton and Edward B. Thornton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p739-748.

Backwashing Comparison of Water Backwash and Brush Cleaning Sys-tems for Vertical Panel Fish Screens, Morton D. McMil-len and Clint W. Smith, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1129-1134.

Backwater

Bridge Abutment Scour in Floodplain with Backwater, Terry W. Sturm and Aftab Sadiq. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p921-930.

Chishmaya Daumaia, ett., 1990), py21-930.

The Effects of Water Surface Profiles on Manning's Roughness Coefficient, P. Michael DePue, II and Ta Wei Soong, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3639-3644.

Influence of Backwater on Headcut Advance, Kerry M. Ro-binson and Gregory J. Hanson, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), pl 17-122.

Role of Vegetation in Hydraulics of Channel Restoration, Marcelo H. García, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2607-2612.

Backwater profiles

Backwater Computation for Transcritical River Flows, C. Beffa, HY Dec. 96, p745-748.

Anaerobic Bacterial Quantitation of Yucca Mountain, Nevada Doe Site Samples, William W. Clarkson, Lee R. Krumholz and Joseph M. Suflita, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p39-40.

Anaerobic Biodegradation of High Energetics in Digestion Sewage Sludge, Sung-Hyun Kwon, Frank J. Y. Shiu and Teh Fu Yen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p794-799.

Autotrophic and Heterotrophic Bacterial Diversity from Yucca Mountain, M. Khalil, D. L. Haldeman, A. Igbinovia, P. Castro, L. Ragatz and P. Anny, (High Level Radio-active Waste Management, Technical Program Committee, 1996), p9-11.

Biopolymers for Geotechnical Applications, Teh Fu Yen, Iris C. Y. Yang, Shiva Karimi and Geoffrey R. Martin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1602-1607.

Bugs Clean Tunnels, CE Aug. 96, p22.

Changes in Bacterial Aerosols with Height Above Aeration Tanks, Bernard Sawyer, K. C. Rao, Parnell O'Brien, Gilbert Elenbogen, David R. Zenz and Cecil Lue-Hing, EE May 96, p368-373.

Degradation of Carboxydiphenyl Ether via Bioaugmenta-tion, Rolf U. Halden, Barbara G. Fischer and Daryl F. Dwyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2396-2401.

1990), p.2396-2401.
Distribution and Nutrient Limitations of Heterotrophic Bacteria from Yucca Mountain, D. L. Haldeman, L. Ragatz and P. S. Amy, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p.30-32.

Scaling Bacterial Filtration Rates in Different Sized Porous Media, Michael J. Martin, Bruce E. Logan, William P. Johnson, David G. Jewett and Robert G. Arnold, EE May 96, p407-415.

Seasonal Effects on Generation of Particle-Associated Bac-teria During Distribution, Blaise J. Brazos and John T. O'Connor, EE Dec. 96, p1050-1057.

Small Inocula Can Effect In Situ Biodegradation, Rolf U. Halden and Daryl F. Dwyer, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2402.

Wastewater System Design and Evaluation, Leonard Bell and Troy Norris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p949-957.

Design of Flocculating Baffled Channel, Prabhata K. Swamee, EE Nov. 96, p1046-1048.

Eliminating Backflow in Retrofit BNR Systems, Gregory J. Daviero and Terry W. Sturm, EE Oct. 96, p950-954.

Performance of Baffle-Sluice Modules with Changed Module Dimensions, B. Maheswara Babu, P. K. Mishra and T. Satyanarayana, IR Sept./Oct. 96, p310-313.

Sediment Removal from Stormwater Runoff, Ashok Pandit and Ganesh Gopalakrishnan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2439-2444.

Baker, Clyde N., Bartlett, Paul E., Brooks, Norman H., Durkee, Jackson L., Lammie, James L., Santry, Israel W., Spaw, Louis D., Tang, Man-Chung, Yeh, William W-G., Zeevaert, Leonardo W.

Honorary Member Ranks Grow As 10 Civil Engineers Are Elected, CE June 96, p72.

Baker, Clyde N., Bartlett, Paul E., Brooks, Norman H., Durkee, Jackson L., Lammie, James L., Santry, Israel W., Spaw, Louis D., Tang, Man-Chung, Wiechers, Leonardo E. Zeevaert, Yeh, William W-G. Honorary Members of ASCE Increase Ranks by 10 at Washington, D.C., Ceremony, NE Dec. 96, p2-3.

Balancing

Design and Construction Balances for Bascule Bridges, Andrew W. Herrmann and Nicholas J. Altebrando, (Building on International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p9-15.

Flywheels for Energy Storage in Space Using Superconducting Bearings, T. L. Wilson, W. K. Chu, K. Ma and H. Xia, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p355-359.

Ballard, Joe N.

Ballard Picked as Army Engineers Chief, NE Sept. 96, p15.

Ballard, Joe N., Marsh, Elbert L.

New Faces in Familiar Places, NE Nov. 96, p15.

Mixing Processes in the Dangava River Estuary, B. Hakansson, E. Zaharchenko and H. B. Wittgren, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3276-3277.

Remote Sensing of the Polish Coasts Morphology, Kazimierz Furmańczyk and Stanisłław Musielak, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p1018-1023.

Waves with Two-peaked Spectrum in the Gdańsk Bay, Barbara Paplińska, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p33-44.

Element-Embedded Localization Band Based on Regularized Displacement Discontinuity, Ragnar Larsson and Kenneth Runesson, EM May 96, p402-411.

Bangladesh

Design Provisions for Stair Slabs in the Bangladesh Build-ing Code, I. Ahmed, A. Muqtadir and S. Ahmad, ST Mar. 96, p262-266.

Environmental Considerations for Water Resources Development in Haor Areas of Northeastern Bangladesh, G. opment in Haor Areas of Northeastern Bangladesh, d.
M. Akram Hossain and Ainun Nishat, (North American
Water and Environment Congress & Destructive Water,
Chenchayya Bathala, ed., 1996), p1063-1068.
Mitigating Losses in Bangladesh's Active Floodplains, Paul
Thompson and Ian Tod, (Natural Disaster Reduction,
George W. Housner, ed. and Riley M. Chung, ed.,

1997), p23-24.

A Multi-Objective Analysis for Cyclone Shelter Planning in Bangladesh, Jahir U. Chowdhury, Rezaur Rahman, Fazlul Karim and David W. Watkins, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p213-214.

Response to Floods and Mitigation Measures in Bangla-desh, Paul Thompson and Mustafa Alam, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p103-104.

Chung, ed., 1997), p103-104.
Storm-Surge Flooding in Chittagong City and Associated Risk, M. Mozzammel Hoque, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3701.

Water and Sanitation Intervention in Flood Mitigation Programs, Bilquis A. Hoque, Bradley R. Sack, Nahid A. Ali and J. T. A. Chowdhury, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), 33916.

Bank erosion

Coordination of Empirical and Rational Alluvial Canal For-mulas, Shrikrishna V. Chitale, HY June 96, p357-359.

Design Guidelines for Bioengineered Bank Stabilization, Dale E. Miller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3085-3090.

Development and Testing of Riverbank-Stability Analysis, Stephen E. Darby and Colin R. Thorne, HY Aug. 96,

p443-454.

Field Data Collection and Analysis for Verification of Estu-arine Models, W. H. McAnally, T. C. Pratt, G. T. Stevens and T. M. Parchure, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng. 1996), p204-214.

Mitigating Losses in Bangladesh's Active Floodplains, Paul Thompson and Ian Tod, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p23-24.

Numerical Simulation of Widening and Bed Deformation of Straight Sand-Bed Rivers. I: Model Development, Stephen E. Darby and Colin R. Thorne, HY Apr. 96, p184-193.

Numerical Simulation of Widening and Bed Deformation of Straight Sand-Bed Rivers. II: Model Evaluation, Stephen E. Darby, Colin R. Thorne and Andrew Simon, HY Apr. 96, p194-202.

Use of Geomorphic Data for Assessing Stream Stability at Bridge Structures, Jonathan Fuller and Steven R. Walker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996). p3294-3299.

Bank stabilization

Analysis of Bank Stabilization in Steep Complex Streams Using A Two-Dimensional Model, Raymond Walton, Wilfredo A. Moneda and Jeffrey B. Bradley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p352-357.

Bank Protection Toe-Downs and Local Pier Scour, Dennis .. Richards and Christopher J. Pauley, (North American Water and Environment Congress & Destructive Water,

Chenchayya Bathala, ed., 1996), p4172-4177.

Channel Restoration Project Along Toby Creek, Dennis N. Jermeland, Daniel Billman and William R. Tingle. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3521-3526.

Channel Scour Protection at Roadway Crossings, Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3278-3285.

Design Guidance - Instream and Bank Restoration Struc-tures, J. Craig Fischenich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3079-3084.

Design Guidelines for Bioengineered Bank Stabilization, Dale E. Miller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3085-3090.

Development and Testing of Riverbank-Stability Analysis, Stephen E. Darby and Colin R. Thorne, HY Aug. 96, p443-454.

Reduction of Sediment Loads in DEC Streams, Chester C. Watson, Tom Pokrefke and Daniel Gessler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2885-2890.

Restoration Design for Urban Streams: Anacostia River Basin, Maryland, Meg Burns, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4198-4201.

Sizing Dumped Rock Riprap, David C. Froehlich and Craig A. Benson, HY July 96, p389-396.

South Platte River Restoration Through Maintenance, Ben Journ France River Restoration Through Maintenance, Bell R. Urbonas and Bryan W. Kohlenberg, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3533-3538.

Toe-Scour Estimation in Stabilized Bendways, Stephen T. Maynord, HY Aug. 96, p460-464.

Bankruptcy

New Orleans Rolls the Dice (Available only in Structures Special Issue), Richard G. Weingardt and John F. Davis, CE May 96, p3A-7A.

Baptista, Antonio

Web Tour: Antonio Baptista, ET June/July 96, p10-11.

Balancing on the Tides, Boris Levintov, P.E. and Joseph Klein, P.E., CE Oct. 96, p48-51.

Barge Collision Design of Highway Bridges, M. W. Whitney, I. E. Harik, J. J. Griffin and D. L. Allen, BE May 96, p47-58.

Distributions of Return Flow in Navigable Waterways, Ta Wei Soong, Renjie Xia and Nani Bhowmik, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2855-2860.

Effects of Tow Sequencing on Capacity and Delay at a Waterway Lock, Ching-Jung Ting and Paul Schonfeld, WW

Jan./Feb. 96, p16-26.

Hydrodynamic Changes Associated with Navigation Traffic on the Upper Mississippi River System, Nani G. Bhowmik, Ta-Wei David Soong and Renjie Xia, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2849-2854.

Improving the Speed of Double Lockages, Mary K. Spence, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p2867-2872.

Risk Analysis of Ship and Barge Collision Loads on Bridges. Michael A. Knott, (Probabilistic Mechanics & Struc tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p724-727.

Barrier beaches

Longshore Currents Over Barred Beaches, A. J. H. M. Reniers, E. B. Thornton and T. C. Lippmann, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p413-424.

Longshore Nonuniformities of Nearshore Currents, F. E. Sancho, I. A. Svendsen, A. R. Van Dongeren and U. Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed., 1996), p425-436.

Wave Stress and Longshore Current on Barred Profiles, T. C. Lippmann, E. B. Thornton and A. J. H. M. Reniers, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p401-412.

Barrier design

Saved by the Net, CE Sept. 96, p22.

Barrier islands

Beach Nourishment: Planform Considerations, Robert G. Dean, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p533-546.

Coastal Flood Hazard Analysis Using Digital Photogram-metry, Margery Overton, Cheryl Petrina and John Fisher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p187-188.

Managing the Impacts of Storm Surges on Victoria Island, Lagos, Nigeria, Peter Chigozie Nwilo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3496.

A Rapid Barrier Island Hazard Mapping Technique as a Basis for Property Damage Risk Assessment and Mitiga-tion, David M. Bush, William J. Neal and Orrin H. Pil-key, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p185-186.

Active Isolation of Machine Foundations by In-Filled Trench Barriers, T. M. Al-Hussaini and S. Ahmad, GT Apr. 96, p288-294.

Asphalt-Concrete Water Barriers for Embankment Dams, Patrick J. Creegan and Carl L. Monismith, 1996, 0-7844-0141-1, 185pp.

Compass: A Source Term Code for Investigating Capillary Barrier Performance, Wei Zhou and M. J. Apted, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p276-278.

Effects of Transport Model Alternatives Incorporating Precipitation on the Performance of Engineered Barriers, Takao Ohi, Kaname Miyahara, Morimasa Naito and Hiroyuki Umeki, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p274-

Flexible-Membrane Wave Barrier. I: Analytic and Numeri-cal Solutions, M. H. Kim and S. T. Kee, WW Jan./Feb.

96, p46-53.

Flow through Vertical Barrier Screens - A Numerical Model, M. E. Allen, M. P. Cherian and L. J. Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1111-1116.

Fuel and Cladding Oxidation under Expected Repository Conditions, J. Kevin McCoy, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p396-398.

Groundwater Dynamics in Beaches and Coastal Barriers, Peter Nielsen and Hong-Yoon Kang, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p521-532.

How Can Coupled Systems Evolve? A Scenario Simulation Methodology, H. Takase, P. Grindrod and S. P. Cromp-ton, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p258-260.

Hydraulic Conductivity of Frozen Granular Soils, Orlando B. Andersland, David C. Wiggert and Simon H. Davies,

EE Mar. 96, p212-216.

Impacts of Cathodic Protection on Waste Package Performance, Joel E. Atkins, Joon H. Lee and Robert W. Andrews, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p459-461.

Important Parameters in the Performance of a Potential Rerarameters in the Performance of a Potential Re-pository at Yucca Mountain (TSPA-1995), Joel E. Ak-kins, S. David Sevougian, Joon H. Lee, Robert W. An-drews and Jerry A. McNeish, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p291-292.

Iron Filing Installation Cleans Contaminants, CE Nov. 96,

Key Risk Attributes in the Perception of Engineering De-sign Options, P. Grindrod, D. J. Waters, H. Takase and F. Yousaf, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p499-501.

Lateral Diversion in the PTn Unit: Capillary-Barrier Analysis, Michael L. Wilson, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Mechanical Properties Characterization of Asphalt Con-crete Barrier for Radioactive Nuclear Waste Vaults, Ber-nard A. Vallerga, Akhtarhusein A. Tayebali, Shmuel L. Weissman and Carl L. Monismith, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1288-1297.

Permeable Barriers to Remove Benzene: Candidate Media Evaluation, J. Rael, S. Shelton and R. Dayaye, EE May

95, p411-415.

Probabilistic Evaluation of Postclosure Criticality Events Internal to the Waste Package, Peter Gottlieb and John R. Massari, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p345-347.

Research Program for Reducing Frost Heave with Geosynthetic Capillary Barriers, Karen S. Henry and Earl Ellis, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p266-277.

Soil Fracture Technique Stops Blast Shock Waves, CE May

96, p12.

Total System Performance Predictions (TSPA-1995) for the Potential High-Level Waste Repository at Yucca Mountain, S. David Sevougian, Robert W. Andrews and Jerry A. McNeish, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p295-297.

Corrosion-Resistant Steel Reinforcing Bars, David Darwin, Carl E. Locke, Jr., Matthew R. Senecal, Shawn M. Schwensen and Jeffrey L. Smith, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p482-491.

Design Considerations for Post-Tensioned Integral Pier Caps, Sami W. Tabsh, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p444-451.

Evaluation of Bond Characteristics of Steel and Glass-Fiber Reinforcing Bars, James R. Lundy and Damian I. Ka-chlakev, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p638-647.

Evaluation of the Performance of Sprayed Zinc Anodes for Protecting Reinforcing Bars, John S. Tinnea and R. P. Brown, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1531-1539.

Fracture Mechanics Modeling with Fracture Surface Image Data, Anne B. Abell and David A. Lange, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p741-

Fundamental Modeling of Chloride Diffusion in Concrete, Pankaj. Arora, B. N. Popov and R. E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p203-212.

handom Elastic Response Characteristics of Bar Structures by Monte Carlo Simulation, Michael Koutsoukis and Ed-mund S. Melerski, (*Probabilistic Mechanics & Structur-*al Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p812-815.

A Unified Limit State Approach Using Deformability Fac-tors in Concrete Beams Reinforced with GFRP Bars, P. V. Vijay and H. V. S. GangaRao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p657-665.

Use of Geophysics to Aid in Mapping Basalts Relevant to Ground Water Flow and a Landslide Hazard at Hager-man Fossil Beds National Monument, P. Michaels, L. Growney and P. Donaldson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p14-26.

Performance of Stabilized Base Course at DFW, William P. Grogan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p308-317.

Rose isolation

Analytical Approaches for the Design of Base-Isolated Structures, Vahid Sattary and Mason T. Walters, (Analysis and Computation, Franklin Y. Cheng, ed., 1996),

Control of Sliding-Isolated Buildings Using Sliding-Mode Control, J. N. Yang, J. C. Wu, A. M. Reinhorn and M.

Riley, ST Feb. 96, p179-186.

Dynamics of Structures: Theory and Applications to Earth-quake Engineering by Anil K. Chopra, T. Igusa, EM Feb. 96, p183.

Evaluation of Equivalent Linear Analysis Methods of Bridge Isolation, J. S. Hwang, ST Aug. 96, p972-976. Fuzzy Logic Based Control for Sliding Structures, Andrei

M. Reinhorn, Ravi S. Subramaniam and Michael A. Riley, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p298-309.

Guidelines and Benchmarks for Analysis of Isolated Build-ings, Harry W. Shenton, III and Andrew W. Taylor, (Analysis and Computation, Franklin Y. Cheng, ed.,

1996), p236-245.

Hybrid Control of Seismic Response Using Nonlinear Output Feedback, A. K. Agrawal and J. N. Yang, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p339-

Largest Seismic Base-Isolated Hospital Tops Out, CE June 96, p8.

Parameter Identification of a Hysteretic Structure, M. Battaini, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p430-433.

Prediction of Observed Response of Base-Isolated Struc-ture, Nicos Makris and Himanshu S. Deoskar, ST May

96, p485-493.

Response of Base Isolated USC Hospital Building in the 1994 Northridge Earthquake, Satish Nagarajaiah and Xiaohong Sun, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p212-223.

Seismic Isolation Retrofit of Large Historic Building, Anoop S. Mokha, Navinchandra Amin, Michael C. Constantinou and Victor Zayas, ST Mar. 96, p298-308.

Soil-Structure Interaction for Base-Isolated Buildings, Maria I. Todorovska, (Engineering Mechanics, Y. K. Lin

and T. C. Su, 1996), p172-175.

Some Computational Issues in the Control of Distributed Systems, Weiming Xu, Sami F. Masri and Bingen Yang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Theory and Application of Restoring Force Sliding Isolation Systems in Low Seismicity Regions, Paul Bradford and Ching Shi Liu, (Engineering Mechanics, Y. K. Lin

and T. C. Su, 1996), p1102-1105.

Bird Use of an Evaporation Basin and a Mitigation Wet-land, Andrew G. Gordus, Jeff Seay and Scott B. Terrill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Debris Basin Design Procedures, J. J. DeVries and T. V. Hromadka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1657-1662.

Desilting Basin System of the Dul Hasti Hydroelectric Project, Daniel Develay, Jean Binquet, E. Divatia and C. R. Venkatesha, HY Oct. 96, p565-572.

Modeling Microtopography in Basin Irrigation, E. Playán, J. M. Faci and A. Serreta, IR Nov./Dec. 96, p339-347.

Two-Dimensional Simulation of Basin Irrigation. I: Theory, E. Playán, W. R. Walker and G. P. Merkley, IR Sept./ Oct. 94, p837-856.

Batch processing

Production of Nitrous Oxide Gas under Sequencing Batch Reactor System, Cheng-Nan Chang, Jih-Gaw Lin, Jin-Yuan Chen and Fong-Bing Hsu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p782-787.

Removal of Arsenic From Ground Water Using Granular Activated Carbon, Brock D. Buche and Lawrence P. Owens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p1173-1177.

Bathymetry

Beach Profile Evolution Under Mean Conditions, José-María Medina V., Luis Moreno and José C. Santás, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p595-606.

Detailed Measurements of Scour at Bridges, David S. Mueller, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p2541-2549.

An Evaluation of Tidal Predictions in the Yellow and East China Seas, Cheryl Ann Blain, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p429-441.

Longshore Currents Over Barred Beaches, A. J. H. M. Reniers, E. B. Thornton and T. C. Lippmann, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p413-424.

Numerical Simulation of Internal Kelvin Waves with Zlevel and Sigma Level Models, David J. Schwab, Dmitry Beletsky, William P. O'Connor and David E. Dietrich, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p298-312.

Systematic Analysis of Long-Term Fate of Disposed Dredged Material, Norman W. Scheffner, WW May/June

96, p127-133.

The Use of an Equivalent Porosity Method to Model Flow in Marshes, Ian P. King and Lisa C. Roig, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3734-3739.

Bayesian analysis

Bayesian Assessment and Selection of Models for Structural Reliability Analysis, Philippe Geyskens and Armen Der Kiureghian, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p566-569. Bayesian Decision Analysis for Contaminant Travel Time, Marian W. Kemblowski and Hewa A. Wijedasa, (Risk-Marian W. Kemplowski and Hewa A. Wijedasa, (1838-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Sta-khiv, ed., 1996), p207-218.

Rniv, ed., 1990), p201-210.

Bayesian Liquefaction Resistance Analysis, Wilson H.

Tang and Mauricio Angulo, (Uncertainty in the Geologic
Environment: from Theory to Practice, Charles D.

Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1195-1209.

Bayesian Model for Fate and Transport of Polychlorinated Biphenyl in Upper Hudson River, Laura J. Steinberg, Kenneth H. Reckhow and Robert L. Wolpert, EE May

96, p341-349.

Frequency Distributions and Bayesian Techniques for Estimating Performance in Composite Materials, John Miller and José Gomez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p492-501.

Anticyclonic Upper Layer Residual Circulation and Estua-Amocyclonic Opper Layer Resolute Circulation and Esta-rine Circulation in Osaka Bay, Keiji Nakatsuji and Tateki Fujiwara, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p128-142. Application of Circulation and Sediment Transport Model-

ing within San Diego Bay, Thomas L. Johnson and Claudio Fassardi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p596-607. Application of the Model SPECIES to Kaneohe Bay, Oahu,

Hawaii, Clifford J. Hearn, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p355-366.

1990), p333-300.
Hala, Iwao Oshima, Takcaki Kuramoto and Kisaburo Nakata, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p542-554.
Experiments on Resuspension of Fluid Mud Using an Ostalibation Cold Tech. Description.

cillating-Grid Tank, Panagiotis D. Scarlatos, *Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p808-811.

Hydrodynamic Model and Sensitivity Analysis for San Juan Bay, P. R. Lisa J. Wolf and Gavin Gong, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p505-517.

The Influence of Turbulence Closure Strategy on Numeri-cal Modeling of Shallow Water Tides, Roger R. Grenier, Jr. and Richard A. Luettich, Jr., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p143-155.

Modeling Changing Freshwater Delivery to Apalachicola Bay, FL, W. K. Jones and Wenrui Huang, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T.

Cheng, 1996), p116-127.

Modeling Outfall Plume Behavior Using Far Field Circula-tion Model, Alan F. Blumberg, Zhen-Gang Ji and C. Kirk Ziegler, HY Nov. 96, p610-616.

Modeling the Effect of Reduced Nitrogen Loading on Water Quality, Y. Peter Sheng, Eduardo A. Yassuda and Changlu Yang, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p644-658

Modeling the Fate of Copper Discharged to San Francisco Bay, Carl W. Chen, Daniel Leva and Adam Olivieri, EE

Oct. 96, p924-934.

Modeling the Impact of Sea Level Rise in Delaware Bay, K. W. Kim and B. H. Johnson, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2737-2742.

Modeling the Periodic Stratification and Gravitational Cir-culation in San Francisco Bay, California, Ralph T. Cheng and Vincenzo Casulli, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p240-254.

Numerical Modeling on the Ofunato Bay Ecosystem Including the Oyster Farming, Tomohiko Terasawa, Kisa-buro Nakata and Koichi Taguchi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p530-541.

Numerical Simulation of Temperature in the New York Bight, S. Rao Vemulakonda, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p66-79.

Prediction of Storm Induced Flows in Great Lakes Estuarine Inlets, James H. Riley and William L. Wood, (Estu-arine and Coastal Modeling, Malcolm L. Spaulding and Raiph T. Cheng, 1996), p583-595.

The Role of Circulation Patterns on the Simulation of Con-Gong and James D. Bowen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p518-529.

Salt Transport Characteristics of Pak Phanang Estuary, Somboon Pornpinatepong and Malcolm L. Spaulding, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p92-105

Sediment and Contaminant Transport in Green Bay, Zeni-tha Chroneer, Mary Cardenas, James Lick and Wilbert Lick, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p313-324.

Spauloing and Raiph 1. Cheng, 1990), p313-324.
Sediment Transport in a Thermally Stratified Bay, Kai-Ping
Wang, Zenitha Chroneer and Wilbert Lick, (Estuarine
and Coastal Modeling, Malcolm L. Spaulding and Ralph
T. Cheng, 1996), p466-477.
Three-Dimensional Modeling of Wind-Driven Upwelling
of Anoxic Bottom Water 'A-oshio' in Tokyo Bay, Keiji

Nakatsuji, Jong Sung Yoon and Koji Muraoka, (Estua-rine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p618-631.

Three-Dimensional Tidal Currents and Water Quality in Stratified Omura Bay, Tadashi Fukumoto, Akihide Tada, Takehiro Nakamura and Hiroyoshi Togashi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p707-721.

Waves with Two-peaked Spectrum in the Gdańsk Bay, Barbara Paplińska, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p33-44.

For Sure Shores, Monica Maldonado, CE Oct. 96, p57-60.

Improving Input Wave Data for Use with Shoreline Change Models, Kevin R. Bodge, Christopher G. Creed and Andrew W. Raichle, WW Sept./Oct. 96, p259-263.

Model of Beach Profile Change Under Random Waves, Magnus Larson, WW July/Aug. 96, p172-181.

Modeling Coastal Ground-Water Response to Beach Dewa-tering, L. Li, D. A. Barry and C. B. Pattiaratchi, WW Nov./Dec. 96, p273-280.

A Morphology Model to Predict Erosion Near a Seawall, K. A. Rakha and J. W. Kamphuis, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p879-890.

Numerical Model for On-Offshore Sediment Transport with Moving Boundaries, Cheol-Eung Lee, Moo-Hyun Kim and Billy L. Edge, WW Mar/Apr. 96, p84-92.

Settling and Erosion Characteristics of Mud/Sand Mixtures, Hilde Torfs, Helen Williamson and Heidi Huysentruyt, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p749-758.

Storm Surge Frequency Computations for Long Island, NY: A Comparison of Methodologies, Norman W. Scheffner and H. Lee Butler, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p80-

Verification of the Bruun Rule for the Estimation of Shoreline Retreat Caused by Sea-Level Rise, Nobuo Mimura and Hisamichi Nobuoka, (*Coastal Dynamics* '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p607-616.

Beach nourishment

Beach Nourishment: Planform Considerations, Robert G Dean, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed., 1996), p533-546.

Field Validation and Application of a Coastal Profile Model, J. A. Roelvink, Th. J. G. P. Meijer, K. Houwman, R. Bakker and R. Spanhoff, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996). p818-828.

Interdependence of Beach Fill Volumes and Repetition Intervals, Hans-H. Dette, Alfred Fuehrboeter and Arved J. Raudkivi, WW Nov./Dec. 94, p580-593.

Managing the Impacts of Storm Surges on Victoria Island, Lagos, Nigeria, Peter Chigozie Nwilo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3496. Monitoring Results of a Nearshore Disposal Berm, Emre N. Otay, (Coastal Dynamics '95, William R. Dally, ed. and

Otay, (Coastat Dynamics 95), William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p547-558.Prototype Monitoring Study of Wave Climate and Beach Profile in the Surfzone, Joachim Grüne, (Coastal Dynamics 95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p559-570.

Simplified Dean's Method for Beach-Fill Design, James R. Houston, WW May/June 96, p143-146.

Simulation of Dune and Nourished Berm Erosion During Storm Surges, Jürgen Newe and Hans-H. Dette, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p850-861.

The 'Dynamics of Beaches' Project, P. Prinos, A. S. Arcilla, N. Christiansen, J. van de Graaf, M. Hogedal, A. Lewis, B. O'Connor, F. Rivero and J. de Rouck, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p571-582.

Beach and Nearshore Profile Evolution at Different Temporal Scales: The Case of Duck, North Carolina, U.S.A. Michele Capobianco, Rina Basana and Riccardo Pesaresi, (*Coastal Dynamics* '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p629-638.

and Ryszard B. Zeidier, ed., 1990, pc29-038. Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996, 0-7844-0154-3, 1065pp. Comparison of Computed Three-Dimensional Wave-Driven Currents with Measurements, Philippe Péchon and Arnaud Desitter, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p513-520. Corps' Shoreline Work Assessed, CE Oct. 96, p11.

Design of a Laboratory Facility for Longshore Sediment Transport Research, Julie D. Rosati, David G. Hamilton, Jimmy E. Fowler and Jane M. Smith, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p771-782.

1996), p/11-782.
Dynamic Processes on a Ridge and Runnel Beach, David Simmonds, George Voulgaris and David Huntley, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p868-878.
Employment of Electronic Sand Level Gauges for Measurement of Beach Slope Deformation on Norderney Island, Kos'yan R., H. Kunz and I. Podymov, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p651-663.

An Energetics Approach to Sand Transport on Beaches, Paul Russell, Yolanda Foote and David Huntley, (Coast-al Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p829-840. Evaluation of the UK Coastal Research Facility, Richard R. Simons, Richard J. S. Whitehouse, Ruairi D. MacIver, Jonathan Pearson, Paul B. Sayers, Yingdao Zhao and Adrian R. Channell, (*Coastal Dynamics* '95, William R.

Dally, ed. and Ryszard B. Zeidler, ed., 1996), p161-172. Experimental Study of the Flow Around a Breakwater, Mathieu Mory and Luc Hamm, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p501-512.

Flow Properties of the Swash Zone, M. Brocchini and D. H. Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p221-232.

Groundwater Dynamics in Beaches and Coastal Barriers, Peter Nielsen and Hong-Yoon Kang, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p521-532.

Interaction Between Nearshore Natural Processes on Macro-Tidal Beaches. Case Study Along the Capricorn Coast, Australia, Jerzy Piorewicz and Paul Boswood, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p489-500.

Modeling Coastal Ground-Water Response to Beach Dewa-tering, L. Li, D. A. Barry and C. B. Pattiaratchi, WW

Nov/Dec. 96, p273-280. Numerical Model for On-Offshore Sediment Transport with Moving Boundaries, Cheol-Eung Lee, Moo-Hyun Kim and Billy L. Edge, WW Mar./Apr. 96, p84-92. A One-Dimensional Cross-Shore Transport Model, J. Ni-cholson and B. A. O'Connor, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p795-805.

Relationship between Kelp Beds and Beach Width in Southern California, M. Hany S. Elwany and Reinhard E. Flick, WW Jan./Feb. 96, p34-37.

Remote Sensing of the Polish Coasts Morphology, Kazimierz Furmańczyk and Stanisłław Musielak, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1018-1023.

Reproducibility of Beach Profiles and Sand Ripples Generated by Huge Waves, Masahiro Ito, Hiroshi Murakami and Takeshi Ito, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p698-708.

Simplified Dean's Method for Beach-Fill Design, James R. Houston, WW May/June 96, p143-146.

Spatial and Temporal Fluctuations of Nearshore Currents Induced by Directional Random Waves, Yoshimi Goda and Tetsuya Mizusawa, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p.269-280

Studies on Wave, Current and Suspended Sediment Characteristics at the Surf Zone, Chien-Kee Chang and Ching-Her Hwang, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p728-738.

Subharmonic Edge Waves. Stability Analysis, Antonio Lechuga, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p281-292

Time Series Analysis of Long-Term Beach Level Data from Lincolnshire, UK, Howard N, Southgate and Luiss M. Beltran, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1006-1017.

Wave Groups Approaching a Beach: Full Irrotational Flow Computations, T. C. D. Barnes and D. H. Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), pl16-127.

Wave Reflection and Overwash of Dunes, Nobuhisa Kobayashi, Yukiko Tega and Mark W. Hancock, WW May/ June 96, p150-153.

Beam columns

Analysis Requirements for Performance-Based Design of Beam-Column Joints, John F. Bonacci, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p257-265.

Behavior of Beam-Column Connections Under Axial Col-umn Tension, El Mostafa M. Higazy, Amr S. Elnashai and Mihran S. Agbabian, ST May 96, p501-511.

Behavior of Cold-Formed SHS Beam-Columns, Raef M. Sully and Gregory J. Hancock, ST Mar. 96, p326-336

Behavior of High-Strength Concrete Beam-Column Joints, Michael E. Kreger and Elias I. Saqan, (Worldwide Advances in Structural Concrete and Masonry, Schultz, ed. and S. L. McCabe, ed., 1996), p420-430.

Cyclic Analysis of Concrete-Filled Tubes and Design of Composite Frames, Jerome F. Hajjar, Brett C. Gourley and Katherine A. Stillwell, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p43-54. Editor's Note, David Darwin, ST Nov. 96, p1257.

Fire Reliability at Earthquake Occasions, Mamoru Kohno, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p198-201.

Hybrid Moment Resisting Precast Beam-Column Connec-tions, John Stanton, (Worldwide Advances in Structural Concrete and Masonny, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p266-277.

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Physical Tests and Analyses of Composite Steel-Concrete Beam-Columns, S. Ali Mirza, Ville Hyttinen and Esko Hyttinen, ST Nov. 96, p1317-1326.

Quartic Formulation for Elastic Beam-Columns Subject to Thermal Effects, B. A. Izzuddin, EM Sept. 96, p861-871.

Representation of Concrete-Filled Steel Tube Cross-Section Strength, Jerome F. Hajjar and Brett C. Gourley, ST Nov. 96, p1327-1336.

Alternate Load Factor (Autostress) Design for Short to Medium Span Continuous Steel Bridges, C. C. Fu, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p298-306.

Analysis of Effect of Dead Loads on Natural Frequencies of Beams Using Finite-Element Techniques, Shi-Jun Zhou and Xi Zhu, ST May 96, p512-516.

Assessing Bridge Cracks, ET Mar./Apr. 96, p2.

Bending and Shear Behavior of Web Elements with Openings, M. Y. Shan, R. A. LaBoube and W. W. Yu, ST Aug. 96, p854-859.

Bridge Monitoring Using An Optical Fibers Sensor System, R. L. Idriss and M. B. Kodindouma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p.238-

Buckling of Laminated Composite Beams, Carol Shield and Tim Morey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1010-1013.

Characterization of Pultruded FRP Wide-Flange Beams, Ju-lio F. Davalos, Pizhong Qiao and Hani A. Salim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p223-232

Cold Neutron Facility Gets a Face-Lift, ET Mar/Apr. 96,

Community Involvement Drives Chicago Viaduct Reconstruction, CE Apr. 96, p10.

A Comparison of Seismic Design Using ASD and LRFD, Jeffrey R. Soulages, Jon A. Heintz and James O. Malley, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p542-549.

Composite Applications in the Navy Waterfront Infrastruc-ture, L. J. Malvar, G. E. Warren and C. M. Inaba, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p1179-1188.

Composite Repair/Upgrade of Concrete Structures, Orange S. Marshall, Jr. and John P. Busel, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p932-938.

Concrete Beams and Slabs Retrofitted with CFRP Laminates, M. Arockiasamy, Ahmed Amer and M. Shahawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Constraint-Based Reasoning for Optimal Concrete Design and Detailing, Warren K. Lucas and W. M. Kim Roddis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p154-165.

Continuum Model for Analysis of Multiply Connected Per-forated Cores, Domenico Capuani, Marco Savoia and Ferdinando Laudiero, EM Aug. 94, p1641-1660

Contradictions in Use of Collar Beams, Jonathan Ochshorn, AE Mar. 96, p20-25.

Deflection of Beams with Integral Elastic Supports, Karl K. Stevens, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p343-346.

Developments in Sandwich Beam Theory and Practice, James C. LaBelle, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1017-1026.

Dynamic Analysis of Prestressed Concrete Beams with Openings, Hany Abdalla and John B. Kennedy, ST July 95, p1058-1068.

Dynamics of Highly Deformable Sandwich Frame Structures, H. Deng and L. Vu-Quoc, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p1147-1150.

Effect of Concrete Workmanship on Strength Reliability of R/C Beams, E. H. Khor, D. V. Rosowsky and M. G. Stewart, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p238-241.

Effective Moment of Inertia of Elasto-Plastic Beams, Barry T. Rosson and Ronald K. Faller, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p254-257.

Experimental Study of Reinforced Concrete Beams Using Acoustic Surface Waveguides, Yidong He and Roger H. L. Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p869-875.

Fatigue Cracks at Stringer-Floorbeam Connections, Leon L-Y Lai, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p483-490.

Fatigue Strength of Externally Reinforced Concrete Beams, L. C. Muszynski and R. L. Sierakowski, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p648-656.

Field Performance of Stress-Laminated T and Box Beam Bridges, Barry Dickson and Hota GangaRao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p253-259.

Finite Element Analysis of Fracture Behavior of ECC Shear Beams, Petr Kabele and Hideyuki Horii, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p409-418.

Finite Element Modelling of Deep Rolled Wide Flange Beam Subject to Localized Edge Loading - A Case Study, M. Arif Fazil and Celal N. Kostem, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p874-880.

Flexure for Polymer Concrete Using PET Waste, K. S. Re-beiz and D. W. Fowler, P.E., (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1037-1044.

Grouted Anchors for Carbon FRP Tendon, Antonio Nanni and Jay Thomas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p527-534.

High Performance Concrete Applications in Bridge Struc-tures in Virginia, Celik Ozyildirim, Jose Gomez and M. Elnahal, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p153-163.

A Hybrid System for Partial Prestressed Concrete Beam Design, Nicolaas Stuurstraat, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed.,

1996), p887-891.

Lateral Distortional Buckling of Monosymmetric Beams under Point Load, Owen Hughes and Ming Ma, EM Oct. 96, p1022-1029. A Layer-Wise Formulation for Progressive Failure Analy-

sis of Laminated Composite Beams, Julio F. Davalos and Youngchan Kim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1150-1159.

Minimum-Time Design of a Slewing Flexible Beam, Xiao-jian Liu and David W. Begg, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1205-1214.

A New Element Flexibility Based FEM for Stochastic Structures, Yongjian Ren and Isaac Elishakoff, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p918-921.

New Warping Function for Thin-Walled Beams. I: Theory, A. Prokić, ST Dec. 96, p1437-1442.

New Warping Function for Thin-Walled Beams. II: Finite Element Method and Applications, A. Prokić, ST Dec. 96, p1443-1452.

Non Linear Computation of Fiber Reinforced Micro-Concrete Structures, Mouloud Behloul, Régis Adeline and Gérard Bernier, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p518-529.

On Buckling Analysis of Beams and Frame Structures by the Differential Quadrature Element Method, Xinwei Wang, Huizhi Gu and Bin Liu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p382-385.

On the Shoulders of Giants-Part Three, Francis E. Griggs, Jr., El Apr. 96, p55-64.

Sectional Depth of Prestressed Concrete Beams with Excess Capacity, Y. H. Chai, ST July 96, p788-793.

Shear Strength of Beams with Corrugated Webs, Mohamed Elgaaly, Robert W. Hamilton and Anand Seshadri, ST Apr. 96, p390-398.

Apr. 30, p39-30.

Single-Criteria Genetic Optimization for Design and Detailing of Concrete Structures, W. M. Kim Roddis, Warren K. Lucas and Vorathum Chunnanond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p91-96.

Size Effects in the Fracture of Fiber Reinforced Materials. Size Effects in the Fracture of Fiber Reinforced materials, Roberta Massabó and Alberto Carpinteri, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p462-473. Stability of Beams in an Elastic Foundation, Fady F. Barsoum and William F. Carroll, (Engineering Mechanics, 1996), p43-444.

Y. K. Lin and T. C. Su, 1996), p1143-1146.

Static Analyses of Beams and Plates by Spline Collocation Method, Charles W. Bert and Youngkwang Sheu, EM Apr. 96, p375-378.

Stiffness Formulation for Nonprismatic Beam Elements, Arturo Tena-Colunga, ST Dec. 96, p1484-1489.

Stochastic Modeling of Imperfections in Beams, B. W. Yeigh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p676-679.

Thin-Walled Prestressed Concrete Members under Com-bined Loading, B. M. Luccioni, J. C. Reimundin and R.

Danesi, ST Mar. 96, p291-297.

Three Repair/Retrofit Procedures for Welded Moment Frames, J. C. Anderson, Z. Yin and X. Duan, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p768-771.

A Unified Limit State Approach Using Deformability Fac-tors in Concrete Beams Reinforced with GFRP Bars, P. V. Vijay and H. V. S. GangaRao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p657-665.

Upgrading of Braced Frames for Potential Local Failures, Hae In Kim and Subhash C. Goel, ST May 96, p470-475. Variational Principles Developed for and Applied to Analysis of Stochastic Beams, I. Elishakoff, Y. J. Ren and M. Shinozuka, EM June 96, p559-565.

Volume and Stress Heterogeneity Effects in Fiber-Reinforced Composites, François Hild and Pascal Feil-lard, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1026-1029.

Web Buckling in Thin Webbed Castellated Beams, Walid Zaarour and Richard Redwood, ST Aug. 96, p860-866.

Beams, cantilever

Deflection of Beams with Integral Elastic Supports, Karl K. Stevens, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p343-346.

Finite Element Interval Estimation by Convex Model, Shi-geru Nakagiri and Nobuhiro Yoshikawa, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p278-281.

influence of Support Stiffness for Cantilever Beams Subjected to Modulated Filtered White Noise, Gongkang Fu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p689-692.

Mode-I Fracture Toughness of Composite/Wood Interface Bond, Julio F. Davalos, Prabhu Madabhusi-Raman and Pizhong Qiao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1469-1478.

Bearing capacity

Bearing Capacity of a Prestressed Cracked Plate, Leonid I. Slepyan and John P. Dempsey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p989-992.

Bearing Capacity of Footings over Two-Layer Foundation Soils, Radoslaw L. Michalowski and Lei Shi, GT May 95, p421-428.

Bearing Capacity of Hydrated Geosynthetic Clay Liners, Robert M. Koerner and Dhani Narejo, GT Jan. 95, p82-

Bearing Capacity of Rectangular Footings on Geogrid-Reinforced Sand, Temel Yetimoglu, Jonathan T. H. Wu and Ahmet Saglamer, GT Dec. 94, p2083-2099.

Bearing Capacity of Shallow Foundations on Noncohesive Soils, Bohdan Zadroga, GT Nov. 94, p1991-2008.

Behavior of Pile-Supported Dolphins in Marine Clay Under Lateral Loading, S. Narasimha Rao, V. G. S. T. Ramakrishna and G. Balarama Raju, GT Aug. 96, p607-612. Blasting Densifies Volcanic Debris (Available only in

Focus on Geo/Environmental Special Issue), Thomas C.

Badger, CE Mar. 96, p8A-12A.

Bidge Strength Evaluation Based on Field Tests, Jonathan S. Reid, Michael J. Chajes, Dennis R. Mertz and Geoffrey H. Reichelt, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p294-297.

Comparing Three Techniques for Finding the Overall Lengths of Installed Timber Piles, Shunyi Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Comparison of Load Restriction Timings Determined Using FHWA Guidelines and Frost Tubes, Nazli Yesill-er, Craig H. Benson and Peter J. Bosscher, CR Mar. 96,

p6-24.

Cyclic Axial Loading of Drilled Shafts in Cohesive Soil, Kevin J. McManus and Fred H. Kulhawy, GT Sept. 94, p1481-1497

p1481-1497.
Besign Methodology for Strengthening of Continuous-Span Composite Bridges, H. A. El-Arabaty, F. W. Klaiber, F. S. Fanous and T. J. Wipf, BE Aug. 96, p104-111.
Determination of Drained Friction Angle of Sands from CPT, J. W. Chen and C. H. Juang, GT May 96, p374-261.

Ductile Masonry Construction in California, Hanns U. Bau-mann, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p93-100.

Field Observations on Stabilization of Unpaved Roads with Geosynthetics, R. J. Fannin and O. Sigurdsson, GT July 96, p544-553.

Foundation Design Considerations for Construction on Marshlands, A. Rhett Whitlock and Shahzad S. Moosa,

MATSHIBBINS, A. RICEL WHILLOCK BILL SHALLER J. S. PROSSI, CF Feb. 96, p15-22.

Hydrothermal Effects on the Bearing Strength of GFRP Composite Joint, Stephanie Hurd and Robert Yuan, (Ma-terials for the New Millennium, Ken P. Chong, ed., 1996), p243-250.

1990), p243-201. Lateral Capacity of Helical Piles in Clays, Yenumula V. S. N. Prasad and S. Narasimha Rao, GT Nov. 96, p938-941. Load Capacity of Nested, Laterally Braced, Cold-Formed Steel Z-Section Beams, Ahmad A. Ghosu and Ralph R. Sinno, ST Aug. 96, p968-971.

Loading Tests on Circular and Ring Plates in Very Dense Cemented Sands, Nabil F. Ismael, GT Apr. 96, p281-

Mechanical and Load-Settlement Characteristics of Two Lunar Soil Simulants, Steven W. Perkins and Craig R. Madson, AS Jan. 96, p1-9.

Pile Driving Records Reanalyzed Using Neural Networks, Anthony T. C. Goh, GT June 96, p492-495. Plate Anchor Groups Pulled Vertically in Sand, James D.

Geddes and Edward J. Murray, GT July 96, p509-516. Riddle of the Riverbed, Kenneth D. Walsh, Robert E. Schock and Steven A. Jimenez, CE June 96, p64-67.

Scale Effects of Shallow Foundations on Lunar Regolith, Steven W. Perkins and Craig R. Madson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p963-972.

Seismic Bearing Capacity of Foundation on Cohesionless Soil, L. Dormieux and A. Pecker, GT Mar. 95, p300-303. Stone Bridge Safety Assessed, CE May 96, p23.

Strength of Struts and Nodes in Strut-Tie Model, Young Mook Yun and Julio A. Ramirez, ST Jan. 96, p20-29.

Threshold Accelerations for Rotation or Sliding of Bridge Abutments, Rowland Richards, Jr., Kenneth L. Fishman and Randall C. Divito, GT Sept. 96, p752-759.

Vertical Uplift Capacity of Horizontal Anchors, Kanaka-pura S. Subba Rao and Jyant Kumar, GT July 94, p1134-1147.

The Effect of the Lunar Surface Environment upon Ma-chinery, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Flywheels for Energy Storage in Space Using Superconducting Bearings, T. L. Wilson, W. K. Chu, K. Ma and H. Xia, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p355-359.
Seismic Isolation of Bridges in New York City, Jagtar S.

Khinda and Feng-Bao Lin, (Building an International Community of Structural Engineers, S. K. Ghosh, ed.

and Jamshid Mohammadi, ed., 1996), p24-32. Seismic Isolation of Bridges in the Midwest, Mark R. Capron, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p48-55.

Beautification

ASCE Group Gets Its Own Piece of a Freeway, CE Feb. 96, p68.

Seismic Isolation of Bridges Using Sliding Isolation Systems, Paul F. Bradford and Ronald J. Watson, (Building

an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996).

Bad land

Bed-Load Transport. I: Mechanical Characteristics, Chunhong Hu and Yujia Hui, HY May 96, p245-254. Bed-Load Transport. II: Stochastic Characteristics,

Bed-Load Transport. II: Stochastic Characteristics, Chunhong Hu and Yujia Hui, HY May 96, p255-261. Prediction of Bed-Load Transport by Desert Flash Floods

Prediction of Bed-Load Transport by Desert Flash Floods, Ian Reid, D. Mark Powell and Jonathan B. Laronne, HY Mar. 96, p170-173.

Sediment Control at Water Intakes, Yalin Wang, A. Jacob Odgaard, Bruce W. Melville and Subhash C. Jain, HY June 96, p353-356.

Sediment Transport in the Yellow River, Chih Ted Yang, Albert Molinas and Baosheng Wu, HY May 96, p237-244.

Settling and Erosion Characteristics of Mud/Sand Mixtures, Hilde Torfs, Helen Williamson and Heidi Huysentruyt, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p749-758.

Under Cover Transport and Accumulation of Frazil Granules, Hung Tao Shen and De Sheng Wang, HY Feb. 95, p184-195.

Bed load movemen

Bed-Load Transport. I: Mechanical Characteristics, Chunhong Hu and Yujia Hui, HY May 96, p245-254.

Bed-Load Transport. II: Stochastic Characteristics, Chunhong Hu and Yujia Hui, HY May 96, p255-261.

Boundary Layer Theory and Field Bedload, Leszek M. Kaczmarek, Rafall Ostrowski and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p664-675.

Contraction Scour at Bridges: Analytic Model for Coarse-Bed Channels, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3706-3715.

Estimation of Bed Material Transport Capacity, Henry M. Fehlman and Ruh-Ming Li. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1033-1038.

Velocity and Concentration Profiles in Sheet-Flow Layer of Movable Bed, B. M. Sumer, A. Kozakiewicz, J. Fredsee and R. Deigaard, HY Oct. 96, p549-558.

Bed material

Channel Restoration of Incising, Mixed Grain Size Streams: Lessons Learned, F. D. Shields, Jr., M. W. Doyle, S. S. Knight and C. M. Cooper, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3363-3368.

Design Relationship for Filters in Bed Protection, K. J. Bakker, H. J. Verheij and M. B. de Groot, HY Sept. 94, p1082-1088.

Estimation of Bed Material Transport Capacity, Henry M. Fehlman and Ruh-Ming Li, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1033-1038.

Fish Passage Pool Bedding Analysis, Louis S. Coletta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), 3818, 3823

Modeling Non-Uniform-Sediment Fluvial Process by Characteristics Method, Keh-Chia Yeh, Shian-Jang Li and Wen-Lin Chen, HY Feb. 95, p159-170.

Optimal Fitting of a Model to Observations of Sediment Concentration in the Irish Sea, J. N. Aldridge, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p416-428.

Scour Protection in Bottomless Culverts, D. V. Halvorson and F. J. Laumann, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3932-3941.

Bed movements

42

Distribution of Reynolds Stress above a Packed Bed in Open Channel Flow, Mahesh Balakrishnan, Clinton Dancey, Thanais Papanicolaou and Panos Diplas, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p665-668.

Initiation of Bed Forms on a Flat Sand Bed, Stephen E. Coleman and Bruce W. Melville, HY June 96, p301-310.

A Model for Bed Surface Shear Stress Fluctuations, César Mendoza, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p669-672.

Relative Celerities of Mobile Bed Flows with Finite Solids Concentrations, Peter H. Morris and David J. Williams, HY June 96, p311-315.

Bed roughnes

Contraction Scour at Bridges: Analytic Model for Course-Bed Channels, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3706-3715.

Chelenayya Bandala, etc., 1950, 19300-173.

Evaluation of Flow Resistance in Ice-Covered Channels, Florin Braileanu, Robert Etterna and James Wuebben, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p606-616.

Shear Stresses and Hydrodynamics of Combined Waves and Currents, R. D. Maclver, R. R. Simons and A. J. Grass, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p676-685.

Bedding

Sand Variability from Ground Penetrating Radar Data. Charles T. Young and Jon P. Doucette, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p368-382.

Bedform

Bed Configuration and Hydraulic Resistance in Alluvial-Channel Flows, Fazle Karim, HY Jan. 95, p15-25.

Employment of Electronic Sand Level Gauges for Measurement of Beach Slope Deformation on Norderney Island, Kos'yan R., H. Kunz and I. Podymov, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p651-663.

Initiation of Bed Forms on a Flat Sand Bed, Stephen E. Coleman and Bruce W. Melville, HY June 96, p301-310. Monitoring Results of a Nearshore Disposal Berm, Emre N. Otay, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed., 1996), p547-558.
E. Coleman and John D. Fenton, (North American Water and Environment Congress & Destructive Water, Chenchaya Bathala, ed., 1996), p442-45.

Bedrock

Behavior of DNAPLs in Fractured Bedrock, David Foster, Salvatore Priore and Kevin Brewer, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p583-594.

Boston's Third Harbor Tunnel (Available only in Focus on Geo/Environmental Special Issue), Axel J. Pollak and V. Peter Lalas, CE Mar. 96, p3A-6A.

Evaluation of a Bedrock DNAPL Pool Site, Dackyoo Hwang, Christopher Reitman and William Richardson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface En-

Hwang, Unissopher Retirant and William Richardson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p731-742.
I onfill Site Evaluation and Application of MODELOW to

Lanfill Site Evaluation and Application of MODFLOW to simulate Hydraulically Conductive Zones in Bedrock Associated with Diabase Dikes in North Carolina, M. A. Ponti, Jr., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p988-1002.

Beds

Bed Configuration and Hydraulic Resistance in Alluvial-Channel Flows, Fazle Karim, HY Jan. 95, p15-25. Big Tires Stabilize a Canal Bed, CE Jan. 96, p22,24. Effects of Bed Discordance on Flow Dynamics at Open Channel Confluences, Pascale Biron, James L. Best and

Channel Connuences, Paccae Briton, James L. Best and André G. Roy, HY Dec. 96, p676-682. Gravity Current of Fluid Mud on Sloping Bed, Thijs van Kessel and C. Kranenburg, HY Dec. 96, p710-717. Local Scour Downstream of Hydraulic Structures, Gijs J. C. M. Hoffmans and Krystian W. Pilarczyk, HY Apr. 95,

Ohio Transportation Goes to the Mat to Protect a Creek, CE Mar. 96, p82.

Bellows, Warren S., Jr. (Life M.) Warren Bellows, ASCE Life Member, Headed Houston Construction Company, NE July 96, p15.

Benchmarking of a Total-System Performance Assessment Model for WIPP, Joseph E. Hachey and Dawn A. Shut-tle, (High Level Radioactive Waste Management, Techni-

cal Program Committee, 1996), p322-324.

Benchmarking Preproject-Planning Effort, M. R. Hamilton and G. E. Gibson, Jr., ME Mar./Apr. 96, p25-33.

and G. E. Gibson, Jr., ME Mar/Apr. 96, p25-33.
Benchmarking: Performance-Improvement Towards Competitive Advantage, N. M. Lema and A. D. F. Price, ME Jan/Feb. 95, p28-37.
Guidelines and Benchmarks for Analysis of Isolated Buildings, Harry W. Shenton, III and Andrew W. Taylor, (Analysis and Computation, Franklin Y. Cheng, ed., 1996). 1996), p236-245.

Parametric Thermal Evaluations of Waste Package Emplacement, Robert H. Bahney, III and Thomas W. Doering, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p445-447

Analysis of Eigenvalue Variability for 2D Stochastic Struc-tural Systems Using Variability Response Functions, George Deodatis and Lori Graham, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigorius, ed., 1996), p600-603.

Bending and Shear Behavior of Web Elements with Openings, M. Y. Shan, R. A. LaBoube and W. W. Yu, ST Aug. 96, p854-859.

Bending Instability of Composite Tubes, Long-yuan Li, AS Apr. 96, p58-61.

Effective Length Factor for Columns in Unbraced Frames, Lian Duan and Wai-Fah Chen, ST Jan. 89, p149-165.

Experimental Study of Reinforced Concrete Beams Using Acoustic Surface Waveguides, Yidong He and Roger H. L. Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p869-875.

In-Plane Inelastic Buckling and Strengths of Steel Arches, Yong-Lin Pi and N. S. Trahair, ST July 96, p734-747. Investigation of the Use of Carpet Waste PP Fibers in Concrete, Antoine E. Nauman, Sandra Garcia, Marwan Kork-

crete, Antoine E. Naaman, Sandra Garcia, Marwan Kork-mar and Victor C. Li, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p782-791. Localized Load Effects in High-Order Bending of Sand-wich Panels with Flexible Core, Y. Frostig and M. Bar-

uch, EM Nov. 96, p1069-1076.

uch, EM NOV. 90, Proof-toro.
Micromechanics Based Design of FRCC Components, Christopher K. Y. Leung and Y. Philip Geng, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

New Compression Based Design Principals for Reinforced Glulams, Daniel A. Tingley and Stephen Cegelka, (Mate-ricls for the New Millennium, Ken P. Chong, ed., 1996),

p1479-1491.

Reliability Design of Laminated Plate for Buckling, Nozo-mu Kogiso, Shaowen Shao and Yoshisada Murotsu, Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p627-634.

Repetitive Member Adjustment for Wood Structural Derepetitive Memoer Adjustment for Wood Structural Design, Ron Wolfe and Steve Cramer, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p804-811. Solution to Reissner Plate with Clamped Edges, M. M. Aghdam, M. Shakeri and S. J. Fariborz, EM July 96, 200669.

Steady-State Thermal Bending of Thick Rectangular Plates, Isamu A. Okumura, EM June 96, p512-520.

System Factors Using First-Order Reliability Methods, William M. Bulleit and Weifeng Liu, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p786-

Tubular Members. II: Local Buckling and Experimental Verification, Spyros A. Karamanos and John L. Tassou-las, EM Jan. 96, p72-78.

A Unified Limit State Approach Using Deformability Factors in Concrete Beams Reinforced with GFRP Bars, P. V. Vijay and H. V. S. GangaRao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p657-665.

Use of Pasternak Foundation Model in Concrete Pavement Analysis, T. F. Fwa, X. P. Shi and S. A. Tan, TE July/

Aug. 96, p323-328.

Variability Response Functions for Random Eigenvalue Problems, George Deodatis and Lori Graham, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p681-684.

Buckling Analysis of Curved Beams by Finite-Element Discretization, Chai H. Yoo, Young J. Kang and James S. Davidson, EM Aug. 96, p762-770.

Computer Application of CLM Lateral Load Analysis to Piles and Drilled Shafts, Tracy Brettmann and J. Michael Duncan, GT June 96, p496-498.

Cross-Frame Spacing and Parametric Effects in Horizontally Curved I-Girder Bridges, James S. Davidson, Mark A. Keller and Chai H. Yoo, ST Sept. 96, p1089-1096.

Forces in Pile Foundations under Seismic Loading, A M. Kaynia and Saeed Mahzooni, EM Jan. 96, p46-53.

Thin-Walled Curved Beams. II: Analytical Solutions for Buckling of Arches, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2102-2125.

Benefit cost analysis

Benefits and Costs Associated with Flood Mitigation in the United States, Eugene A. Stallings, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p153-154.

Cost Benefit Analysis of Video-Based Vehicle Detection Panos G. Michalopoulos, Craig A. Anderson and Richard D. Jacobson, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p176-182.

Cost Effectiveness and Incremental Cost Analyses for Environmental Planning, William Hansen, Kenneth Orth and Ridgley Robinson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4220-4225.

Dam Safety Policy for Spillway Design Floods, James R. Dubler and Neil S. Grigg, El Oct. 96, p163-169.

Economic Evaluation of Design Codes—Case of Seismic Design, A. Warszawski, J. Gluck and D. Segal, ST Dec. 96, p1400-1408.

Economic Issues Regarding Water Quality Objectives in the Grassland Basin, Dennis Wichelns and Laurie Houston, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Evaluation of Road Maintenance Automation, Arif Osmani, Carl Haas and W. Ron Hudson, TE Jan./Feb. 96, p50-58.

Reliability Analysis in the Rehabilitation of Corps Struc-tures with Time-Dependent Needs, Mary Ann Leggett, (Risk-Based Decision Making in Water Resources VII, Yacov Y, Haimes, ed., David A, Moser, ed. and Eugene Z, Stakhiv, ed., 1996), p134-141.

Reliability Assessment of Dike and Levee Embankments, Thomas F. Wolff, Edward C. Demsky, Jeffrey Schauer and Edward Perry, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p636-650.

Social Consequences of Flood Mitigation, Elliott Mittler, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p369-370.

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The FEMA Program of Seismic Safety of Buildings, Ugo Morelli, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p159-160.

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Aspects of River House Cleaning During Floods, Parviz Monadjemi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2192.

ed., 1996), p.2192.
Beneficial Aspects of Flood and Rain in Countries Where the Drinking Water is Naturally Contaminated with Fluoride Where Fluorosis is a Major Public Health Problem, Susheela Andezhath Kumaran, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2191.

Benefits of the Santa Ana River Mainstem Project, William L. Zaun, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2176.

Benefits/Impacts of Utilizing Depleted Uranium Silicate Glass as Backfill for Spent Fuel Waste Packages, R. B. Pope, C. W. Forsberg, R. C. Ashline, M. D. DeHart, K. W. Childs and J. S. Tang, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

p369-371.

The Environmental Valuation Reference Inventory (EVRI) for Water Related Benefits Transfers, Jim Frehs, Matthew Clark, Paul De Civita, Fernand Filion, Virginia Kibler and Mahesh Podar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1331-1336.

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Probability Based Estimation of Expected Annual Benefits, Eric D. Loucks, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p298-303.

Effects of Transport Model Alternatives Incorporating Precipitation on the Performance of Engineered Barriers. Takao Ohi, Kaname Miyahara, Morimasa Naito and Hiroyuki Umeki, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p274-

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Practical Methods for Managing Uncertainties for Geosynthetic Clay Liners, David E. Daniel and Robert B. Gilbert, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1331-1346.

Study of Clay-Cement Slurries with Mechanical and Electromagnetic Waves, M. A. Fam and J. C. Santamarina, GT May 96, p365-373.

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A Diffusion-Type Adsorption Batch Test Method for De-termination of Benzene Adsorption on Regina Clay, Xiao Zhang, S. Lee Barbour and John V. Headley, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p175-186.

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chayya Bathala, ed., 1996), p3728-3733.

Monitoring Results of a Nearshore Disposal Berm, Emre N. Otay, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed., 1996), p547-558.

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Dynamic Mechanical Properties of SBR Modified Asphalt, Fariborz Gahvari and Imad L. Al-Qadi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p133-

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Study on Lunar Cement Production Using Hokkaido Anorthite and Hokkaido Space Development Activities, T. Horiguchi, N. Saeki, T. Yoneda, T. Hoshi and T. D. Lin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p621-629.

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1990), p418-499.
Anacrobic Biodegradation of High Energetics in Digestion Sewage Sludge, Sung-Hyun Kwon, Frank J. Y. Shiu and Teh Fu Yen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p794-799.

Anaerobic Removal of Pentachlorophenol in Presence of Zinc, Peikang Jin and Sanjoy K. Bhattacharya, EE July 96. p590-598.

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Biodegradation of Dichloromethane in Leachate, R. Kerry Rowe, Leila Hrapovic, Naim Kosaric and D. Roy Cullimore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2021-2026.

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Lakshmi N. Reddi, ed., 1996), p670-680. Innovative Bioventing System Construction/Operation in Cold Regions, Kimberly K. Stricklan and Randall L. Mattzela, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p351-359.

Microbial Decontamination of Polluted Soil in a Slurry Process, M. J. Geerdink, R. H. Kleijntjens, M. C. M. van Loosdrecht and K. C. A. M. Luyben, EE Nov. 96, p975-

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Oxygen Supplies for Bioremediation in Tundra Soils, Daniel M. White and Robert L. Irvine, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p339-350.

Petroleum Hydrocarbon Removal via Volatilization and Biodegradation at McGrath, Alaska, Paul C. Ramert and Wayne L. Eberhardt, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p94-105.

Phenol- and Thiocyanate-Based Wastewater Treatment in

RBC Reactor, Goutam Banerjee, EE Oct. 96, p941-948.

A Pilot-Scale Study of In Situ Hydrocarbon Remediation of Contamination in Soil and Groundwater at Fort Wainwright, Alaska, Timothy F. Gould and Mark Wallace, Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p106-115.

Recover Inorganic Solids from Obsolete Propellants, Frank J. Y. Shiu, Iris C. Y. Yang and T. F. Yen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1373-1378.

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Surfactant-Enhanced Extraction and Biodegradation of a Non-Aqueous Phase Contaminant in Soil, Satishkumar Santharam, Larry Eugene Erickson and Liang-tseng Fan, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p419-430.

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wromment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p466-477.
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Attachment Strength of Zebra Mussels on Natural, Polymeric, and Metallic Materials, Josef Daniel Ackerman, Catherine M. Cottrell, C. Ross Ethier, D. Grant Allen and Jan K. Spelt, EE Feb. 96, p141-148.

Biaxial Mechanical Behavior of Bovine Pericardium as a Bioprosthetic Material, Michael S. Sacks, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p200-203.

Mechanics, 1. A. Lin and 1. C. Su, 1990, peop-eo-Biomechanics and Testing of Mechanical Circulatory Sup-port Devices, Harvey Borovetz, James Antaki, William Wagner, Marina Kameneva, John Pristas, Stephen Winowich, William Mandarino, Philip Litwak, Robert Kormos and Bartley Griffith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p35. Computation of Velocity Fields of Intravenous Balloon Pumping, Huaqiang Li, Tin-Kan Hung, Chiuping Chang and Pat Sawzik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p326-329.

Computational Modeling of Fluid Dynamics in Aortopul-monary Shunts: Comparison to In Vitro Studies, Kevin K. Whitehead, Theresa A. Tacy and Edward G. Cape, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p334

The Effect of Diameter Mismatch Upon Hemodynamics in the Distal Anastomoses of Vascular Bypass Grafts, Robert S. Keynton, Mary M. Evancho, Rick L. Sims and Stanley E. Rittgers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p196-199.

Engineering a Novel Intravenous Oxygenator, William Federspiel, Frank Walters, Pat Sawzik, Gary Reeder, Harvey Borovetz and Brack Hattler, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p43

Engineering Design Considerations for Artificial Lungs, L. F. Mockros and K. E. Cook, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p33-34.

Engineering Mechanics, 2 vols., Y. K. Lin and T. C. Su, 1996, 0-7844-0172-1, 1240pp.

Experimental Study of Steady and Pulsatile Flows in Models of Abdominal Aortic Aneurysms, Robert A. Peattie, Tiffany J. Riehle, Matthew L. Parsons, Brian P. Giles and Edward I. Bluth, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p318-321.

Human Biomechanics Inform Seismic Protection, ET

Apr./May 96, p10-11.

ApJ May 9, pt - 11.

Mechanical Stress in Pediatric Heart Disease: Computational Modeling of Associated Defects in Subaortic Stenosis, Michael D. VanAuker, Pedro del Nido, Theresa A. Tacy, Gunnlaugur Sigfusson and Edward G. Cape, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p470.

New Trends in Biomechanics, Y. C. Fung, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1-15.

Platelet Activation in Time Varying Shear Flow Field, C. Cornelius Glismann and Ned H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p39-42.

Pulsatile Flow Circuitry for Dynamic Study of a Volume Plethysmograph, Alex A. Yu, Jeff Raines and Ned H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p204-207.

Simulation of Suspended Particles Transport in the Entrance Region of Tube Flow, Shi-kang Wang and N. H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p462-465.

Validation of a 3-D Numerical Model of LV Ejection, Tong Ding and Richard T. Schoephoerster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p322-325.

Biomedical engineering

Biaxial Mechanical Behavior of Bovine Pericardium as a Bioprosthetic Material, Michael S. Sacks, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p200-203.

Biomechanics and Testing of Mechanical Circulatory Sup-port Devices, Harvey Borovetz, James Antaki, William Wagner, Marina Kameneva, John Pristas, Stephen Winowich, William Mandarino, Philip Litwak, Robert Kormos and Bartley Griffith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p35.

Changes in the Host to Biomaterial Surface-Blood Contact; Activation of Host Components, B. G. Hattler, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p36-

Chaotic Advection in a Bioengineering System, Ahmet C. Omurtag, Victor Stickel and Rene Chevray, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p450-453.

Computation of Velocity Fields of Intravenous Balloon Pumping, Huaqiang Li, Tin-Kan Hung, Chiuping Chang and Pat Sawzik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p326-329.

Computational Modeling of Fluid Dynamics in Aortopul-

monary Shunts: Comparison to In Vitro Studies, Kevin K. Whitehead, Theresa A. Tacy and Edward G. Cape, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

The Effect of Diameter Mismatch Upon Hemodynamics in the Distal Anastomoses of Vascular Bypass Grafts, Robert S. Keynton, Mary M. Evancho, Rick L. Sims and Stanley E. Rittgers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p196-199.

Engineering a Novel Intravenous Oxygenator, William Federspiel, Frank Walters, Pat Sawzik, Gary Reeder, Harvey Borovetz and Brack Hattler, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p43.

Engineering Design Considerations for Artificial Lungs, L. F. Mockros and K. E. Cook, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p33-34.

Experimental Study of Steady and Pulsatile Flows in Models of Abdominal Aortic Aneurysms, Robert A. Peattie, Tiffany J. Riehle, Matthew L. Parsons, Brian P. Giles and Edward I. Bluth, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p318-321.

Magnetic Fluid Dynamics of Blood Flow, Yousef Haik, Ching Jen Chen and Vinay Pai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p458-461.

Mechanical Stress in Pediatric Heart Disease: Computational Modeling of Associated Defects in Subaortic Stenosis, Michael D. VanAuker, Pedro del Nido, Theresa A. Tacy, Gunnlaugur Sigfusson and Edward G. Cape, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p470.

Minimally Invasive Endoluminal Vascular Grafts, L. Pinchuk, J. P. Dereume, H. Kontges, N. Frid, Y. P. Kato, B. A. Weber, J. B. Martin, I. J. Khan, R. Alcime, G. J. Wilson and D. C. MacGregor, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p192-195.

Platelet Activation in Time Varying Shear Flow Field, C. Cornelius Glismann and Ned H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p39-42.

Pulsatile Flow Circuitry for Dynamic Study of a Volume Plethysmograph, Alex A. Yu, Jeff Raines and Ned H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p204-207.

Simulation of Pulsatile Flow Past a St. Jude Valve, L. Niu, D. Bluestein and R. T. Schoephoerster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p330-333.

Simulation of Suspended Particles Transport in the Entrance Region of Tube Flow, Shi-kang Wang and N. H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p462-465.

Validation of a 3-D Numerical Model of LV Ejection, Tong Ding and Richard T. Schoephoerster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p322-325.

Rirds

Bird Use of an Evaporation Basin and a Mitigation Wetland, Andrew G. Gordus, Jeff Seay and Scott B. Terrill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p518-523.

An Evaluation of Drainage Conditions in the San Joaquin Valley, M. Manucher Alemi and George Nishimura, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Interference of Avian Guano in Analyses of Fuel-Contaminated Soils, David E. James, Tod E. Johnson and David K. Kreamer, EE Jan. 96, p74-76.

Significance of Tests for Highway Materials, E. Ray Brown, P. S. "Ken" Kandhal, Dah Yinn Lee and K. Wayne Lee, MT Feb. 96, p26-40.

Bituminous coatings

Field Investigation of Potential Contamination by Bitu-men-Coated Piles, Albert T. Yeung, Rajan Viswanathan and Jean-Louis Briaud, GT Sept. 96, p736-744.

Minimizing Costs of Northern Highways by Using BST, D. R. MacLeod and Robin Walsh, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p935-946.

Black, George W., Jr. (Member, ASCE)

Civil Engineer Named to Transportation Safety Board, NE Apr. 96, p15.

Blast effects

Article Should Be Required Reading, James Warner, P.E., CE Nov. 96, p32.

Blasting Densifies Volcanic Debris (Available only in Focus on Geo/Environmental Special Issue), Thomas C. Badger, CE Mar. 96, p8A-12A.

Bauger, C.E. Mair. 30, poA-12A.
Measuring Blast Damage, Clifton E. R. Lawson, P.E., CE Oct. 96, p38-39.
Protecting Buildings against Vehicle Bomb Attacks, Anatol Longinow and Kim R. Mniszewski, SC Feb. 96, p51-54. To Blast or Not to Blast? G. F. Revey, SC Aug. 96, p81-82.

Blast Resistant Design of Commercial Buildings, Moham-med Ettouney, Robert Smilowitz and Tod Rittenhouse, SC Feb. 96, p31-39.

Structural Design for Vehicular Bombs, Task Committee on Structural Design for Physical Security, (Paul F. Mlakar, FASCE, Chair, chmn.), (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1269-1276.

Blasting
Controlled Drill & Blast Excavation at AECL's Underground Research Laboratory, G. W. Kuzyk, D. P. Onagi and P. M. Thompson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p404-406.

Evaluating Efficiency of Rock Blasting Using Data-Envelopment Analysis, James Odeck, TE Jan./Feb. 96,

Improvements in Mining Technology, Jacques Nantel, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p806-812. Measuring Blast Damage, Clifton E. R. Lawson, P.E., CE

Oct. 96, p38-39. Soil Fracture Technique Stops Blast Shock Waves, CE May

96, p12.

To Blast or Not to Blast? G. F. Revey, SC Aug. 96, p81-82.

Active Vibration Control of Machine Foundation, Mohamed Abdel-Rohman and Hasan Al-Sanad, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

Compression of Bonded Blocks of Soft Elastic Material: Variational Solution, Katerina-D. Papoulia and James M.

Kelly, EM Feb. 96, p163-170.

Design Formulas for Block Revetments, Adam Bezuijen and Mark Klein Breteler, WW Nov./Dec. 96, p281-287. EcoBlocks: Nontraditional Use for Mixed Wastepaper, A. M. Springer, Marc Rose and Rich Ryu, EE May 96, p437-444.

Vector Analysis of Keyblock Rotations, Matthew Mauldon and Richard E. Goodman, GT Dec. 96, p976-987.

Numerical Modeling of Wind-Structure Interactions, Dahai Yu and Ahsan Kareem, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1005-1012.

Boiler Emissions Drop, CE Nov. 96, p21. Computerized I&M Programs for Oil-Fired Space Heating Boilers, Alexander P. Economopoulos, EY Aug. 96, p61-74.

Crossing the Cape Cod Canal; A Natural Gas Pipeline Interconnection, Charles A. Pickering, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p48-55.

Water Conservation for Boilers and Steam Systems, Joann Casey, Stuart Cooley and Marekat C. Joseph, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2685-2688.

Boiling water reactors

U.S. Light-Water Reactor Spent Fuel Inventory—Fissile Distribution, Ron C. Ashline and Charles W. Forsberg. (High Level Radioactive Waste Management, Technical Program Committee, 1996), p342-344.

3D Simulation of End-Plate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94, p3122-3136.

Blind Bolts Seek Spotlight, ET Apr./May 96, p8-9.
Bolted Field Splices for Steel Bridges, Firas Sheikh-Ibrahim and Karl H. Frank, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p290-297.

Field Study of Pretension in Large-Diameter A490 Bolts, Charles J. Oswald, Robert J. Dexter and Steven K.

Brauer, BE Aug. 96, p121-126.
Resistance Factors for High Strength Blind Bolts, Sami W.
Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p784-787.

Changing Conditions and Water Elections, Charles H. Lawrance, James M. Stubchaer and Jon A. Ahlroth, WR July/Aug. 94, p458-475.

Elastic Moduli of a Bond Model for Reinforced Concrete. James V. Cox, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p84-87.

Bond stress

Analysis of Bond Stress Distributions in Pullout Specimens, Homayoun H. Abrishami and Denis Mitchell, ST Mar. 96, p255-261.

Pullout Simulation of Postinstalled Chemically Bonded An-chors, Michael McVay, Ronald A. Cook and Kailash Krishnamurthy, ST Sept. 96, p1016-1024.

Analysis of Bond Stress Distributions in Pullout Speci-mens, Homayoun H. Abrishami and Denis Mitchell, ST Mar. 96, p255-261.

Compression of Bonded Blocks of Soft Elastic Material: Variational Solution, Katerina-D. Papoulia and James M.

Kelly, EM Feb. 96, p163-170.

Design and Construction of a Bonded Fiber Concrete Over-lay of CRCP, Hadi H. Shirazi, Masood Rasoulian and Bill King, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1647-1658.

Dimensional Analysis of Bond Modulus in Fiber Pullout, Jyrki Kullaa, ST July 96, p783-787.

Jyrix Rullia, S.1 July 30, Pt. 2016.

Influence of Coatings on Bar-Concrete Bond, Protasio F. Castro, MT Nov. 96, p212-214.

Laminate Bonding for Concrete Repair and Retrofit, D. V. Reddy, G. B. Gervois and L. A. Carlsson, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1579-

Bonding strength

Bond and Slip of Plain Rebars in Concrete, Y. L. Mo and J.

Chan, MT Nov. 96, p208-211.

Composite Action of Foamed and Lightweight Aggregate Concrete, Yasser M. Hunaiti, MT Aug. 96, p111-113. Concrete/Reinforcing Steel Bond Strength of Low-Temperature Concrete, Herbert P. Schroeder and Thom-

as B. Wood, CR June 96, p93-117.

Evaluation of Bond Characteristics of Steel and Glass-Fiber Reinforcing Bars, James R. Lundy and Damian I. Ka-chlakev, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p638-647.

Evaluation of Bond Strength with Polypropylene Fiber Re-inforced Concrete, R. C. Zellers, V. Ramakrishnan, V. N. Rajpathak and S. Yu, (Materials for the New Millennium,

Rajpatnak and S. Tu, (materials for the New Internation, Ken P. Chong, ed., 1996), p123-132.
Improving Development Characteristics of Reinforcing Bars, CERF Report #94-6002. Civil Engineering Research Foundation, 1994, 0-7844-0062-8, 45pp.

search Foundation, 1994, 0-7844-0062-8, 43pp.
The Next Generation in Composite Rebars for Concrete Reinforcement, Salem S. Faza, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p905-913.
Performance of Repair Materials Exposed to Fluctuation of Temperature, A. S. Al-Gahtani, Rasheeduzzafar and A. A. Al-Mussallam, MT Feb. 95, p9-18.

Uniaxial Cyclic Behavior of Discontinuous Fiber Rein-forced Composites, Takashi Matsumoto and Victor C. Li, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p426-435.

Bonds, contracts

County Responsible for Bond, CE June 96, p24.

State Agency Not Responsible for Performance Bond, CE Nov. 96, p28.

Border irrigation Complete Hydrodynamic Border-Strip Irrigation Model, Vivekanand Singh and S. Murty Bhallamudi, IR July/

Aug. 96, p189-197.

Managing Border Irrigation for Near-Zero Discharge, T. S. Strelkoff and A. J. Clemmens, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1711-1715.

Borehole geophysics

Application of Ground-Penetrating Radar to a Site Investigation Involving Shallow Faults, Christopher L. Liner and Jeffrey L. Liner, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p101-111.

Delineating Subsurface Contamination Using Geostatistical Delineating Subsurface Contamination Using Geostatistical and Non-Intrusive Geophysical Methodologies, Sandra Bowling, Wayne Woldt and Dennis Schulte, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2230-2235. Geophysical Log Interpretation Using Neural Network, S. Pezeshk, C. V. Camp and S. Karprapu, CP Apr. 96, 126-126.

p136-142

Localized Alteration of the Paintbrush Nonwelded Hydrologic Unit within the Exploratory Studies Facility, Z. E. Peterman, R. W. Spengler, F. R. Singer and S. C. Beason, (High Level Radioactive Waste Management, Technical Program Committee, 1996), 946-47.

Simulation and Observation of ESF Tunnel Effects on Bar-

ometric Conditions, Parviz Montazer and Nick Stellava-to, (High Level Radioactive Waste Management, Techni-

cal Program Committee, 1996), p92-94.

Boreholes

Analysis of Air Permeability Tests at Yucca Mountain, Nevada, Dave O. Cox and Nick Stellavato, (High Level Ra-

dioactive Waste Management, Technical Program Committee, 1996), p160-162.

Brothole UE-25 ONC #1 Drilling at Yucca Mountain, Nevada, Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p166-167.

p166-167.

Control of Stacking Loads in Final Waste Disposal According to the Borehole Technique, Walter Feuser, Eike Bar-nert and Hendrik Vijgen, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p477-479

Generalized Plane Strain Finite Element Analysis: Geome chanical Applications, V. N. Kaliakin, L. Cui and A. H-D Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p289-292.

Just One More Boring, and We'll Know for Sure! Sam S. C. Liao, David L. Druss, Thom L. Neff and Brian R. Brenner, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p119-133.

Measurement of the Undrained Pore Pressure Response of a Shale in Triaxial Tests, Tomoyuki Aoki, Chee P. Tan, Rory H. T. Cox and William E. Bamford, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1086-1089.

Nine-Component Vertical Seismic Profiling at Yucca Mountain, Nevada, A. H. Balch, Cemal Erdemir, R. W. Spengler and W. Clay Hunter, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p155-156.

Release Rates of Radionuclides through a Porous Material-Filled Borehole in a Radioactive Waste Repository, Kun Jai Lee and Heui-Joo Choi, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p279-281.
Westbay/MOSDAX Instrumentation of UE-25 ONC #1 and USW NRG-4 at Yucca Mountain, Nevada, Nick Stellavato, (High Level Radioactive Waste Management, Tech-

nical Program Committee, 1996), p163-165.

Analytical Study and Verification of a Coupled Theory of Mixtures for Application in Cone Penetration and Tunnel Boring in Soils, George Z. Voyiadjis, Murad Y. Abu-Farsakh and Mehmet T. Tumay, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p543-546.

Design and Construction of Large Diameter High Pressure Design and Construction of Large Diameter High Pressure Gas Transmission River Crossing for San Diego Gas and Electric Using Directional Boring, Jey K. Jeyapalan and Robert Dalby, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p379-386. Start-Ups, CE Mar. 96, p8. Tunnel Boring Records Set, CE May 96, p15-16. Under-Harbor Sewage Tunnel Holes Through, CE Apr. 96, p10

p10.

Boston Boston Blockbuster, Virginia Fairweather, CE Dec. 96,

Boston's Home Run, Rita Robison, CE July 96, p36-39. Boston's Third Harbor Tunnel (Available only in Focus on Geo/Environmental Special Issue), Axel J. Pollak and V. Peter Lalas, CE Mar. 96, p3A-6A.

Central Artery Utility Crossings, Brian Brenner, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996),

Central Artery/Tunnel (CA/T) Project Environmental Permitting, Jeffrey M. Paul, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2236-2241. Combined Structural and Non-Structural Flood Hazard Mit-

igation, Barbara D. Hayes, (Natural Flood Hazard Mit-George W. Housner, ed. and Riley M. Chung, ed., 1997), p25-26.

Geotechnical Instrumentation for Boston's Central Artery/ Tunnel Project: An Overview, John Dunnicliff, Charles Daugherty and Thom Neff. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p727-733. An Interception by Boston, Dennis J. Doherty, P.E. and

Irene McSweeney Woodfall, P.E., CE Oct. 96, p45-47. Water Quality Impacts of Dredging and Disposal Opera-tions in Boston Harbor, J. Craig Swanson and Daniel Mendelsohn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2642-2647.

Investigation of Lignite-Based Bottom Ash for Structural Concrete, Nader Ghafoori and Jeffrey Bucholc, MT Aug. 96, p128-137.

Boulders

Field Measurement of Boulder Flow Drag, James C. Bath-

urst, HY Mar. 96, p167-169.

Successful Implementation of Grouted Boulder Grade Control Structures on Drainageways in the Denver Metropol-itan Area, John M. Pflaum, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p836-841.

Boundaries

Flexible Boundary for Discrete Element Simulation of Granular Assemblies, Runing Zhang and Stein Sture, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p723-726.

p123-726. Microplane Model for Concrete: I: Stress-Strain Boundaries and Finite Strain, Zdenék P. Bažant, Yuyin Xiang and Pere C. Prat, EM Mar. 96, p245-254. Microplane Model for Concrete: II: Data Delocalization and Verification, Zdenék P. Bažant, Yuyin Xiang, Mark D. Adley, Pere C. Prat and Stephen A. Akers, EM Mar. 96, p255-262.

Vibration of Laminated Shallow Shells on Quadrangular Boundary, A. V. Singh and V. Kumar, AS Apr. 96, p52-

Boundaries, property Legal Principles Applicable to Sharing Transboundary Wa-ters, William E. Cox, (North American Water and Environment Congress & Destructive Water, Chenchayya

Managing Transboundary Water Sharing, Stephen E. Drap-er, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996).

p3230-3235.

Transboundary Diversions, Water Law and Property Rights, George William Sherk, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3224-3229.

Boundary characteristics

Evaluation of Flow Resistance in Ice-Covered Channels, Florin Braileanu, Robert Ettema and James Wuebben, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p606-616.

A Finite Element Model for the Aeroelasticity Analysis of Hypersonic Panels, Part II: Determination of Flutter Boundary, Ji Y. Shen and Lonnie Sharpe, Jr., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl 148-1154.

Boundary conditions

Application of the Q-3D SHORECIRC Model to Surfbeat, A. R. Van Dongeren, I. A. Svendsen and F. E. Sancho, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p233-244.

Effect of Acceleration on Bottom Shear Stress in Tidal Estuaries, A. Y. Kuo, J. Shen and J. M. Hamrick, WW

Mar./Apr. 96, p75-83.

Efficient Pump Representation for Fixed-Grid MOC in Pipeline Systems, David H. Axworthy and Bryan W. Karney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p370-375.

Exterior Reflections in Elliptic Harbor Wave Models, Bingyi Xu, Vijay Panchang and Zeki Demirbilek, WW May/June 96, p118-126.

Flow Properties of the Swash Zone, M. Brocchini and D. H. Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p221-232.

Friction-Term Response to Boundary-Condition Type in Flow Models, Raymond W. Schaffranck and Chintu Lai.

HY Feb. 96, p73-81.

High-Resolution, Short-Term Lake Forecasts for Lake Erie, John G. W. Kelley, David J. S. Welsh, Keith W. Bed-ford, David J. Schwab, Jay S. Hobgood and Brendon Hoch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p367-378.

Modeling the Impact of Uncertainty in Spatial Variability of Estuarine Boundary Conditions, B. H. Johnson and K. W. Kim, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2731-2736.

Modelling Eddy Formation in Coastal Waters: A Comparison between Model Capabilities, Duncan Galloway, Eric Wolanski and Brian King, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p13-25.

Nested Three-Dimensional Hydrodynamic Modeling of the Delaware Estuary, John S. Ramsey, Robert P. Hamilton, Jr. and David G. Aubrey, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p53-65.

Numerical Model for On-Offshore Sediment Transport with Moving Boundaries, Cheol-Eung Lee, Moo-Hyun Kim and Billy L. Edge, WW Mar/Apr. 96, p84-92.

Numerical Modeling of Water Flow over Porous Media, Christopher Y. Choi, Peter M. Waller and Fukumura Kazunari, (North American Water and Fukumura Ka-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2433-2438.

Numerical Simulation of Temperature in the New York Bight, S. Rao Vemulakonda, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p66-79.

Optimized Boundary Conditions for Coastal Modeling, Igor Shulman and James K. Lewis, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p268-282.

Simulation of Regional Ground-Water Flow on a Trans-boundary Flowline; Trans-Pecos, Texas and Chihuahua, Mexico, Barry J. Hibbs, Bruce K. Darling, John M. Sharp, Jr. and John B. Ashworth, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1323-1330.

Stochastic BEM-Random Excitations and Time-Domain Analysis, Sunil Saigal and Igor Kaljević, EM Apr. 96,

Unsaturated Zone Flow Modeling for GWTT-95, Clifford K. Ho, Susan J. Altman, Sean A. McKenna and Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p184-186.

Boundary element method

Active Isolation of Machine Foundations by In-Filled Trench Barriers, T. M. Al-Hussaini and S. Ahmad, GT Apr. 96, p288-294.

Consistent Infinitesimal Finite-Element Cell Method - A Boundary Finite-Element Procedure, Chongmin Song and John P. Wolf, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p176-179.

Cracking Analysis of Arch Dams by 3D Boundary Element Method, L. M. Feng, O. A. Pekau and C. H. Zhang, ST

June 96, p691-699.

Dynamic Analysis of Axisymmetric Foundations on Poroelastic Media, Gary F. Dargush and Manoj B. Chopra, EM July 96, p623-632.

Dynamic Interaction Between Embedded Foundations by the Substructure Deletion Method, Raimondo Betti, Euclides de Mesquita Neto and Edivaldo Romanini, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), p314-317.

Dynamic Response Analysis of High Arch Dam-Water-Foundation System, Du Xiuli, Chen Houqun and Hou Shunzai, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p987-988.

Dynamic Through-the Soil Interaction of Adjacent Surface or Buried Structures, D. C. Rizos and D. L. Karabalis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p180-183.

Earthquake Response of Gravity Dams Including Effects of Porous Sediments, José Domínguez and Rafael Gallego, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p649-652.

Exact Stiffnesses for Tapered Members, Husain Jubran Al-Gahtani, ST Oct. 96, p1234-1239.

Flexible-Membrane Wave Barrier. I: Analytic and Numerical Solutions, M. H. Kim and S. T. Kee, WW Jan./Feb. 96, p46-53.

Flow through Slit in Dam, Yakun Guo, Xianyun Wen and Chigong Wu, HY Nov. 96, p662-669.

Critigong Wu, H. 1807. 90, proceeds: Further Application of Dynamic Poroelasticity to Geotechnical Engineering Via BEM, Jianming Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p479-482.

ing Mechanics, Y. K. Lin and T. C. Su, 1996), p479-482.
Investigation on Active Isolation of Machine Foundations by Open Trenches, S. Ahmad, T. M. Al-Hussaini and K. L. Fishman, GT June 96, p454-461.
Multiple-Pit Breakwaters, William G. McDougal, A. Neil Williams and Keizo Furukawa, WW Jan./Feb. 96, p27-33.

Numerical Methods in Structural Mechanics, Co-published with Thomas Telford, U.K., Zdeněk Bittnar and Jiří Šejnoha, 1996, 0-7844-0170-5, 422pp.

On the Numerical Treatment of Vorticity Diffusion from a Boundary Element in the Discrete Vortex Element Method, Fusen He and Tsung-chow Su, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p844-847.

Seepage from Surface Canals by Boundary Element Method, Alexander C. Demetracopoulos and Christos Had-jitheodorou, IR Jan./Feb. 96, p40-48.

Seismic Response Assessment of Active-Controlled Multi-Story Buildings with Soil-Foundation Influence, F. Y. Cheng, S. Suthiwong and P. Tian, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1155-1163.

Stochastic BEM—Random Excitations and Time-Domain Analysis, Sunil Saigal and Igor Kaljević, EM Apr. 96,

p342-349.

Time Domain Fundamental Solution to Nonclassical Thermoelasticity with One Relaxation Time Part II: Two-Dimensional Solution, Jianming Chen and Alexander H.-D. Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p88-91.

Two Classical Elasticity Problems Revisited by a Quasi-static Poroelastic BEM Implementation, João C. B. de Campos and Euclides de Mesquita Neto, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1078-1081.

Wave Groups Approaching a Beach: Full Irrotational Flow Computations, T. C. D. Barnes and D. H. Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p116-127.

Boundary integral equation method

The Boundary Integral Equation Method for Plates, Eduard S. Ventsel, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1005-1009.

Boundary layer

Boundary Layer Theory and Field Bedload, Leszek M. Kaczmarek, Rafall Ostrowski and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p664-675.

Employment of Electronic Sand Level Gauges for Measurement of Beach Slope Deformation on Norderney Island, Kos'yan R. H. Kunz and I. Podymov, Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p651-663.

Experimental and Numerical Studies of Shear Layers in Granular Shear Cell, Jan-Olov Aidanpää, Hayley H. Shen and Ram B. Gupta, EM Mar. 96, p187-196.

Flow Over Vortex Ripples: Models and Experiments, Lewis A. W., E. Hitching, G. Perrier, E. Asp Hansen, H. Earnshaw, K. Eidsvik, C. Greated, M. Sumer and A. Temperville, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p686-697.

International Collaboration in the Design of Three Boundary Layer Wind Tunnels, César Farell, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p1061-1068.

Peculiarities of the Mode Shapes of Two-Dimensional Spinning Bodies, Marc P. Mignolet and Chris D. Eick, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1001-1004

Boundary layer flow

Shear Dispersion in the Benthic Boundary Layer, C. G. Hannah, J. W. Loder and Y. Shen, (Estuarine and Coast-al Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p454-465.

Boundary processes

Minimum-Time Design of a Slewing Flexible Beam, Xiao-jian Liu and David W. Begg, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1205-1214.

Determining Rehabilitated Sewer Flow Capacity, Joseph Barsoom, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p97-104.

Boundary value problems

Flow through Slit in Dam, Yakun Guo, Xianyun Wen and Chigong Wu, HY Nov. 96, p662-669.

Bounding surface

Implicit Integration Procedures and Consistent Tangent Operators for Bounding Surface Plasticity Models, P. Rahulkumar and S. Saigal, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p140-143.

Reduced-Order Sand Model for Ground Response Analysis, X. S. Li, EM Sept. 96, p872-881.

inesq equations

A Boussinesq Model for Inshore Zone Sediment Transport Using an Energetics Approach, Theofanis V. Karambas, Howard N. Southgate and Christopher Koutitas, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p841-849.

Depth-Averaged Boussinesq Equations Applied to Flow in a Converging Channel, Thomas Molls and Gang Zhao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

A Finite Element Analysis of Mach Reflection by Using the Boussinesq Equation, Shoichiro Kato, Toshimitsu Takagi and Mutsuto Kawahara, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3440-3445.

A Method to Study Suspended Sediment Induced Flow Characteristics Changes, D. Zhou and C. Mendoza, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1447-1452.

Numerical Simulation of 1993 Southwest Hokkaido Earthquake Tsunami around Okushiri Island, Shinji Sato, WW Sept./Oct. 96, p209-215.

Parameterisation of Triad Interactions in Wave Energy Models, Y. Eldeberky and J. A. Battjes, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p140-148.

Vertically Averaged and Moment Equations Model for Flow over Curved Beds, Abdul A. Khan and Peter M. Steffler, HY Jan. 96, p3-9.

Wave Propagation in Shallow Waters: Modelling and Real Data, José C. Santás and José M. de la Peña, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p128-139.

Cyclic Tests of Concrete-Filled Steel Box Columns, Hanbin Ge and Tsutomu Usami, ST Oct. 96, p1169-1177.

EBEF Method for Distortional Analysis of Steel Box Gird-er Bridges, Yao T. Hsu, C. C. Fu and David R. Schelling, ST Mar. 95, p557-566.

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Computer-Aided Design of Braced Excavations, Chandra S. Brahma and Howard C. Biddlecome, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p838-844.

Lateral Earth Pressures on Deep Braced Walls, Daniel O. Wong, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p746-

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Behavior of Three-Span Braced Columns with Equal or Unequal Spans, Raymond H. Plaut and Yu-Wen Yang, ST June 95, p986-994.

Beware of Flying Cranes - and Disconnected Codes, M. Russell Nester and Allan R. Porush, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p219-220.

Elastic Response of Columns After Sudden Loss of Brac-ing, Raymond H. Plaut and Rae-Hak Yoo, EM Apr. 96,

p383-384.

Grout Repair of Dent-Damaged Steel Marine Tubulars, James Ricles and Troy Gillum, WW May/June 96,

Inelastic Response of Columns after Sudden Loss of Bracing, Rae-Hak Yoo and Raymond H. Plaut, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p378-381.

Load Capacity of Nested, Laterally Braced, Cold-Formed Steel Z-Section Beams, Ahmad A. Ghosn and Ralph R. Sinno, ST Aug. 96, p968-971.

Practical Advanced Analysis for Braced Steel Frame De-sign, Seung-Eock Kim and Wai-Fah Chen, ST Nov. 96, p1266-1274.

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Upgrading of Braced Frames for Potential Local Failures, Hae In Kim and Subhash C. Goel, ST May 96, p470-475.

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The Resonance Drives with Adaptive Control, Teodor S. Akinfiev, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p947-950.

Brant, Austin E., Jr. (Fellow, ASCE)

Austin Brant, Retired Chairman of TAMS, Dies at 66, NE Feb. 96, p14.

Controlling Brazil's Pollution: Federal versus State Taxes and Fines, Antonio Estache and Kangbin Zheng, IS June 96, p83-93.

Flood Control in the Brazilian Electric System Reservoirs at Parana River Basin, A. L. Lopes and V. F. Rocha, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1979.

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Hydraulic Performance of Open Channel Breaching, Juan A. González and Ben Chie Yen, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p334-339.

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A Boussinesq Model for Inshore Zone Sediment Transport Using an Energetics Approach, Theofanis V. Karambas, Howard N. Southgate and Christopher Koutitas, (Coastal Dynamics '93, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p841-849.

Breaking Waves in Surfzones, Ke Yu and Ib A. Svendsen, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed., 1996), p329-340.

Comparison of Computed Three-Dimensional Wave-Driven Currents with Measurements, Philippe Péchon and Arnaud Desitter, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p513-520.

Evaluation of Design Wave Impact Pressures, G. Müller and T. J. T. Whittaker, WW Jan./Feb. 96, p55-58.

Experimental Study of the Flow Around a Breakwater, Mathieu Mory and Luc Hamm, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p501-512.

Improving Input Wave Data for Use with Shoreline Change Models, Kevin R. Bodge, Christopher G. Creed and Andrew W. Raichle, WW Sept./Oct. 96, p259-263.

The Modelling of Plunging Breakers by the Introduction of a K-I Turbulence Closure Model, Michele Drago and Luigi Iovenitti, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p317-328.

One-Dimensional Modelling of Individual Breaking Waves, K. M. Wijnberg and L. C. van Rijn, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p341-354.

Study of Surf-Zone Macroturbulence and Mixing Using Delta '93 Field Data, A. Rodriguez, A. Sánchez-Arcilla, J. Gomez and E. Bahia, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p305-

Surf-Zone Modeling, Ib A. Svendsen and Uday Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p13-32.

Velocity Measurements of Post-Breaking Turbulence Gen-erated by Plunging Breakers, Paul A. Quinn, Timothy C. D. Barnes, Simon T. Lloyd, Clive A. Greated and D. Howell Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p293-304.

Vertical Profiles of Longshore Currents and Bed Shear Stress, E. B. Thornton, C. M. C. V. Soares and T. P. Stanton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p449-459.

Vorticity and Eddies in the Surf Zone, D. Howell Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p460-464.

Wave Field in the Efflux of River Water, Akira Mano and Subandono Diposaptono, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p185-196.

Wave Run-Up: Recent IBW PAN Investigations, Jerzy Kolodko, Jaroslaw Kapiński, Marek Szmytkiewicz and Ryszard B. Zeidler, (*Coastal Dynamics* '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p197-208.

Wave Stress and Longshore Current on Barred Profiles, T. C. Lippmann, E. B. Thornton and A. J. H. M. Reniers, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p401-412.

Waves on a 1:100 Slope: Experiments and Numerical Models, G. Liberatore, M. Petti, M. Drago and M. Sclavo, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p355-365.

Breakwaters

The 'Dynamics of Beaches' Project, P. Prinos, A. S. Arcilla, N. Christiansen, J. van de Graaf, M. Hogedal, A. Lewis, B. O'Connor, F. Rivero and J. de Rouck, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582.

Comparison of Computed Three-Dimensional Wave-Driven Currents with Measurements, Philippe Péchon and Arnaud Desitter, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p513-520.

Contributions to the Momentum Balance in the Surf Zone, Marien Boers and Jan van de Graaff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p257-268.

Evaluation and Validation of the Mild Slope Evolution Equation Model Using Field Data, Suzana Ilić and Andrew Chadwick, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p149-160.

Experimental Study of the Flow Around a Breakwater, Mathieu Mory and Luc Hamm, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p501-512.

Managing the Impacts of Storm Surges on Victoria Island, Lagos, Nigeria, Peter Chigozie Nwilo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3496.

Multiple-Pit Breakwaters, William G. McDougal, A. Neil Williams and Keizo Furukawa, WW Jan/Feb. 96, p27-

Sediment Transport Fluxes as Determined from Wave Breaker Induced Suspended Sediment and Flow Fields, G. Smith, G. Mocke and L. Engelbrecht, (Coastal Dy-namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p783-794.

Slowly-varying Components of Hydrodynamic Field at the Wall of Breakwater of Gdańsk North Port, Piotr Wilde and Eugeniusz Sobierajski, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996).

Wave Forces on an Array of Vertical Cylinders, Shohachi Kakuno, Yoshihiro Nakata and Philip L.-F. Liu, WW May/June 96, p147-149.

Wave Overtopping and Pressure Dependent on Crest Eleva-tion, Tsutomu Sakakiyama, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p209-220.

Dynamic Behaviour of Masonry Church Bell Towers, Alan R. Selby and John M. Wilson, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p188-199.

Dynamic Response of Hagia Sophia, A. S. Cakmak, C. L. Mullen and M. N. Natsis, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p200-210.

Lateral Strength of Brick Cladded Frames, Stephen P. Schneider and Stephen J. Favieri, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p112-122.

A Finite Element Damage Model for the Evaluation and Rehabilitation of Brick Masonry Shear Walls, Luigi Gambarotta and Sergio Lagomarsino, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p72-81.

Innovative Development of Prestressed Masonry, G. Shaw, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

p13-24.

Masonry Designers' Guide - A Comprehensive Design Tool, John H. Matthys, (Worldwide Advances in Struc-tural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p322-333.

Prestress Loss Due to Creep in Post-Tensioned Clay Ma-sonry, Subhash C. Anand and Naresh Bhatia, (World-wide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p49-60.

Testing of Prestressed Clay-Brick Walls, Gary L. Krause, Ravi Devalapura and Maher K. Tadros, (Worldwide Ad-vances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p37-48.

Clay Brick Masonry Weight Variation, Clayford T. Grimm, AE Dec. 96, p135-137.

Premature Deterioration of Concrete Structures-Study, Ishtiaque Ahmed and M. Zakaria Ahmed, CF

Nov. 96, p164-170.

Technology for Mining of Building Materials at First Stages of Moon Development, Oleg V. Nagovicin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p830-839.

Bridge abutments

Bridge Abutment Scour in Floodplain with Backwater, Terry W. Sturm and Aftab Sadiq. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p921-930.

Capacity and Stiffness of Bridge Abutments During Earth-quakes, Rakesh K. Goel, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p239-240.

Channel Scour Protection at Roadway Crossings, Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3278-3285.

Design of Guide Banks for Bridge Abutment Protection, P. F. Lagasse, E. V. Richardson and L. W. Zevenbergen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Earthquake-Induced Ground Settlements of Bridge Abut-ment Fills, Raj V. Siddharthan and Mahmoud El-Gamal, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p100-123.

Effects of Earthquakes on Highway Bridge Abutments, M. Zoghi, J. M. Hastings and D. W. Fenza, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p193-194.

Instrumentation for Field Measurement of Abutment Scour, J. D. Schall, G. R. Price and G. A. Fisher, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p931-939.

Numerical Simulation of Bridge Abutment Scour Development, Xibing Dou, Yafei Jia and Sam S. Y. Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3716-3721.

Seismic Analysis and Model Studies of Bridge Abutments, K. L. Fishman and R. Richards, Jr., (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p77-99.

Threshold Accelerations for Rotation or Sliding of Bridge Abutments, Rowland Richards, Jr., Kenneth L. Fishman and Randall C. Divito, GT Sept. 96, p752-759.

Bridge construction

Alaska Students Triumph in 1996 Steel Bridge Finals, CE Aug. 96, p64.

Analytical and Measured Strains in Sunshine Skyway Bridge. II, Mohsen A. Shahawy and M. Arockiasamy, BE May 96, p87-97.

Balancing on the Tides, Boris Levintov, P.E. and Joseph Klein, P.E., CE Oct. 96, p48-51.

Bridge Over the River Karnali, George Gesner and Selva Selvaratnam, CE Apr. 96, p48-51.

Bridges of the 21st Century with High Performance Steel, Wagdy G. Wassef, John M. Kulicki and Philip A. Ritchie, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p116-124. Cellular Confinement System Helps Hold Slope, CE Dec.

Design and Construction Balances for Bascule Bridges, Andrew W. Herrmann and Nicholas J. Altebrando, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p9-15.

A Method to Study Suspended Sediment Induced Flow Characteristics Changes, D. Zhou and C. Mendoza, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1447-1452.

Numerical Simulation of 1993 Southwest Hokkaido Earthuake Tsunami around Okushiri Island, Shinji Sato, WW ept./Oct. 96, p209-215.

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Vertically Averaged and Moment Equations Model for Flow over Curved Beds, Abdul A. Khan and Peter M.

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Practical Advanced Analysis for Braced Steel Frame De-sign, Seung-Eock Kim and Wai-Fah Chen, ST Nov. 96, p1266-1274.

Seismic Analysis and Retrofit Design of the Anheuser-Busch Bevo Building in St. Louis, Missouri, Nathan C. Gould and Christopher I. Deneff, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p381-388.

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Brant, Austin E., Jr. (Fellow, ASCE)

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Flood Control in the Brazilian Electric System Reservoirs at Parana River Basin, A. L. Lopes and V. F. Rocha, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1979.

Hydraulic Performance of Open Channel Breaching, Juan A. González and Ben Chie Yen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p334-339.

Breaking waves

A Boussinesq Model for Inshore Zone Sediment Transport Using an Energetics Approach, Theofanis V. Karambas, Howard N. Southgate and Christopher Koutitas, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p841-849.

Breaking Waves in Surfzones, Ke Yu and Ib A. Svendsen, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed., 1996), p329-340.

Comparison of Computed Three-Dimensional Wave-Driven Currents with Measurements, Philippe Péchon and Arnaud Desitter, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p513-520.

Evaluation of Design Wave Impact Pressures, G. Müller and T. J. T. Whittaker, WW Jan./Feb. 96, p55-58.

Experimental Study of the Flow Around a Breakwater, Mathieu Mory and Luc Hamm, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p501-512

Improving Input Wave Data for Use with Shoreline Change Models, Kevin R. Bodge, Christopher G. Creed and Andrew W. Raichle, WW Sept./Oct. 96, p259-263.

The Modelling of Plunging Breakers by the Introduction of a K-I Turbulence Closure Model, Michele Drago and Luigi Iovenitti, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p317-328.

One-Dimensional Modelling of Individual Breaking Waves, K. M. Wijnberg and L. C. van Rijn, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p341-354.

Study of Surf-Zone Macroturbulence and Mixing Using Delta '93 Field Data, A. Rodriguez, A. Sánchez-Arcilla, J. Gomez and E. Bahia, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p305-

Surf-Zone Modeling, Ib A. Svendsen and Uday Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p13-32.

Velocity Measurements of Post-Breaking Turbulence Gen-erated by Plunging Breakers, Paul A. Quinn, Timothy C. D. Barnes, Simon T. Lloyd, Clive A. Greated and D. Howell Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p293-304.

Vertical Profiles of Longshore Currents and Bed Shear Stress, E. B. Thornton, C. M. C. V. Soares and T. P. Stanton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p449-459.

Vorticity and Eddies in the Surf Zone, D. Howell Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p460-464.

Wave Field in the Efflux of River Water, Akira Mano and Subandono Diposaptono, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p185-196.

Wave Run-Up: Recent IBW PAN Investigations, Jerzy Ko-lodko, Jaroslaw Kapiński, Marek Szmytkiewicz and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p197-208.

Wave Stress and Longshore Current on Barred Profiles, T. C. Lippmann, E. B. Thornton and A. J. H. M. Reniers, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p401-412.

Waves on a 1:100 Slope: Experiments and Numerical Models, G. Liberatore, M. Petti, M. Drago and M. Sclavo, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p355-365.

Breakwaters

The 'Dynamics of Beaches' Project, P. Prinos, A. S. Arcilla, N. Christiansen, J. van de Graaf, M. Hogedal, A. Lewis, B. O'Connor, F. Rivero and J. de Rouck, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582.

Comparison of Computed Three-Dimensional Wave-Driven Currents with Measurements, Philippe Péchon and Arnaud Desitter, (*Coastal Dynamics* '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p513-520.

Contributions to the Momentum Balance in the Surf Zone. Marien Boers and Jan van de Graaff, (Coustal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p257-268.

Evaluation and Validation of the Mild Slope Evolution Equation Model Using Field Data, Suzana Ilić and Andrew Chadwick, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p149-160.

Experimental Study of the Flow Around a Breakwater, Mathieu Mory and Luc Hamm, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p501-512.

Managing the Impacts of Storm Surges on Victoria Island, Lagos, Nigeria, Peter Chigozie Nwilo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3496.

Multiple-Pit Breakwaters, William G. McDougal, A. Neil Williams and Keizo Furukawa, WW Jan./Feb. 96, p27-

Sediment Transport Fluxes as Determined from Wave Breaker Induced Suspended Sediment and Flow Fields, G. Smith, G. Mocke and L. Engelbrecht, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p783-794.

Slowly-varying Components of Hydrodynamic Field at the Wall of Breakwater of Gdańsk North Port, Piotr Wilde and Eugeniusz Sobierajski, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

Wave Forces on an Array of Vertical Cylinders, Shohachi Kakuno, Yoshihiro Nakata and Philip L.-F. Liu, WW

May/June 96, p147-149.

Wave Overtopping and Pressure Dependent on Crest Eleva-tion, Tsutomu Sakakiyama, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p209-220.

Dynamic Behaviour of Masonry Church Bell Towers, Alan R. Selby and John M. Wilson, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p188-199.

Dynamic Response of Hagia Sophia, A. S. Cakmak, C. L. Mullen and M. N. Natsis, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p200-210.

Lateral Strength of Brick Cladded Frames, Stephen P. Schneider and Stephen J. Favieri, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p112-122.

A Finite Element Damage Model for the Evaluation and Rehabilitation of Brick Masonry Shear Walls, Luigi Gambarotta and Sergio Lagomarsino, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p72-81.

Innovative Development of Prestressed Masonry, G. Shaw, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p13-24.

Masonry Designers' Guide - A Comprehensive Design Tool, John H. Matthys, (Worldwide Advances in Struc-tural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), 9322-333.

Prestress Loss Due to Creep in Post-Tensioned Clay Ma-sonry, Subhash C. Anand and Naresh Bhatia, (World-wide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p49-60.

Testing of Prestressed Clay-Brick Walls, Gary L. Krause, Ravi Devalapura and Maher K. Tadros, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p37-48.

Clay Brick Masonry Weight Variation, Clayford T. Grimm, AE Dec. 96, p135-137.

Premature Deterioration of Concrete Structures-Case Study, Ishtiaque Ahmed and M. Zakaria Ahmed, CF Nov. 96, p164-170.

Technology for Mining of Building Materials at First Stages of Moon Development, Oleg V. Nagovicin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p830-839.

Bridge abutments

Bridge Abutment Scour in Floodplain with Backwater, Terry W. Sturm and Aftab Sadiq. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p921-930.

Capacity and Stiffness of Bridge Abutments During Earth-quakes, Rakesh K. Goel, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p239-240.

Channel Scour Protection at Roadway Crossings, Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3278-3285.

Design of Guide Banks for Bridge Abutment Protection, P. F. Lagasse, E. V. Richardson and L. W. Zevenbergen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Earthquake-Induced Ground Settlements of Bridge Abut-ment Fills, Raj V. Siddharthan and Mahmoud El-Gamal, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p100-123.

Effects of Earthquakes on Highway Bridge Abutments, M. Zoghi, J. M. Hastings and D. W. Fenza. (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p193-194.

Instrumentation for Field Measurement of Abutment Scour, Strumentation for Field Measurement of Abutment Scour, J. D. Schall, G. R. Price and G. A. Fisher, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p931-939.

Numerical Simulation of Bridge Abutment Scour Develop-ment, Xibing Dou, Yafei Jia and Sam S. Y. Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3716-3721.

Seismic Analysis and Model Studies of Bridge Abutments, K. L. Fishman and R. Richards, Jr., (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p77-99.

Threshold Accelerations for Rotation or Sliding of Bridge Abutments, Rowland Richards, Jr., Kenneth L. Fishman and Randall C. Divito, GT Sept. 96, p752-759.

Bridge construction

Alaska Students Triumph in 1996 Steel Bridge Finals, CE Aug. 96, p64.

Analytical and Measured Strains in Sunshine Skyway Bridge. II, Mohsen A. Shahawy and M. Arockiasamy, BE May 96, p87-97.

Balancing on the Tides, Boris Levintov, P.E. and Joseph Klein, P.E., CE Oct. 96, p48-51.

Bridge Over the River Karnali, George Gesner and Selva Selvaratnam, CE Apr. 96, p48-51

Servannam, C. Jan. 30, 1907

Bridges of the 21st Century with High Performance Steel, Wagdy G. Wassef, John M. Kulicki and Philip A. Wagdy G. Wassef, John M. Kulicki and Philip A. International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p116-124.

Cellular Confinement System Helps Hold Slope, CE Dec.

Design and Construction Balances for Bascule Bridges, Sagar and Consulction Balances for Bascule Bridges, Andrew W. Herrmann and Nicholas J. Altebrando, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p9-15.

Development of High Performance Steels for Commercial and Military Applications, Eric M. Focht and Thomas W. Montemarano, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p91-99.
Engineers of Dreams Is Well Worth the Read as Petroski Zeroes in on Bridges, Augustine J. Fredrich, NE Nov. 96, p15

Evaluating Innovative Concrete Technologies through the HITEC Process: the JMI Channel Bridge, Kathleen H. Almand, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p161-166.

Field Instrumentation to Study the Time-Dependent Behavior in Sunshine Skyway Bridge. I, Mohsen A. Shahawy and M. Arockiasamy, BE May 96, p76-86.

Field Performance of Stress-Laminated T and Box Beam Bridges, Barry Dickson and Hota GangaRao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi. ed., 1996). p253-259

Geotextiles Cut Costs for Temporary Retaining Wall, CE July 96, p84.

A.L. Waddell and the Diffusion of Civil Engineering Techniques, George F. W. Hauck and Louis W. Potts, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p53-65.

Nonstructural Evaluation of Competing Bridge Materials, Robert L. Smith and Robert J. Bush, MT May 96, p88-

Orthotropic Steel Decks Are Viable Bridge Option, CE Nov. 96, p19-20.

Practical Formulas for Estimation of Cable Tension by Vi-bration Method, Hiroshi Zui, Tohru Shinke and Yoshio Namita, ST June 96, p651-656.

Precasting Long Spans for the Northumberland Strait Crossing, Gerard Sauvageot and Joe Showers, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p141-146.

So Mrs. Roebling—What's Your Side of the Story—About the Brooklyn Bridge? Patricia D. Galloway, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p23-24.

Terrestrial Applications of a Composite Lattice Space Structure, Arup K. Maji, Keith Donnelly and Michelle Salas, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1122-1126.

Virtual Reality Modeling for Bridge Construction, Tsung-chieh Tsay, Fabian C. Hadipriono and Richard E. Larew, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p63-69.

Aluminum Has History, Kurt P. Thompson, CE Sept. 96,

Behavior of RC Bridge Decks with Flexible Girders, L. Cao, J. H. Allen, P. B. Shing and D. Woodham, ST Jan.

96, pl1-19.

Bridge Deck Performance and Rehabilitation: A Reliability-Based Analysis, Paul D. DeStefano and Dimitri A. Grivas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1072-1081.

Construction Applications of Polyolefin Fiber Reinforced Concrete, D. Strand, C. N. MacDonald, V. Ramakrish-nan and V. N. Rajpathak, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p103-112.
Construction Forum, SC Aug. 96, p69-70.

Damage Mechanics Model for Evaluation of Bridge Deterioration, Roberto Lopez-Anido, Hota V. S. GangaRao and Raimondo Luciano, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p458-461

Data and Data Interpretation in Bridge Management Systems, George Hearn, Dan M. Frangopol, Tianna Szanyi and Steven Marshall, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p245-252.

Detection of Cracks in Concrete Using the Impact Responses, H. L. (Roger) Chen and Lianfeng Pei, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p620-623.

Evaluation of Bridge Decks and Pavements at Highway Speed using Ground Penetrating Radar, Kenneth R. Maser, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p820-828.

First Post Tensioned Deck Bridge with Composite Cables, Srinivasa L. Iyer and Gopi Sripathy, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p375-385.

First Smart Bridge Tested, CE June 96, p18.

First Smart Bridge Tested, ET Apr./May 96, p1,6.

Florida DOT Applies Gravity Sealer to Seaway Bridges, CE Sept. 96, p96.

Full-Scale Fatigue Test of the Williamsburg Bridge Ortho-tropic Deck, Mark R. Kaczinski, Frank E. Stokes, Peter Lugger and John W. Fisher, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p329-336.

Ground Penetrating Radar for Infrastructure Condition Assessment and Geophysical Applications: A Review, Udaya B. Halabe, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p812-819.

High Performance Highway Bridge Substructures, Robert W. Barnes and John E. Breen, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p176-187.

Longest Suspension Bridge Overhauled, CE Feb. 96, p19-

More Aluminum Than You Know, John J. Ahlskog, CE May 96, p27-28.

New Aluminum Decks Cut Loads, Add Life, CE Aug. 96. p12.

Nonlinear Pounding of Bridges in Earthquakes, Xian Ma and Chris P. Pantelides, (Building an International Con munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1180-1187.

Orthotropic Steel Deck for the Williamsburg Bridge Reconstruction, R. B. Gajer, J. Patel and D. Khazem, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p491-498

Permanent Deformation and Fatigue Characteristics of SMA Mixtures, Louay N. Mohammad and Harold R. Paul, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p622-630.

Probabilistic Durability Analysis of Reinforced Concrete Bridge Decks, Paul C. Hoffman and Richard E. Weyers, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p290-293

Punching Shear Failure in Concrete Decks Through Instability, Michael F. Petrou and Philip C. Per-dikaris, ST Sept. 96, p998-1005.

Punching Strength of Deck Slabs in Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE May 96, p59-66.

A Review of Dynamic Behavior of Sector Plates and Curved Bridge Decks, H. R. Molaghasemi and I. E. Harik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p993-996.

Rita Robison, An Engineering Writer for CE, Dies at 70, CE Oct. 96, p76,78.

Service Load Test of 1:3 Scale Shell Bridge Model, F. S. Fanous, F. W. Klaiber and W. G. Wassef, ST Feb. 96, p210-216.

Static Behavior of Noncomposite Concrete Bridge Decks under Concentrated Loads, Michael F. Petrou, Philip C. Perdikaris and Mingzhu Duan, BE Nov. 96, p143-154.

Structural Strength of Bridge Decks Reinforced with Welded Wire Fabric, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Sept. 96, p989-997.

Tappan Zee Set for Inverset (Available only in Structures special issue), Harry Goldstein, CE Sept. 96, p12A-13A.

Vibration Analysis of Special Orthotropic Plate with Varianormann analysis of Special Orthotropic Plate with Varia-ble Cross-Section, and with a Pair of Opposite Edges Simple Supported and the Other Pair of Opposite Edges Free, Duk Hyun Kim, Keyong Jin Kim and Do Sik Sim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1408-1417.

Bridge design

Alaska Students Triumph in 1996 Steel Bridge Finals, CE

Aug. 96, p64.

Alternate Load Factor (Autostress) Design for Short to Me-dium Span Continuous Steel Bridges, C. C. Fu, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p298-306.

Assault Bridge Tested, CE Oct. 96, p24,26.

Barge Collision Design of Highway Bridges, M. W. Whit-ney, I. E. Harik, J. J. Griffin and D. L. Allen, BE May 96, p47-58.

Barriers to the Use of High Performance Steel in 1-Girder Highway Bridges, Richard Sause, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p108-115.

BDS Implementation of AASHTO LRFD Design Philoso-phy, Toorak Zokaie, Richard Pickings and Karim Vali-

pny, 100rak Zokaie, Richard Pickings and Karim Valimohamed, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p453-463.
Bridge Design by the AASHTO LRFD Bridge Design Specifications, Dennis R. Mertz and John M. Kulicki, Guilding an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 10063-11. 1996), p1-8.

Bridge Over the River Karnali, George Gesner and Selva

Selvaratnam, CE Apr. 96, p48-51.

Bridges of the 21st Century with High Performance Steel, Wagdy G. Wassef, John M. Kulicki and Philip A. Ritchie, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p116-124.

Cape Girardeau Bridge Over the Mississippi River, Steven T. Hague, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

Mohammadi, ed., 1996), p952-959.

A Copied Design? Patrick J. Murray, CE Nov. 96, p32. A Copied Design's Patrick J. Murray, CE Nov. 96, p32. Cross-Frame Diaphragms for Steel Girder Bridges Using the AASHTO LRFD Bridge Design Specifications, Dennis R. Mertz, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p307-312.
Delaware Authority Puts Money on Composite Bridges, CE Oct. 96, p16-17

Oct. 96, p16-17.

congn and Construction Balances for Bascule Bridges, Andrew W. Herrmann and Nicholas J. Altebrando, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p9-15. Design and Construction Balances for Bascule Bridges,

Design Considerations for Post-Tensioned Integral Pier Caps, Sami W. Tabsh, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p444-451.

Design of a Floodplain Road Crossing Using Two Dimensional Modeling, Nathan R. South, Andrzej J. Kosicki and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4300-4305.

Designed by Jury, Frederick Gottemoeller, CE Oct. 96,

Development of High Performance Steels for Commercial and Military Applications, Eric M. Focht and Thomas W. Montemarano, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p91-99.

Economic Preliminary Design of Bridges with Prestressed I-Girders, Sami M. Fereig, BE Feb. 96, p18-25. Editorial, Dennis Mertz, BE Feb. 96, p1.

Effect of Sidewalks and Railings on Wheel Load Distribu-tion in Steel Girder Bridges, K. M. Tarhini, M. Mabsout and M. Kobrosly, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p881-886. Engineers of Dreams Is Well Worth the Read as Petroski Zeroes in on Bridges, Augustine J. Fredrich, NE Nov. 96,

p15.

valuating Innovative Concrete Technologies through the HITEC Process: the JMI Channel Bridge, Kathleen H. Almand, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p161-166.

Fiber-Reinforced Bridges Studied, CE May 96, p8.

Fried-Reinforced Bridges Studied, CE May 96, ps. Implementation of Structural Redundancy in Bridge Design
— A Probabilistic Approach, Robert W. Kritzler and Jamshid Mohammadi, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p682-687. Innovative N.Y. Bridges Add Highway Clearance, CE July

96, p19-20.

Jointless Steel Bridges Design and Retrofit, Robert L. Nickerson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p313-320.

Measurements of Bridge-Scour Depths in Mississippi, K. Van Wilson, Jr., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3023-3032.

Mechanism of Bluff Body Aerodynamics and Its Stabilization, Masaru Matsumoto and Fumitaka Yoshizumi, (Probabilistic Mechanics & Structural Reliability, Dan Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p74-77.

Minnesota Featured State at Bridge Conference, CE Aug. 96, p16.

Optimization of Composite Highway Bridge Systems, M. Z. Cohn and J. J. Werner, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p135-146.

Parameters in Bridge Restrainer Design for Seismic Re-trofit, M. Saiidi, E. Maragakis and S. Feng, ST Jan. 96, p61-68.

Percy Michener, Engineer of Chesapeake Bridges, Dies at 92, NE Apr. 96, p7. Precasting Long Spans for the Northumberland Strait Crossing, Gerard Sauvageot and Joe Showers, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p141-146.

Recent Innovation for Concrete Highway Bridges, S. H. Rizkalla and A. A. Mufti, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p1063-1071.

nium, Ken P. Chong, etc., 1970), proco-1077. Redundancy of Prestressed Concrete I-Beam Bridges, Michel Ghosn and Fred Moses, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p688-695.

The Response of Long Span Bridges to Wind Action, Robert L. Wardlaw, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p66-69.

Sacramento River Pedestrian Bridge, Charles Redfield and Jiri Strasky, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p153-160.

San Francisco Bay's Jeweled Necklace (Available only in Focus on Structures Special Edition), Charles Seim, CE Jan. 96, p14A-16A.

Scour Study for Bridge Design on Temecula Creek, How-ard H. Chang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1162-1166.

ed., 1996), p. 102-1100. Shakedown Tests of One-Third-Scale Composite Bridge, M. G. Barker, P. M. Bergson, C. E. French, R. T. Leon, T. V. Galambos and F. W. Klaiber, BE Feb. 96, p.2-9. Singapore Showcase, T. Y. Lin and Tan See Chee, P.E., CE

Nov. 96, p61-63.

Stress Limits in Prestressed Concrete Bridge Girders, Hassan H., El-Hor and Andrzej S. Nowak, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p460-467

Target Safety Level for Bridges, Andrzej S. Nowak and Vijay K. Saraf, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p696-703. Terrestrial Applications of a Composite Lattice Space Structure, Arup K. Maji, Keith Donnelly and Michelle Salas, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1122-1126. Timber Trestle Stars at Costner-Owned Resort, CE Mar.

Ultimate Behavior of Tie Plates at High-Speed Tension, Makoto Obata, Yoshiaki Goto, Sei Matsuura and Hideyuki Fujiwara, ST Apr. 96, p416-422.

Bridge failure

Editor's Note, Kenneth L. Carper, CF Nov. 96, p141-142.
Effects of Earthquakes on Highway Bridge Abutments, M.
Zoghi, J. M. Hastings and D. W. Fenza, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p193-194.

Chung, ed., 1997), p193-194.
Geographic Information Systems for Emergency Response
Management of Transportation Systems, Anne Kiremidjian, Nesrin Basoz, Kincho Law and Stephanie King,
(Natural Disaster Reduction, George W. Housner, ed.
and Riley M. Chung, ed., 1997), p355-356.
Historical Development of Bridge Scour Evaluations, E. V.
Richardson, (North American Water and Environment
Compares & Destructive Water, Cheschouse, Bathala. Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3-27.
The Maryland Bridge Scour Program, Stanley R. Davis and David D. Dee, Jr., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p469-478. Stone Bridge Safety Assessed, CE May 96, p23.

Use of Geomorphic Data for Assessing Stream Stability at Bridge Structures, Jonathan Fuller and Steven R. Waiker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3294-3299

p3299-3299.

Bridge foundations

Applicability of Scour Equations in Tidal Areas, J. R. Richardson, E. V. Richardson and B. L. Edge, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1980-1989.

Arizona Local Government Bridge Scour Evaluation Study, Bart S. Bergendahl and Raymond C. Jordan, (North American) Water and Environment Congress & Destruc-

American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p479-488.
Contraction Scour at Bridges Founded on Clay Soils, W. R. Ivarson, F. Qadir and M. Phelps, (North American Water

and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1358-1366.

Effects of Rectangular Foundation Geometry on Local Pier Scour, A. C. Parola, S. K. Mahavadi, B. M. Brown and A. El Khoury, HY Jan. 96, p35-40.

Historical Development of Bridge Scour Evaluations, E. V. Richardson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3-27.

Maryland SHA's Procedure for Assessing Existing Bridges for Scour Vulnerability and for Rating Unknown Foundations, Leonard N. Podell, Stanley R. Davis and Dan Sajedi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2766-2774.

Bridge inspection

Application of Neural Networks for the Performance Evaluation of Bridges, Augusto V. Molina and Karen C. Chou, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 10061-2008 201 1996), p298-301.

1996), p298-301.
Assessment of Damage Identification Algorithms on Experimental and Numerical Bridge Data, David V. Jauregui and Charles R. Farrar, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p892-899.
Bridge Monitoring Using An Optical Fibers Sensor System, R. L. Idriss and M. B. Kodindouma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p238-244.

Computation of Structural Flexibility for Bridge Health Monitoring Using Ambient Modal Data, Scott W. Doe-bling and Charles R. Farrar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1114-1117.

Contraction Scour at Bridges Founded on Clay Soils, W. R. Ivarson, F. Qadir and M. Phelps, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1358-1366.

The Cost of Highway Bridge Scour in the State of Minne-sota, W. Robert Ivarson, Mark Gieseke and Dave Hal-vorson, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p3500-3508.

1996), p.5300-3308.
Data and Data Interpretation in Bridge Management Systems, George Hearn, Dan M. Frangopol, Tianna Szanyi and Steven Marshall, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p.245-252.

Detecting Damage in Highway Bridges from Vehicle Induced Girder Strains, Leon L-Y Lai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1122-1125.

Determining Bridge Inspection Requirements for Fatigue Damage Using Reliability, Theodore Hopwood, II, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p454-457. Editorial, Dennis Mertz, BE Feb. 96, p1.

Fatigue Lifetime Prediction of Steel Bridge Details, Peter J. Massarelli and Thomas T. Baber, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p450-453.
Field Evaluation of a Wireless Global Bridge Evaluation and Monitorine Sustein (WCIELEMS).

and Monitoring System (WGBEMS), Kenneth Maser, Robert Egri, Abba Lichtenstein and Steven Chase, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

ps35-328.

Inspection of Fatigue Sensitive Bridge Members, Richard A. Walther and Michael J. Koob, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p321-328.

Ed. and Jamishu Mohamman, ed., 1970), p321-328. Intelligent Bridge Monitoring System, Pei-Ling Liu, Yun-Fu Luo and Shyh-Jang Sun, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1966), p608-611.

Issues Related to Intelligent Bridge Monitoring, A. Emin Aktan, Arthur J. Helmicki and Victor J. Hunt, (Building an International Community of Streeting). an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p750-757

Maryland SHA's Procedure for Assessing Existing Bridges for Scour Vulnerability and for Rating Unknown Foundations, Leonard N. Podell, Stanley R. Davis and Dan Sajedi, (North American Water and Environment Congress & Destruction 1996), p2766-2774. ess & Destructive Water, Chenchayya Bathala, ed.,

Measurement of Applied Stress in Steel Bridges, E. A. Mandracchia, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1118-1121.

Perfecting Bridge Inspecting, Albert Leung, CE Mar. 96, p59-61

Potential-Scour Assessments at 130 Bridges in Iowa, Edward E. Fischer, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), pl 149-1155.

Reliability Concept and Application in Bridge Management System, Zongwei Tao and Brian J. Stearman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p442-445.

Safety Analysis of Suspension-Bridge Cables: Williams-burg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211. South Korea Stabilizes Commuter Bridge, CE Apr. 96,

Structural Sensing with Fiber Optic Systems, Raymond M. Measures, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p224-227.

Su, 1990), p.224-227.
A Summary of Research and Development Projects in Non-destructive Evaluation Technologies for Bridges, Steven B. Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p.230-237.
Tening for Bridge Investors, in Stream Stability, and

Training for Bridge Inspectors in Stream Stability and Scour, P. F. Lagasse and E. V. Richardson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p499-505.

Bridge loads

Assault Bridge Tested, CE Oct. 96, p24,26.

BDS Implementation of AASHTO LRFD Design Philoso-phy, Toorak Zokaie, Richard Pickings and Karim Valimohamed, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p453-463.

Ringe Live Load Model Including Overloads, Gongkang Fu and Osman Hag-Elsafi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p34-37.

cea D. Grigoriu, ed., 1990, p.34-37. Fatigue Lifetime Prediction of Steel Bridge Details, Peter J. Massarelli and Thomas T. Baber, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and

Mircea D. Grigoriu, ed., 1996), p450-453.

Proof Load Testing of Bridges, Vijay K. Saraf, Andrzej S. Nowak and Roger Till, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p526-529.

Railway Bridge Loads Under Current Operating Conditions, Daniel H. Tobias, Douglas A. Foutch and John Choros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p215-222.

Site-Specific Live Load Models for Bridge Evaluation, Michel Ghosn and Dan M. Frangopol, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p30-33.

Traffic Action Effect Reduction Factors, Simon F. Bailey and Rolf Bez, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p22-25.

Traffic Load Effects on Highway Bridges, Sang Hyo Kim and Sang Ho Lee, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-

goriu, ed., 1996), p38-41.

Verification of Site-Specific Live Load on Bridges, Sangjin Kim, Andrzej S. Nowak and Roger Till, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p214-217.

Bridge maintenance

Are Bridge Conditions Improving Under Bridge Manage-ment: A Panel Discussion, Bojidar S. Yanev, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

Assessment and Implications of Local Channel Instability on the Prediction of Bridge Scour, Thomas M. Heil and Peggy A. Johnson, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3286-3293.

Evaluation of Bridge Strengthening Measures Using Forced Vibration Tests, Kosal Krishnan, Frieder Seible and Gerald Pardoen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p845-852.

Graphic-Based Interactive Path Planning for Large-Scale Bridge Maintenance Cranes, Sungwoo Moon and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p79-85.

The Maryland Bridge Scour Program, Stanley R. Davis and David D. Dee, Jr., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p469-478.

Reliability Concept and Application in Bridge Management System, Zongwei Tao and Brian J. Stearman, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p442-445.

Reliability Based Optimum Bridge Repair Strategy, Allen C. Estes, Dan M. Frangopol and George Hearn, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p372-375.

The Scour at Bridges Management Program in Rhode Is-land, Edward J. Kent, Jeffrey S. Glenn and Joseph T. Boardman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p489-498. South Korea Stabilizes Commuter Bridge, CE Apr. 96, p16,18.

Tappan Zee Set for Inverset (Available only in Structures

Tappan Zee Set for Inverset (Available only in Structures special issue), Harry Goldstein, CE Sept. 96, p12A-13A.
Vulnerability Assessment within BMS, Edgar P. Small and Steven B. Chase, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p446-449.
Wetland Mitigation Evaluation Ten Years After Florida Keys Bridge Replacement, Roy R. Lewis, III, Curtis R. Kruer, Sally F. Treat and Stephanie M. Morris, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p759-763.
Bridge test.

Assault Bridge Tested, CE Oct. 96, p24,26.

Assault Bridge Tested, CE Oct. 96, p24-26.
Bridge Strength Evaluation Based on Field Tests, Jonathan S. Reid, Michael J. Chajes, Dennis R. Mertz and Geoffrey H. Reichelt, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p294-297.

Development of a Wireless Global Bridge Evaluation and Monitoring System (WGBEMS), Kenneth Maser, Robert Egri, Abba Lichtenstein and Steven Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p734-

Engineers Establish Bridge Safety Site, CE Nov. 96, p8 Evaluation of Reliability of an Existing Concrete Bridge: A Case Study, Andrew Scanlon, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p522-525.

Girder Moments in Continuous Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE Feb. 96, p37-45.

Tarek Ebeido and John B. Kennedy, BE Feb. 96, p37-45.
 Measuring Flutter Derivatives for Bridge Sectional Models in Water Channel, Q. C. Li, EM Jan. 95, p90-101.
 Modal Identification of a Cable-Stayed Bridge, W-H. P. Yen, T. T. Baber and F. W. Barton, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p600-603.
 Proof Load Testing of Bridges, Vijay K. Saraf, Andrzej S. Nowak and Roger Till, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p526-529.
 Seismic Analysis of Concrete Towers of the San Diego-Coronado Bridge and Evaluation of a High Performance

Coronado Bridge and Evaluation of a High Performance Concrete Retrofit, Robert A. Dameron and Daniel R. Parker, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p530-541.

M. G. Barker, P. M. Bergson, C. E. French, R. T. Leon, T. V. Galambos and F. W. Klaiber, BE Feb. 96, p2-9.

Y. Galamous and F. W. Klaiber, Be Pet. 3, per 3. Verification of Site-Specific Live Load on Bridges, Sangjin Kim, Andrzej S. Nowak and Roger Till, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p214-217.

Seismic Analysis of Concrete Towers of the San Diego-Coronado Bridge and Evaluation of a High Performance Concrete Retrofit, Robert A. Dameron and Daniel R. Parker, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p530-541.

Bridges

Acoustic Emission Monitoring of Pultruded Bridge Members, Arup K. Maji, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p963-966. Aluminum Has History, Kurt P. Thompson, CE Sept. 96,

Assault Bridge Tested, CE Oct. 96, p24,26. Assessing Bridge Cracks, ET Mar/Apr. 96, p2.

Benefits of the Santa Ana River Mainstern Project, William Benetits of the Santa Ana River Mainstem Project, William L. Zaun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2176.

Bridge Hydraulic and Scour Analysis Using FESWMS-2DH, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1555-1564.

Cable Corrosion in Bridges and Other Structures, Frank L. Stahl and Christopher Paul Gagnon, 1996, 0-7844-0014-8, 2256n.

225pp.
 Chanel Fashions Stylish Building, CE Sept. 96, p25-26.

Condition Assessment for Bridge Management, A. Emin Aktan, Daniel N. Farhey, David L. Brown, Vikram Dalal, Arthur J. Helmicki, Victor J. Hunt and Stuart J. Shelley, IS Sept. 96, p108-117.

Correction, CE Mar. 96, p31.

Damage Mechanics Model for Evaluation of Bridge Deterioration, Roberto Lopez-Anido, Hota V. S. GangaRao and Raimondo Luciano, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p458-461.

Detailed Measurements of Scour at Bridges, David S. Mueller, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2541-2549.

Determination of Bridge Scour Velocity in an Estuary, Billy L. Edge, Stephan N. Vignet and John S. Fisher, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1720-1729.

Dynamic and Quasi-Static Design of High-Rise Buildings Subjected to Wind Loads, Okey Onyemelukwe and Guillermo Claure, (Natural Disaster Reduction, George W.

Housner, ed. and Riley M. Chung, ed., 1997), p141-142.

Dynamic Response Analysis of Slab-Type Bridges, Jagmohan L. Humar and Ahmed H. Kashif, ST Jan. 95,

p48-62.

Economic Risk Analysis as a Research Directing Paradigm, Ken Young, Stuart Stein, David Pearson and Roy Trent, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996). p2775-2780.

Editor's Note, David Darwin, ST Oct. 96, p1127.

Editorial, Dennis Mertz, BE Feb. 96, pl.

Effect of Ground Condition on Earthquake Damage, Mako-to Nasu, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p233-234.

Energy Dissipation Devices in Bridges using Hydraulic Dampers, E. A. Delis, R. B. Malla, M. Madani and K. J. Thompson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1188-1196.

Engineers of Dreams Is Well Worth the Read as Petroski Zeroes in on Bridges, Augustine J. Fredrich, NE Nov. 96,

p15.

Evaluation of Equivalent Linear Analysis Methods of Bridge Isolation, J. S. Hwang, ST Aug. 96, p972-976.

Evaluation of Selected Instruments for Monitoring Scour at Bridges in New York, Gerard K. Butch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathale, ed., 1996), p4164-4171.

Evaluation of Service Load Behavior of Small Bridges
Using Strain Measurement, Ben T. Yen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p667-

Examples of Structural Identification from Measured Earthquake Response: Buildings, Bridges, and Dams, G. L. Fenves, E. Safak and M. Raghavendrachar, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p659-

First Smart Bridge Tested, CE June 96, p18.

Four ASCE Student Chapters Win Awards for Excellence.

NE Oct. 96, p2.

Grade Control Structures for Pipeline Crossings in the Arid Southwest, Martin J. Teal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p830-835.

Innovative Design/Build Approach: Ambassador Bridge Project, Jay B. Shah, ME July/Aug. 96, p58-61. Innovative N.Y. Bridges Add Highway Clearance, CE July

96, p19-20. Iowa Touts Transportation, CE Nov. 96, p24.

The Maryland Bridge Scour Program, Stanley R. Davis and David D. Dee, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p469-478.

Minnesota Featured State at Bridge Conference, CE Aug. 96, p16.

Mobile Bay Scour Analysis for Mobile and Baldwin Counties, Alabama, Bryan Hancock, Charles D. Powell and Conor Shea, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p719-728.

Morphological Impact Assessment of Artificial Islands for the Øresund Link Between Denmark and Sweden, Kar-sten Mangor, Andrew M. Driscoll, Ida Brøker and Ann Skou, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed., 1996), p939-950. New Aluminum Decks Cut Loads, Add Life, CE Aug. 96.

p12 New High-Performance Concrete in Canadian Foot Bridge,

CE July 96, p11.

New Modeling Method Aims to Better Scout Scour, ET Mar/Apr. 96, p6.

Nonlinear Response of Bridges under Multisupport Excita-tion, Giorgio Monti, Camillo Nuti and Paolo E. Pinto, ST Oct. 96, p1147-1159.

On the Stamp Campaign, Robert B. Johnson, CE Dec. 96, p28-29.

58

Orthotropic Steel Decks Are Viable Bridge Option, CE Nov. 96, p19-20. Particle Dynamics in the Sound Between Denmark and Sweden, Jens R. Valeur, Morten Pejrup and Anders Jensen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p951-962.

Performance of Bridges during the Hanshin-Awaji Earth-quake, Ejichi Watanabe and Kunitomo Sugiura, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p926-933.

Pier Scour at Wide Piers, Peggy A. Johnson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2193-2201.

Preserving Williamsburg's Cables, Maria Grazia Bruschi and Terry L. Koglin, CE Mar. 96, p36-39.

Prestress Force Effect on Vibration Frequency of Concrete Bridges, M. Saiidi, B. Douglas and S. Feng, ST July 94, p2233-2241.

Probabilistic Diagnosis of Seismic Design Load-To Harmonize Seismic Design Codes of Various Engineering Structures, Tsuyoshi Takada, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p190-193.

Research on Semiactive Dampers Makes Headway, Monica Maldonado, ET Aug./Sept. 96, p6-7.

Returning Veteran, Charles A. Baumgartner and William E. Beyer, CE Apr. 96, p68-71. San Francisco Bay's Jeweled Necklace (Available only in

Focus on Structures Special Edition), Charles Seim, CE Jan. 96, p14A-16A. Scary Bridge Rehabbed for Economic Boon, CE Mar. 96,

p12,14

The Scour at Bridges Management Program in Rhode Island, Edward J. Kent, Jeffrey S. Glenn and Joseph T. Boardman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p489-498.

Scour Monitoring at Johns Pass and Nassau Sound, Fiorida, J. D. Schall, G. A. Fisher and G. R. Price, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1990-1998.

Seeking Structural Solutions, Virginia Kent Dorris, CE Nov. 96, p46-49.

Seismic Isolation of Bridges in New York City, Jagtar S. Khinda and Feng-Bao Lin. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p24-32.

Seismic Isolation of Bridges in the Midwest, Mark R. Capron, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p48-55.

Seismic Isolation of Bridges Using Elastomeric Isolation Systems, Ronald L. Mayes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p33-40.

Seismic Isolation of Bridges Using Sliding Isolation Sys-tems, Paul F. Bradford and Ronald J. Watson, (Building an International Community of Structural Engineers, S K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p41-47.

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST

Sept. 94, p2583-2601.

Sewer Crossing of Creek with Bridge Widening, Surendra Anketell, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p275-281.

South Carolina Department of Transportation's Statewide Program of Bridge Scour Evaluation, Randall D. Williamson, Dean D. Hatfield and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p729-735.

State of Delaware - Scour Evaluation Program, Thomas M. Heil, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Structural Design Forum, SC Feb. 96, p3-8.

System for Bridge Management in a Rural Environment, Matthew S. Gralund and Jay A. Puckett, CP Apr. 96,

Thermal Cracking in a Cantilever Bridge made of HSC, C. van der Veen, E. A. B. Koenders and N. Kaptijn, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p892-898.

U.S. Engineers See the Before and After in Kobe a Year

after the Big Earthquake, NE June 96, p8.

Ultrasonic Characterization of FRP Composites for Bridge Applications, Jerrol W. Littles, Jr., Laurence J. Jacobs and Abdul-Hamid Zureick, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p959–962.

Update on Scour Prediction, Robert B. Nairn, P.E., CE

Sept. 96, p36.

Using HEC-RAS to Compute Scour at Bridges, Gary W. Brunner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1565-1574.

Willie B in the Doghouse, CE June 96, p14,16.

Wind-Induced Accidents of Train/Vehicles and their Countermeasures, Tatsuo Maeda, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p70-73.

"Dry Canal" to Link Atlantic and Pacific, CE Dec. 96, p18.

Investigation of Bridge Floor-Truss Behavior in Tied-Arch Span, Thomas E. Cousins, J. Michael Stallings and Bradley P. Christopher, CF May 96, p79-86.

Long-Span, Precast Bridge Saves Time, Money, CE June 96, p10.

Response of Lime Mortar Joint Arches to Moving Loads, Barry T. Rosson, Thomas E. Boothby and Ketil Søyland, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p223-232

Stone Bridge Safety Assessed, CE May 96, p23.

Bridges, bascule

Community Involvement Drives Chicago Viaduct Recon-

struction, CE Apr. 96, p10.

Design and Construction Balances for Bascule Bridges, Andrew W. Herrmann and Nicholas J. Altebrando, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p9-15.

Rebound of the Bascule Bridge, Patrick A. Cassity, P.E., Vinod C. Patel, P.E. and R. Shankar Nair, P.E., CE Aug. 96, p48-50.

Bridges, box girder

Development of Design Factors for Redundant Concrete Bridges, Michel Ghosn, Youhong Hang and Fred Moses, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p716-719

Dynamic Behavior of Continuous and Cantilever Thin-Walled Box Girder Bridges, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, BE May 96, p67-75.

Field Performance of Stress-Laminated T and Box Beam Bridges, Barry Dickson and Hota GangaRao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p253-259.

Precasting Long Spans for the Northumberland Strait Crossing, Gerard Sauvageot and Joe Showers, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p141-146

Roosevelt Bridge Spans Florida River, CE Jan. 96, p10. Vibration of Thin-Walled Box-Girder Bridges Excited by Vehicles, Dongzhou Huang, Ton-Lo Wang and Mohsen Shahawy, ST Sept. 95, p1330-1337.

Bridges, cable-stayed

Alluring Approach, James D. Lockwood, P.E. and John R. Hillman, P.E., CE Nov. 96, p68-71. Bridge Over the River Karnali, George Gesner and Selva

Selvaratnam, CE Apr. 96, p48-51

Cable-Stayed Bridge Concept for Longer Spans, Uwe Starossek, BE Aug. 96, p99-103.

Cape Girardeau Bridge Over the Mississippi River, Steven Cape Girardeau Bridge Over the Mississippi River, Steven
T. Hague, (Building an International Community of
Structural Engineers, S. K. Ghosh, ed. and Jamshid
Mohammadi, ed., 1996), p952-2959.
Coupled Flutter and Buffeting Analysis of Long-Span
Bridges, Anurag Jain, Nicholas P. Jones and Robert H.
Scanlan, ST July 96, p716-725.

Dynamic Duo, John Prendergast, CE July 96, p40-43. Modal Identification of a Cable-Stayed Bridge, W-H. P. Yen, T. T. Baber and F. W. Barton, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p600-603.

Oscillations of Bridge Stay Cables Induced by Periodic Motions of Deck and/or Towers, A. Pinto da Costa, J. A. C. Martins, F. Branco and J. L. Lilien, EM July 96,

p613-622.

Permanent Deformation and Fatigue Characteristics of SMA Mixtures, Louav N. Mohammad and Harold R. Paul, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p622-630.

Sacramento River Pedestrian Bridge, Charles Redfield and Jiri Strasky, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

Mohammadi, ed., 1996), p153-160.

Some Computational Issues in the Control of Distributed Systems, Weiming Xu, Sami F. Masri and Bingen Yang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p747-750.

Ted Williams Tunnel Gets OCEA Plaque at Boston Ceremony, NE Aug. 96, p14.
Tunnel Tops Record Field of 22 to Claim This Year's Out

standing Civil Engineering Achievement Award, NE May 96, p16.

Vibration Control of Cable-Stayed Bridges: Analytical Development, Armin G. Schemmann and H. Allison Smith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p898-901.

Vibration Control of Cable-Stayed Bridges: Control System Development and Experimental Results, Rahmat A. Shoureshi and Mark J. Bell, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p902-905.

Bridges, cantilever

Thermal Cracking in a Cantilever Bridge made of HSC, C. van der Veen, E. A. B. Koenders and N. Kaptijn, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p892-898.

Bridges, composite

Comparative Analysis of Bridge Superstructure Deteriora-tion, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136. Delaware Authority Puts Money on Composite Bridges, CE

Oct. 96, p16-17.

Punching Strength of Deck Slabs in Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE May 96, p39-66.

San Angelo High Performance Concrete Bridge in Texas, Mary Lou Ralls, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p164-175.

Bridges, concrete Cleveland Extends Light Rail on the Waterfront, CE Nov.

96, p20. Development of Design Factors for Redundant Concrete Bridges, Michel Ghosn, Youhong Hang and Fred Moses, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996). p716-719

Evaluation Findings: the Segmental Concrete Channel Bridge System, CERF Report: HITEC 96-01, Civil Engineering Research Foundation, 1996, 0-7844-0157-8,

Evaluation of Reliability of an Existing Concrete Bridge: A Case Study, Andrew Scanlon, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p522-525.

Florida DOT Applies Gravity Sealer to Seaway Bridges, CE Sept. 96, p96.

High Performance Concrete Applications in Bridge Struc-tures in Virginia, Celik Ozyildirim, Jose Gomez and M. Elnahal, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p153-163.

High-Performance Concrete in Bridge Structures in Virginia, Celik Ozyildirim and Jose Gomez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1357-1366.

Innovative Development of Prestressed Masonry, G. Shaw, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p13-24.

p.13-24.
Long-Term Deflection Control in Cantilever Prestressed
Concrete Bridges. I: Control Method and Algorithm,
Hui-Sheng Chiu, Jenn-Chuan Chern and Kuo-Chun
Chang, EM June 96, p489-494.
Long-Term Deflection Control in Cantilever Prestressed

Concrete Bridges. II: Experimental Verification, Hui-Sheng Chiu, Jenn-Chuan Chern and Kuo-Chun Chang,

Sheng Chiu, Jenn-Chuan Chern and Kuo-Chun Chang, EM June 96, p495-501.
New Sacrificial Anode for Cathodic Protection of Reinforced Concrete Structures. Miki Funahashi and Steven F. Daily, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1256-1265.
Part of Christopean

Re-Assessment of Concrete Bridges, P. Thoft-Christensen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p613-620.

Recent Innovation for Concrete Highway Bridges, S. H.

Recent Innovation for Concrete Highway Bridges, S. H. Rizkalla and A. A. Mufti, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p1063-1071.
Redundancy of Prestressed Concrete 1-Beam Bridges, Michel Ghosn and Fred Moses, (Building an Internation-al Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p688-695.

and Jamshid womanman, e., 1990, pose-99.
Rehabilitation of a Concrete Bridge Using FRP Laminates, Joseph W. Tedesco, J. Michael Stallings, Mahmoud El-Mihilmy and Michael W. McCauley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p631-637.

Reliability of Post-Tensioned Concrete Slab Bridges, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p712-715

San Angelo High Performance Concrete Bridge in Texas, Mary Lou Ralls, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p164-175.

Saving Scotland's Busiest Bridge, Rita Robison, CE Jan. 96, p48-51.

Service Load Test of 1:3 Scale Shell Bridge Model, F. S. Fanous, F. W. Klaiber and W. G. Wassef, ST Feb. 96,

Ultimate Analysis of Monolithic and Segmental Externally Prestressed Concrete Bridges, Gonzalo Ramos and Angel C. Aparicio, BE Feb. 96, p10-17.

Bridges, continuous
Design Methodology for Strengthening of Continuous-Span
Composite Bridges, H. A. El-Arabaty, F. W. Klaiber, F.
S. Fanous and T. J. Wipf, BE Aug. 96, p104-111.

Dynamic Behavior of Continuous and Cantilever Thin-Walled Box Girder Bridges, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, BE May 96, p67-75.

Girder Moments in Continuous Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE Feb. 96, p37-45.

Bridges, girder

Brigges, grace:
Barriers to the Use of High Performance Steel in I-Girder Highway Bridges, Richard Sause, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p108-115.

Behavior of Two Long-Span High Strength Concrete Pre-stressed Bridge Girders, Theresa M. Ahlborn, Carol K. Shield and Catherine W. French, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p141-152.

Cross-Frame Diaphragms for Steel Girder Bridges Using the AASHTO LRFD Bridge Design Specifications, Dennis R. Mertz, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

Mohammadi, ed., 1996), p307-312.

Dynamic Behavior of Glued Laminated Timber Girder Bridges, Terry J. Wipf, Michael A. Ritter and Douglas L. Wood. (Building on International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p260-267.

Economical Long-Span Spliced Bridges, Leo Spaans, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed.,

1996), p147-152

Editor's Note, David Darwin, ST July 96, p715.

Effect of Sidewalks and Railings on Wheel Load Distribu-tion in Steel Girder Bridges, K. M. Tarhini, M. Mabsout and M. Kobrosly, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p881-886.

Fatigue-Load Models for Girder Bridges, Jeffrey A. Laman and Andrzej S. Nowak, ST July 96, p726-733.

First Smart Bridge Tested, ET Apr./May 96, p1,6

High Performance Concrete for Giles Road Bridge, Amin Einea, Xiaoming Huo, Mohsen Saleh and Maher K. Tadros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p133-140.

Improved Analysis Techniques for the Capacity and Fatigue Assessment of TPG Railway Bridges, Terrence W. Philbrick, Jr. and Scott D. Schiff, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p199-206.

Load Testing and Strength Evaluation of a Non-Composite Steel Plate Girder Bridge, Y. Edward Zhou, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p884-

Mechanism of Bluff Body Aerodynamics and Its Stabilization, Masaru Matsumoto and Fumitaka Yoshizumi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p74-77

Modeling the Blue Ridge, CE Aug. 96, p20,22.

A Non-Destructive Method for Prestress Evaluation, Atorod Azizinamini, Armin B. Mehrabi, Bruce Keeler and John Rohde, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p900-907.

Probabilistic Fatigue Models for Bridge Evaluation, Jeffrey A. Laman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p286-289

Proof Load Testing of Bridges, Vijay K. Saraf, Andrzej S. Nowak and Roger Till, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p526-529.

Reactive Powder Concrete (RPC), A New Material for Prestressed Concrete Bridge Girders, Scott K. Gilliand, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p125-132. Steel Girder Bridge Cost Optimization Using AASHTO Specifications, T. E. Fenske, M. Yener, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng,

ed., 1996), p472-481.

Stress Limits in Prestressed Concrete Bridge Girders, Hassan H., El-Hor and Andrzej S. Nowak, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p460-

Stretching Span Capability of Prestressed Concrete Bridges under AASHTO LRFD, Yohchia Chen and Alex Aswad, BE Aug. 96, p112-120.

Bridges, highway

Accelerations and Time Histories for Earthquakes Affecting Kentucky's Bridges, I. E. Harik, R. Street, Z. Wang and D. L. Allen, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p464-471.

Arizona Local Government Bridge Scour Evaluation Study. Bart S. Bergendahl and Raymond C. Jordan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p479-488.
Barge Collision Design of Highway Bridges, M. W. Whitney, I. E. Harik, J. J. Griffin and D. L. Allen, BE May 96, p47-58.

p41-38.
Barriers to the Use of High Performance Steel in I-Girder Highway Bridges, Richard Sause, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p108-115.
BDS Implementation of AASHTO LRFD Design Philosophy, Toorak Zokaie, Richard Pickings and Karim Valimohamed, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p453-463.
Bridge Design by the AASHTO LRFD Bridge Design.

Stridge Design by the AASHTO LRFD Bridge Design Specifications, Dennis R. Mertz and John M. Kulicki, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1-8.

A Bridge Live Load Model Including Overloads, Gongkang Fu and Osman Hag-Elsafi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-

cea D. Grigoriu, ed., 1996), p34-37.

Bridge Rehabilitation Permits Higher Live Loads, Dennis W. Stolldorf, P.E. and Thomas A. Holm, P.E., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1082-1090.

Bridge-Column Footings: An Improved Design Procedure, Lian Duan, SC Feb. 96, p20-24.

Contraction Scour at Bridges: Analytic Model for Coarse-Bed Channels, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3706-3715.

Controlled Semiactive Hydraulic Vibration Absorber for Bridges, William N. Patten, Ronald L. Sack and Qiwei He, ST Feb. 96, p187-192.

The Cost of Highway Bridge Scour in the State of Minne-sota, W. Robert Ivarson, Mark Gieseke and Dave Hal-vorson, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3500-3508.

Design Considerations for Post-Tensioned Integral Pier Caps, Sami W. Tabsh, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p444-451.

Detecting Damage in Highway Bridges from Vehicle Induced Girder Strains, Leon L-Y Lai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1122-1125. Development of Caltrans Guidelines for Natural Gas Pipe-

lines on Highway Bridges, Anthony Gugino, Chih-Hung Lee, Richard Gailing, Philip Constantine and David Reistetter, (*Pipeline Crossings 1996*, Lawrence F. Ca-talano, ed., 1996), p245-253.

A Domain Specific Equation Solver for Bridge Analysis, Gary Consolazio, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), Jorge Var p321-327.

Effects of Earthquakes on Highway Bridge Abutments, M. Zoghi, J. M. Hastings and D. W. Fenza. (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p193-194.

Evaluating Innovative Concrete Technologies through the HITEC Process: the JMI Channel Bridge, Kathleen H. Almand, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p161-166.

Evaluation of Reliability of an Existing Concrete Bridge: A Case Study, Andrew Scanlon, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p522-525.

Fabrication and Testing of High Performance Steel I-Girders Research in Progress, William Wright, (Materi-als for the New Millennium, Ken P. Chong, ed., 1996),

p1571-1578.

Fatigue Evaluation of Highway Bridges Using Ultrasonic Stress Measurements, Samer H. Petro, Udaya B. Halabe, Paul Fuchs, Powsiri Klinkhachorn and Hota V. S. GangaRao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p876-883.

High Performance Computing: Application to Highway Bridges, T. E. Fenske, Z. Yu, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed.,

1996), p444-452.

High Performance Concrete for Giles Road Bridge, Amin Einea, Xiaoming Huo, Mohsen Saleh and Maher K. Tadros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi. ed., 1996), p133-140.

High Performance Highway Bridge Substructures, Robert W. Barnes and John E. Breen, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p176-187.

Influence of Support Stiffness for Cantilever Beams Sub-jected to Modulated Filtered White Noise, Gongkang Fu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p689-692.

Investigation of Nonlinear Fluid-Structure Interaction, T. E. Fenske, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p407-415. Major Brooklyn Interchange Being Upgraded, CE July 96,

p12.

Measurement of Applied Stress in Steel Bridges, E. A. Mandracchia, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1118-1121. More Aluminum Than You Know, John J. Ahlskog, CE May 96, p27-28.

New Alloy Prevents Corrosion, ET Oct./Nov. 96, p1,9.

On Structural Identification of Constructed Facilities, A. Emin Aktan and James T. P. Yao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p651-658.

Optimization of Composite Highway Bridge Systems, M. Z. Cohn and J. J. Werner, (Analysis and Computation),

Franklin Y. Cheng, ed., 1996), p135-146.

Potential-Scour Assessments at 130 Bridges in Iowa, Edward E. Fischer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1149-1155.

Precasting Long Spans for the Northumberland Strait Crossing, Gerard Sauvageot and Joe Showers, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p141-146.

Probabilistic Model for the Simulation of Traffic Flows over Highway Bridges, Cesar Crespo-Minguillon and Juan R. Casas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p26-29.

Recent Innovation for Concrete Highway Bridges, S. H. Rizkalla and A. A. Mufti, (Materials for the New Millen-

nium, Ken P. Chong, ed., 1996), p1063-1071.

Site-Specific Live Load Models for Bridge Evaluation, Michel Ghosn and Dan M. Frangopol, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p30-33

Steel Girder Bridge Cost Optimization Using AASHTO Specifications, T. E. Fenske, M. Yener, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng,

ed., 1996), p472-481.

Stress-Strain Behavior of High-Performance 70W Bridge Steel, E. M. Focht and S. J. Manganello, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1540-

A Summary of Research and Development Projects in Non-destructive Evaluation Technologies for Bridges, Steven B. Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p230-237.

Traffic Action Effect Reduction Factors, Simon F. Bailey and Rolf Bez, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p22-25.

Traffic Load Effects on Highway Bridges, Sang Hyo Kim and Sang Ho Lee, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p38-41.

Training for Bridge Inspectors in Stream Stability and Scour, P. F. Lagasse and E. V. Richardson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p499-505.

Wetland Mitigation Evaluation Ten Years After Florida Keys Bridge Replacement, Roy R. Lewis, III, Curtis R. Kruer, Sally F. Treat and Stephanie M. Morris, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p759-763.

Applications of High-Performance Concrete in Columns and Piers, S. K. Ghosh, (Worldwide Advances in Strucral Concrete and Masonry, A. E. Schultz, ed. and S. L.

McCabe, ed., 1996), p385-395.

Assessment and Implications of Local Channel Instability on the Prediction of Bridge Scour, Thomas M. Heil and Peggy A. Johnson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3286-3293.

Channel Scour Protection at Roadway Crossings, Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3278-3285.

Contraction Scour at Bridges Founded on Clay Soils, W. R. Ivarson, F. Qadir and M. Phelps, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1358-1366.

Damage Evaluation in Steel Box Columns by Cyclic Load-ing Tests, Satish Kumar and Tsutomu Usami, ST June

96, p626-634.

Damage Evaluation in Steel Box Columns by Pseudody-namic Tests, Tsutomu Usami and Satish Kumar, ST June 96, p635-642.

Effects of Foundation Geometry on Bridge Pier Scour, Bruce W. Melville and Arved J. Raudkivi, HY Apr. 96,

Effects of Load Path and Load Correlation on the Reliability of Concrete Columns, Dan M. Frangopol, Yutaka Ide and Ichiro Iwaki, (Probabilistic Mechanics & Structure Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p206-209.

Effects of Pier and Foundation Stiffness for Bridges Sub jected to Nonstationary Seismic Input, Gongkang Fu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Experimental Investigation of Cumulative Seismic Damage in Concrete Bridge Piers, Sashi K. Kunnath, Ashraf El-Bahy, William C. Stone and Andrew W. Taylor, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p381-382.

Field Measurements of Streambed Scour at Bridge Piers in Ohio, K. Scott Jackson, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3033-3042.

Measurements of Bridge-Scour Depths in Mississippi, K. Van Wilson, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3023-3032. Modeling the Blue Ridge, CE Aug. 96, p20,22.

Modeling Uncertainty in Prediction of Pier Scour, Peggy A. Johnson and Bilal M. Ayyub, HY Feb. 96, p66-72.

Monitoring Scour at Bridge Piers in Snohomish Co., WA, Anthony P. Nahajski, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1156-1161.

Nonlinear Pile Foundation Analysis Using Florida-Pier, M. I. Hoit, M. McVay, C. Hays and P. W. Andrade, BE

Nov. 96, p135-142.

Riprap and Concrete Armor to Prevent Pier Scour, Lisa M. Fotherby and James F. Ruff, (North American Water and Environment Congress & Destructive Water. Chenchayya Bathala, ed., 1996), p4178-4187.

Scour Around Circular Piers, Prabhata K. Swamee and Chandra Shekhar P. Ojha, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2550-2555.

Scour in Erodible Rock I: The Erodibility Index, George W. Annandale and Steven P. Smith, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1342-1348.

Scour in Erodible Rock II: Erosive Power at Bridge Piers, Steven P. Smith and George W. Annandale, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1349-1357.

Scour Power, George W. Annandale, Steven P. Smith, Robert Nairns and J. Sterling Jones, CE July 96, p58-60.

Scour Processes Observed in Field Data, Mark N. Landers and David S. Mueller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3052-3061.

Scour-hole Dimensions at Selected Bridge Piers in New York, Gerard K. Butch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3043-3051.

Seismic Retrofitting of Bridge Pier Columns, William L. Gamble and Neil M. Hawkins, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p16-23.

Temporal Development of Local Scour at Bridge Piers, Yee-Meng Chiew and Bruce W. Melville, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2556-2564.

West Dock Causeway Bridge Piers, A. B. Christopherson, T. Nottingham, J. W. Pickering and K. W. Braun, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p315-326.

Windsor Bridge Pier Repairs, Phillip Pierce and Joseph Mieczkowski, SC May 96, p79-81.

Bridges, railroad

Approach Philosophy and Risk Considerations for Seismic Design and Evaluation of Railroad Bridges, Kenneth L. Wammel, James R. Beran and Zolan Prucz, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p167-174.

Assessment of Remaining Fatigue Life of Existing Railway Riveted Bridges, Luo Weiwen and Jamshid Mohammadi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p42-45.

Cellular Confinement System Helps Hold Slope, CE Dec.

Conceptual Seismic Design Methods for Railroad Bridges, Zolan Prucz, Kenneth E. Bruestle and Vinaya Sharma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p191-198.

Evaluation and Rehabilitation of Victoria Bridge, G. Oommen, A. Lim and S. Tselios, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p.207-214.

Full-Scale Resonance Tests of a Railway Bridge, E. Mara-gakis, B. M. Douglas, S. Haque and V. Sharma, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p183-190

Improved Analysis Techniques for the Capacity and Fatigue Assessment of TPG Railway Bridges, Terrence W. Philbrick, Jr. and Scott D. Schiff. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p199-206.

Loading Spectra for Railway Bridges under Current Operating Conditions, Daniel H. Tobias, Douglas A. Fouch and John Choros, BE Nov. 96, p127-134.

Program for Estimating the Remaining Fatigue Life of Steel Railway Bridges, Vinaya Sharma and John Choros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed.,

gineers, S. P. Gubbit, ed. and Jamesine recommendation. 1996), p.223-229.

Railroad Bridge Behavior during Past Earthquakes, William G. Byers, (Building an International Community of Structural Engineers, S. K. Chosh, ed. and Jamshid

Mohammadi, ed., 1996), p175-182.

Mohammadi, ed., 1996), p173-182.
Railway Bridge Loads Under Current Operating Conditions, Daniel H. Tobias, Douglas A. Foutch and John Choros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p215-222.
Service Life of Timber Trestles, William G. Byers, (Proba-

bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p720-723.

Bridges, spans
Behavior of Two Long-Span High Strength Concrete Prestressed Bridge Girders, Theresa M. Ahlborn, Carol K. Shield and Catherine W. French, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p141-152.

Cable-Stayed Bridge Concept for Longer Spans, Uwe Starossek, BE Aug. 96, p99-103.

Design Parameters of Pipeline Suspension Bridges, Ralph Alan Dusseau and Irfan Ahmed, (Pipeline Crossings

 Josean and Hall Annied, (Pipeline Crossings)
 1996, Lawrence F. Catalano, ed., 1996, p. 112-119.
 Economical Long-Span Spliced Bridges, Leo Spaans,
 (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p147-152.

Editor's Note, David Darwin, ST July 96, p715.

Jointless Steel Bridges Design and Retrofit, Robert L. Nickerson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohamma-di, ed., 1996), p313-320.

Long-Span, Precast Bridge Saves Time, Money, CE June

96, p10.

Mechanism of Bluff Body Aerodynamics and Its Stabiliza-tion, Masaru Matsumoto and Fumitaka Yoshizumi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Medium Span Gravity Sewer Aerial Crossings, Curtis W. Swanson and Glenn E. Hermanson, (Pipeline Crossings)

Swanson and Glenn E. Hermanson, (Pipeline Crossings) 1996, Lawrence F. Catalano, ed., 1996), p457-468.
Precasting Long Spans for the Northumberland Strait Crossing, Gerard Sauvageot and Joe Showers, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

The Response of Long Span Bridges to Wind Action, Robert L. Wardlaw, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p66-69.

Response of Long-Span Bridges to Spatially Varying Ground Motion, Ronald S. Harichandran, Ahmad Hawwari and Basheer N. Sweidan, ST May 96, p476-

484.

Seismic Evaluation and Retrofitting of U.S. Long-Span Suspension Bridges--Issues and Solutions, Subcommittee on Seismic Performance of Bridges, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p56-90. Vibration Analysis of Special Orthotropic Plate with Variable Cross-Section, and with a Pair of Opposite Edges Simple Supported and the Other Pair of Opposite Edges Free, Duk Hyun Kim, Keyong Jin Kim and Do Sik Sim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1408-1417.

Bridges, steel

Alaska Students Triumph in 1996 Steel Bridge Finals, CE Aug. 96, p64.

Alternate Load Factor (Autostress) Design for Short to Medium Span Continuous Steel Bridges, C. C. Fu, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p298-306.

Bolted Field Splices for Steel Bridges, Firas Sheikh-lbrahim and Karl H. Frank, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p290-297.

Bridge Corrosion Cost Model Implementation and Coating Maintenance Model Using Dynamic Programming, C. K. Tam and S. F. Stiemer, CF May 96, p57-66.

Famanu S. P. Stuemer, C. P. May 96, pp. 7-60.
Bridges of the 21st Century with High Performance Steel, Wagdy G. Wassef, John M. Kulicki and Philip A. Ritchie, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p116-124.

thadat, ed., 1990), p110-12-1.
Cross-Frame Diaphragms for Steel Girder Bridges Using the AASHTO LRFD Bridge Design Specifications, Dennis R. Mertz, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p307-312.

Determining Bridge Inspection Requirements for Fatigue Damage Using Reliability, Theodore Hopwood, II, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p454-457

Development of a Robotic Bridge Painting System, Yong Bai and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p185-191.

Development of Bridge Corrosion Cost Model for Coating Maintenance, C. K. Tam and S. F. Stiemer, CF May 96.

Development of High Performance Steels for Commercial and Military Applications, Eric M. Focht and Thomas W. Montemarano, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p91-99.

EBEF Method for Distortional Analysis of Steel Box Gird-er Bridges, Yao T. Hsu, C. C. Fu and David R. Schelling, ST Mar. 95, p557-566.

Evaluation and Rehabilitation of Victoria Bridge, G. Oommen, A. Lim and S. Tselios, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p207-214.

Fatigue Evaluation of Bridges, George E. Tsiatas and Shane M. Palmquist, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p302-305.

Fatigue Evaluation of Highway Bridges Using Ultrasonic Stress Measurements, Samer H. Petro, Udaya B. Halabe, Paul Fuchs, Powsiri Klinkhachorn and Hota V. S. GangaRao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p876-883.

Fatigue Lifetime Prediction of Steel Bridge Details, Peter J. Massarelli and Thomas T. Baber, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p450-453.

Inspection of Fatigue Sensitive Bridge Members, Richard A. Walther and Michael J. Koob, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p321-328.

Jointless Steel Bridges Design and Retrofit, Robert L. Nickerson, (Building an International Community of Structur-al Engineers, S. K. Ghosh, ed. and Jamshid Mohamma-di, ed., 1996), p313-320.

Knowledge Acquisition and Engineering for Steel Bridge Fabrication, Hani G. Melhem, W. M. Kim Roddis, Sri-nath Nagaraja and Michael R. Hess, CP July 96, p248-

Load Testing and Strength Evaluation of a Non-Composite Steel Plate Girder Bridge, Y. Edward Zhou, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p884-

Material Development for High-Performance Bridge Steels, J. M. Chilton and S. J. Manganello, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p100-107.

Optimization of a 550-/690-MPa High-Performance Bridge Steel, A. B. Magee, J. H. Gross and R. D. Stout, (Materi als for the New Millennium, Ken P. Chong, ed., 1996),

p1561-1570.

Program for Estimating the Remaining Fatigue Life of Steel Railway Bridges, Vinaya Sharma and John Choros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p223-229.

Proof Load Testing of Bridges, Vijay K. Saraf, Andrzej S. Nowak and Roger Till, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-

cea D. Grigoriu, ed., 1996), p526-529.

Quantitative Approach to Rapid Seismic Evaluation of Slab-on-Girder Steel Highway Bridges, Murat Dicleli and Michel Bruneau, ST Oct. 96, p1160-1168.

Rehabilitation of Steel Beams Using Composite Materials, William Edberg, Dennis Mertz and John Gillespie, Jr., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p502-508.

Safety Analysis of Suspension-Bridge Cabies: Williams-burg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

Shakedown Tests of One-Third-Scale Composite Bridge, M. G. Barker, P. M. Bergson, C. E. French, R. T. Leon, T. V. Galambos and F. W. Klaiber, BE Feb. 96, p2-9.

Steel Girder Bridge Cost Optimization Using AASHTO Specifications, T. E. Fenske, M. Yener, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p472-481.

Strengthening Steel Composite Beams with CFRP Lam-inates, Rajan Sen, Larry Liby, Gray Mullins and Ken Spillett, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1601-1607.

Stress-Strain Behavior of High-Performance 70W Bridge Steel, E. M. Focht and S. J. Manganello, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1540-1550

A Summary of Research and Development Projects in Nondestructive Evaluation Technologies for Bridges, Steven B. Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p230-237.

Web Buckle at I-40 Bridge Test, John Minor and Clinton Woodward, BE Feb. 96, p34-36.

Bridges, structures

Lateral Distribution Factor from Bridge Field Testing, Chung C. Fu, Maged Elhelbawey, M. A. Sahin and David R. Schelling, ST Sept. 96, p1106-1109.

Bridges, suspension Computer Analysis, Vincent Thomas Bridge, Raymond W. Wolfe and Hany J. Farran, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p311-312. Danish Suspension Bridge is World's Largest, CE June 96,

p18,21.

Design Parameters of Pipeline Suspension Bridges, Ralph Alan Dusseau and Irfan Ahmed. (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p112-119. Longest Suspension Bridge Overhauled, CE Feb. 96, p19-

Measuring Flutter Derivatives for Bridge Sectional Models in Water Channel, Q. C. Li, EM Jan. 95, p90-101. Seismic Evaluation and Retrofitting of U.S. Long-Span Suspension Bridges—Issues and Solutions, Subcommittee on Seismic Performance of Bridges, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p56-90.

Bridges, truss

Engineering Innovations Highlighted at Research Symposi-um, ET Mar./Apr. 96, p1,5.

Fatigue Cracks at Stringer-Floorbeam Connections, Leon L-Y Lai, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p483-490.

Three Year Evaluation of a Metal-Plate Connected Wood Truss Bridge, Michael H. Triche and Michael A. Ritter, Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p276-281.

Vermont to Inventory Historic Bridges Prior to Project Initiation, CE Jan. 96, p12.

What's New at Nation's C.E. Schools, etc., NE Feb. 96, p9.

Bridges, wooden

Bridges, wooden
Dynamic Behavior of Glued Laminated Timber Girder
Bridges, Terry J. Wipf, Michael A. Ritter and Douglas L.
Wood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p260-267.

Performance Monitoring of Three Stress-Laminated Timber Bridges in Leon County, Nur Yazdani and Joy Orlando

Bridges in Leon County, Nur Yazdani and Joy Orlando Kadnar, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p268-275.
Structural Forum, SC Nov. 96, p95-98.
Three Year Evaluation of a Metal-Plate Connected Wood Truss Bridge, Michael H. Triche and Michael A. Ritter, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p276-281.

Demonstrating Brine Water Wells and Toilets for Deering, Alaska, Robert H. Lundell, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p558-569.

Brittle failure

Dynamic Brittle Material Response Based on a Nonlocal Damage Model, E. P. Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p580-583.

Fracture Mechanics of Concrete: Applications of Fracture Mechanics to Concrete, Rock and Other Quasi-Brittle Materials by Surendra P. Shah, Stuart E. Swartz, and Chengsheng Ouyang, Walter H. Gerstle, ST Nov. 96, p1390-1391. Monotonic Loading of Brittle Materials: A Stochastic Dam-

age Model, David J. Kirkner, B. F. Spencer, Jr. and Sat-ish Kandarpa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p354-357.

Peak-Load Method for Fracture Parameters of Two-Parameter Fracture Model, Tianxi Tang, Chengsheng Ouyang and Surendra P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p584-587.

Performance of Bridges during the Hanshin-Awaji Earth-quake, Eiichi Watanabe and Kunitomo Sugiura, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p926-933

Reliability-Based Optimum Bridge Repair Strategy, Allen C. Estes, Dan M. Frangopol and George Hearn, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p372-375.

Time-Dependent Reliability Analysis of Redundant Brittle Systems, Animesh Dey and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p700-703.

Brittle fractures

Forum, Stan Rolfe and John Barsom, ST Nov. 96, p1258. Modeling Rotation of Principal Load Axes in Brittle Solids with Damage, S. Karnawat and S. Yazdani, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p596-599.

A Probabilistic Framework for Brittle Fracture Assessments of Structures -Constraint and Ductile Tearing Effects, Claudio Ruggieri and Robert H. Dodds, Jr., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p878-881

Statistical Aspects of Toughness in Brittle Fracture, A. Chudnovsky and M. Gorelic, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p346-349.

Brittleness

Analytical Modelling of Damage Based on an Improved Percolation Model, A. Delaplace, S. Roux and G. Pijaudier-Cabot, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), pl 171-1174.

Brittle-Ductile Transition in Porous Rocks by Cap Model, Vlado A. Lubarda, Sreten Mastilovic and Jaroslaw Knap, EM July 96, p633-642.

Gradient Damage and Size Effects, Jan Carmeliet, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1175-1178.

Pitch-Based Carbon Fibre Reinforced Concretes, A. M. Brandt and L. Kucharska, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p271-280.

Rate-Sensitive Micromechanical Damage Model for Brittle Solid, Dipankar Chandra and Theodor Krauthammer, EM May 96, p412-422.

Statistical Aspects of Size Effects in Quasibrittle Fracture, Zdeněk P. Bažant and Jaime Planas, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1179-1180.

Stochastic Damage Model for Brittle Materials Subjected to Monotonic Loading, S. Kandarpa, D. J. Kirkner and B. F. Spencer, Jr., EM Aug. 96, p788-795.

Stochastic Parallel-Brittle Networks for Modeling Materials, D. A. Gasparini, P. Bonacuse, L. Powers and A. Romeo, EM Feb. 96, p.130-137.

Transition from Brittle to Quasi-Brittle Behavior in Fiber Reinforced Brittle Matrix Composites, Claudia P. Ostertag, (Materials for the New Millennium, Ken P. Chong, ed., 1996), pl 219-1227.

Zero-Brittleness Size-Effect Method for One-Size Fracture Test of Concrete, Zdeněk P. Bažant and Zhengzhi Li, EM May 96, p458-468.

Brown, Ronald H., Scoville, John A., Tholan, Stuart, Pieroni, Leonard, Donovan, Robert, Elia, Claudio, Whittaker, Robert, Maier, Frank

ASCE Mourns Loss of Industry Leaders in Plane Crash, CE May 96, p71.

Brown, Ronald H., Scoville, John A., Tholan, Stuart, Pieroni, Leonard, Donovan, Robert, Elia, Claudio, Whittaker, Robert, Maier, Frank

ASCE Mourns Loss of Industry Leaders in Plane Crash, NE May 96, p15.

Rubble

Constitutive Relations for Partially Saturated Soils Containing Gas Inclusions, S. Pietruszczak and G. N. Pande, GT Jan. 96, p50-59.

Void Sizes in Granular Soils, B. Aberg, GT Mar. 96, p236-239.

Buckling

Behavior of Three-Span Braced Columns with Equal or Unequal Spans, Raymond H. Plaut and Yu-Wen Yang, ST June 95, p986-994.

Buckle Propagation: Steady-State Finite-Element Analysis, André C. Nogueira and John L. Tassoulas, EM Sept. 94, p1931-1944.

Buckling Analysis of Curved Beams by Finite-Element Discretization, Chai H. Yoo, Young J. Kang and James S. Davidson, EM Aug. 96, p762-770.

Buckling Analysis of Elastic Space Rods under Torsional Moment, Yoshiaki Goto, Xiao-Song Li and Toshihiro Kasugai, EM Sept. 96, p826-833.

Buckling and Vibration of Thick Laminates on Pasternak Foundations, Y. Xiang, S. Kitipornchai and K. M. Liew, EM Jan. 96, p54-63.

Buckling Behavior of Polyethylene Liner System, Surya Chunduru, Michael E. Barber and Reda M. Bakeer, MT Nov. 96, p201-206.

Buckling Modes at Coincident Singularities of Stiffness Matrix, Igor Raskin and John Roorda, EM Aug. 96, p804-806.

Buckling of Composite Panels with Central Holes, David H. Farnham and Walter J. Horn, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p374-377.

Buckling of Laminated Composite Beams, Carol Shield and Tim Morey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1010-1013. Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST May 94, p1471-1488.

Characterization of Pultruded FRP Wide-Flange Beams, Julio F. Davalos, Pizhong Qiao and Hani A. Salim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p223-232.

Column Design in Fire Exposed Steel Frames, Ricardo Ramos Cabeza, Ali Saffar, Robert W. Fitzgerald and Hossein Davoodi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p906-909.

Compression Bending of Scale-Model Reinforced-Concrete Walls, James K. Gran and Paul E. Senseny, EM July 96,

p660-668

Damage Evaluation in Steel Box Columns by Pseudodynamic Tests, Tsutomu Usami and Satish Kumar, ST June 96, p635-642.

Development of Column Curve for Steel Angles, Seshu Madhava Rao Adluri and Murty K. S. Madugula, ST Mar. 96, p318-325.

Dynamics of Multi-DOF Stochastic Nonlinear Systems, Timothy M. Whalen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p82-85.

Editor's Note, David Darwin, ST Apr. 96, p349.

Effect of Fiber Waviness on the Buckling of Composite Plates, Raouf A. Raouf, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1102-1107.

Flexural Buckling of Steel Angles: Experimental Investigation, Seshu Madhava Rao Adluri and Murty K. S. Madugula, ST Mar. 96, p309-317.

FORM/SORM Search Algorithms in the Presence of Inadmissible Domains, Roger Sindel and Rüdiger Rackwitz, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p570-573.

Generalized Differential Quadrature Method for Buckling Analysis, H. Du, K. M. Liew and M. K. Lim, EM Feb. 96, p95-100.

Identification of Structural Damage, S. Hassiotis and K. M. Grigoriadis, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1 107-1114.

Improving Design in Composite Thin-Walled Columns, Luis A. Godoy and Leonel I. Almánzar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1155-1158.

In-Plane Inelastic Buckling and Strengths of Steel Arches, Yong-Lin Pi and N. S. Trahair, ST July 96, p734-747. Inelastic Local and Lateral Buckling in Design Codes, Alan

R. Kemp, ST Apr. 96, p374-382.

Investigation of Pipeline Buckle Failure in a Horizontally Directionally Drilled Installation, Hugh W. O'Donnell, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p163-172.

Large-Displacement Analysis of Elastoplastic Thin-Walled Frames, 1: Formulation and Implementation, B. A. Izzuddin and D. Lloyd Smith, ST Aug. 96, p905-914.

Large-Displacement Analysis of Elastoplastic Thin-Walled Frames. II: Verification and Application, B. A. Izzuddin and D. Lloyd Smith, ST Aug. 96, p915-925.

Lateral Distortional Buckling of Monosymmetric Beams under Point Load, Owen Hughes and Ming Ma, EM Oct. 96, p1022-1029.

Lateral-Torsional Buckling of Nonprismatic I-Beams, Pratycosh Gupta, S. T. Wang and G. E. Blandford, ST July 96, p748-755.

Local Buckling Experiments on Pultruded Composite Beams, Roberto Lopez-Anido, Rachid Bendidi, Hota V. S. GangaRao and Mohammed Al-Megdad, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p914-923.

Local Buckling of Curved I-Girder Flanges, James S. Davidson and Chai H. Yoo, ST Aug. 96, p936-947.

Looping Behavior and Strength of Prestressed Arches, Zefang Xu and Amir Mirmiran, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p366-369. On Buckling Analysis of Beams and Frame Structures by the Differential Quadrature Element Method, Xinwei Wang, Huizhi Gu and Bin Liu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p382-385.

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew

Bradford, ST Nov. 94, p3137-3155.

Performance of Bridges during the Hanshin-Awaji Earth-quake, Eiichi Watanabe and Kunitomo Sugiura. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p926-933.

Pipeline Beam Models Using Stiffness Property Deforma-tion Relations, Zhilong Zhou and D. W. Murray, TE Mar/Apr. 96, p164-172.

Prediction of Buckling Load of Columns Using Artificial Neural Networks, A. Mukherjee, J. M. Deshpande and J. Anmala, ST Nov. 96, p1385-1387.

Probabilistic Stability Analysis of Shallow Arches, R. P. Nordgren and K. S. Hussain, (Engineering Mechanics,

Nordgren and K. S. Hussain, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p124-127.
Recent Progress in Thermally Induced Vibrations Research, John D. Johnston, Richard S. Foster, David L. Eby and Earl A. Thomton, (Engineering, Construction, and Oper-ations in Space, Stewart W. Johnson, ed., 1996), p1134-

Reliability Analysis of Beam with Initial Deflection by En-tropy Model, Yoshiro Kohama, Toyofumi Takada and Atsunori Miyamura, (Probabilistic Mechanics & Struc-ural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p652-655.

Reliability Design of Laminated Plate for Buckling, Nozo-mu Kogiso, Shaowen Shao and Yoshisada Murotsu, Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p627-634.

Restraint Demand Factors and Effective Lengths of Braced Columns, Jostein Hellesland and Reidar Bjorhovde, ST Oct. 96, p1216-1224.

Shear Strength of Beams with Corrugated Webs, Mohamed Elgaaly, Robert W. Hamilton and Anand Seshadri, ST Apr. 96, p390-398.

Asia, 196, p. 196, p. 197, ed., 1996), p604-607.

ed., 1990, pour-our. Stability Analysis of Axisymmetric Thin Shells, Ashutosh Bagchi and V. Paramasivam, EM Mar. 96, p278-281. Stability of Shear Deformable Thin-Walled Space Frames

and Circular Arches, Sung-Pil Chang, Sung-Bo Kim and Moon-Young Kim, EM Sept. 96, p844-854. Stochastic Modeling of Imperfections in Beams, B. W. Yeigh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), 676-679.

Thin-Walled Curved Beams. I: Formulation of Nonlinear Equations, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2072-2101

Thin-Walled Curved Beams. II: Analytical Solutions for Buckling of Arches, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2102-2125.

Tubular Members. II: Local Buckling and Experimental Verification, Spyros A. Karamanos and John L. Tassou-las, EM Jan. 96, p72-78.

Ultimate Compressive Strength of Orthogonally Stiffened Steel Plates, Ichizou Mikami and Kazuhisa Niwa, ST June 96, p674-682.

Upheaval Buckling of a Pipeline in an Arctic Environment, T. Bartlett Quimby and Michael R. Fitzpatrick, (Cold Regions Engineering: The Cold Regions Infrastructure-International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p215-225.

Very Low Cycle Failure Process of Steel Angle Members, Yeon-Soo Park, Satoshi Iwai, Hiroyuki Kameda and Taijiro Nonaka, ST Feb. 96, p133-141.

Web Buckle at I-40 Bridge Test, John Minor and Clinton Woodward, BE Feb. 96, p34-36.

Web Buckling in Thin Webbed Castellated Beams, Walid Zaarour and Richard Redwood, ST Aug. 96, p860-866.

Budgeting

Anaheim State-of-the-Art Water Treatment Plant -Anancim State-or-the-Air water Treatment Flaint 23 years from Conception to Completion, Isaac Pai, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2654-2659.
National High-Level Waste Systems Analysis, Thomas P.

O'Holleran and Keith Kristofferson, (High Level Radioactive Waste Management, Technical Program Commit-

tee, 1996), p315-316.

Reliability Concept and Application in Bridge Management System, Zongwei Tao and Brian J. Stearman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p442-445.

Budgets 1997 Budget, Casey Dinges, CE May 96, p98. ASCE Planning Group Recommends Funding Shift in FY 97 Budget, NE July 96, p1,6.

ASCE's Board Gives Green Light on Institutes, Virginia Fairweather, NE June 96, p1,3.

The Budget-Blame Battle at Superfund Conference, CE Jan. 96, p18,20.

Corps Comes Back from Difficult Year, Michael Charles, CE Feb. 96, p98.

Fiscal '97 Budget Likes Infrastructure, Martin Hight, CE Nov. 96, pl 16.

Privatization: A Cure for Our Ailing Infrastructure? Charles R. Rendall, CE Dec. 96, p6.

Rehabilitation of Taxiway "NB" at IAH with Concrete Overlay, Adil Godiwalla, Keith E. Chapman, Charles Juhasz, William Stamper and Wayne Overman, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p170-186.

Room for Nonengineers in the Corps of Engineers, John Zirschky, CE Jan. 96, p6.

Society's Board of Direction Approves FY 1997 Budget; ASCE Now Poised to Move Ahead on Strategic Plan, NE Sept. 96, p1,5.

Taxing Matters for Trust Funds, Casey Dinges, CE July 96,

This Year's Budget, with Only Five Months Left, Is a Done Deal, NE June 96, p2. Trust Fund Vote in House, Casey Dinges, CE June 96,

p100. Buffeting

Coupled Flutter and Buffeting Analysis of Long-Span Bridges, Anurag Jain, Nicholas P. Jones and Robert H. Scanlan, ST July 96, p716-725.

Identification of Aerodynamic Indicial Functions, Partha P. Sarkar and Mehmet Metin Kose, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1127-1130.

Building codes

After Oklahoma City, Structural Redundancy Should Be Required, A. Longirow, CE Feb. 96, p28,31.

Analytical Approaches for the Design of Base-Isolated Structures, Vahid Sattary and Mason T. Walters, (Analysis and Computation, Franklin Y. Cheng, ed., 1996). p224-235.

ASCE Task Group Lays Foundation for Structural Institute, Eric Rasmussen, NÉ June 96, p14.

Assurance of Structural Safety—Priority Issue for Structur-al Engineers, Frank J. Heger, SC Nov. 96, p113-118.

Behavior of Reinforced Concrete Buildings: Deformations & Deformation Compatibility, John W. Wallace, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p245-256.

Beware of Flying Cranes - and Disconnected Codes, M. Russell Nester and Allan R. Porush, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p219-220.

uilding Code Requirements for Masonry Structures (ACI 530-95/ASCE 5-95/TMS 402-95); Specification for Masonry Structures (ACI 530.1-95/ASCE 6-95/TMS 602-95); Commentary on Building Code Requirements for Masonry Structures (ACI 530-95/ASCE 5-95/TMS 402-95); Commentary on Specification for Masonry Struc-tures (ACI 530.1-95/ASCE 6-95/TMS 602-95) (St No. 95-005, 95-006), Masonry Standards Joint Committee, (James Colville, chmn.), 1996, 0-7844-0115-2, 97pp. Building Code Requirements for Structural Concrete (ACI 318-95) and Commentary (ACI 318R-95) by ACI Committee 318, AE Sept. 96, p120.

Building Codes and Natural Disasters - 2 Case Studies, Kenneth R. Andreason, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p758-764.

Building Codes and Nuclear Plants, Kenneth P. Buchert, CE Mar. 96, p28.

Building Codes Exist for Progressive Collapse, J. Jeff Davies, P.E., CE July 96, p31-32.

Building Seismic Safety Council Project '97, James E. Beavers and R. Joe Hunt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p335-336.

Calculations Substitute for Actual Knowledge, Robert E.

Carculations substitute for Actual Knowledge, Robert E. Bigham, CE Jan. 96, p29.

Combining Snow and Earthquake Loads for Limit States Design, Bruce Ellingwood and David Rosowsky, ST Nov. 96, p1364-1368.

Composite Materials Reinforcement of Existing Masonry Walls, J. Bradley Christensen, Jeremy Gilstrap and Charles W. Dolan, AE June 96, p63-70.

A Critical Evaluation of Current Approaches to Earthquake Resistant Design, Christopher Rojahn and Andrew Whit-taker, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p331-332.

Deflection Control of Two-Way Reinforced Concrete Slabs, Shyh-Jiann Hwang and Kuan-Yung Chang, ST Feb. 96, p160-168.

Design Provisions for Stair Slabs in the Bangladesh Build-ing Code, I. Ahmed, A. Muqtadir and S. Ahmad, ST Mar. 96, p262-266.

Development of Natural and External Man Induced Design Code Requirements Applicable to Special Facilities, John D. Stevenson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p149-

Dynamics of Structures: Theory and Applications to Earth-quake Engineering by Anil K. Chopra, T. Igusa, EM Feb. 96, p183.

European Experiences in Fire Design of Structural Steel, Yngve Anderberg, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p357-364.

An Expert System for Wind-Resistant Residential Con-struction, James R. McDonald, Douglas A. Smith and Kishor C. Mehta, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p315-

An Expert System for Wind-Resistant Residential Construction, James R. McDonald, Douglas A. Smith and Kishor C. Mehta, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p982-988.

Extreme Wind Distribution Tails: A "Peaks over Threshold" Approach, E. Simiu and N. A. Heckert, ST May 96, p539-547.

Glazed Opening Designs for Windborne Debris Impact, Joseph E. Minor, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p117-118.

Guidelines and Commentary for the Seismic Rehabilitation of Buildings (AtC - 33), L. D. Reaveley, D. Shapiro, J. Moehle, T. Atkinson, C. Rojahn and W. Holmes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1123-1130.

Handrail Graspability, Donald O. Dusenberry and Howard Simpson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p466-469.

Hazard Mitigation in the Built Environment, Susan Dowty. (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p383.

Inelastic Local and Lateral Buckling in Design Codes, Alan R. Kemp, ST Apr. 96, p374-382.

Joint Effort by ASCE and FEMA to Develop Flood Hazard Mitigation Standards, Clifford E. Oliver and Harry B. Thomas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p337-338. Major New Seismic Provisions Proposed for the 1997 UBC, Robert Bachman, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p333-334.

Masonry Designers' Guide - A Comprehensive Design Tool, John H. Matthys, (Worldwide Advances in Struc-tural Concrete and Masonry, A. E. Schultz, ed. and S. L.

McCabe, ed., 1996), p322-333.

Method for Uncoupling Load Factor Determination, Duane E. Castaneda, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p222-225.

Mexico Earthquake Causes Casualties and Damage. CE Jan. 96, p24.

Minimum Design Loads for Buildings and Other Struc-tures, Revision of ANSI/ASCE 7-93 (St No. 95-007), American Society of Civil Engineers, 1996, American Society 0-7844-0092-X, 220pp.

Minimum Design Loads for Buildings and Other Structures: American Society of Civil Engineers Standard 7-95, Frederick S. Merritt, AE June 96, p80-81.

More Ethical Practice, Not Training, Dan Feger, P.E., CE Nov. 96, p38,40.

New USGS Seismic Hazard Maps for the United States, A. Frankel, C. Mueller, D. Perkins, T. Barnhard, E. Leyen-decker, E. Safak, S. Hanson, N. Dickman and M. Hopper, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p173-174.

On Housing Administration and Legislation of Egypt, A. S. Elnashai and M. M. Soliman, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p280-281.

Practitioners' Forum, AE Sept. 96, p85-87.

Progress of the ASTM Standard on Fenestration Relative to Windstorms and its Relationship to Building Codes, David B. Hattis, (Natural Disaster Reduction, George W.

David B. Hattis, (Valural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p119-120. PsD Test on Four-Story R/C Building Designed According to Eurocodes, P. Negro, A. V. Pinto, G. Verzeletti and G. E. Magonette, ST Dec. 96, p1409-1417.

Punching Strength of Deck Slabs in Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE May 96, p59-66.

A Rapid Barrier Island Hazard Mapping Technique as a Basis for Property Damage Risk Assessment and Mitiga-tion, David M. Bush, William J. Neal and Orrin H. Pilkey, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p185-186.

ed. dan Richy. Canage de Art. San Guidelines, Daniel P. Abrams, (Buildings per the ATC-33 Guidelines, Daniel P. Abrams, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1131-1138.

Reliability of Code Provisions for Wind-Induced Discomfort, Rwey-Hua Cherng, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p494-497.

The Return of Masonry as a Structural Material, Daniel P. Abrams, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p1-12.

Seismic Education Needs of the Building Trades and Code Enforcement Personnel, Cynthia Hoover, Marjoric Greene and James Russell, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p101-102.

Seismic Performance of Architectural Glazing Systems, Richard A. Behr, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p115-116.

Seismic Risk Assessment for Environmentally Sensitive Facilities in Northern Maine, Elizabeth A. Champeon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1052-1067.

Shear and Reaction Distributions in Continuous Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE Nov. 96, p155-165.

Strengthening Requirements of Old, Timber Warren Trusses, H. C. Foo and G. Akhras, CF Aug. 96, p127-134.

Structural Fire Resistance - Past, Present and Future, T. T. Structural Fire Resistance - Past, Present and Future, T. T. Lie and V. K. R. Kodur, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p345-351.
Structural Serviceability Review and Standard Implementa-tion, Bruce Ellingwood, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p436-443.
Thermal Response of Bare Steel Roof Assemblies to Fire Environments in Agreedal Storage Eccilisis. S. D. Blunt 1

nerman response or Bate steel Roof Assemblies to Thurt, J. Environments in Aerosol Storage Facilities, S. P. Hunt, J. L. Scheffey and R. G. Gewain, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p365-372.

U.S. Firm Builds Shake Table for Japan, John Casey, ET

U.S. Piffir Bullius Shake Language 196, p1,83. Aug./Sept. 96, p1,8. Update of Building Code Requirements for Masonry, 1992 to 1995 Editions, J. Gregg Borchelt, (Worldwide Advanced Language 1995) and Company A. F. Schultz.

to 1995 Eathous, J. Oregg Botteni, (Worland & Advanc-es in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p334-344. Wind Hazards for Low-Rise Structures and Single Family Dwellings: A Possible Mitigation, H. W. Tieleman, T. A. Reinhold and M. R. Hajj, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p389-390.

Building design

Action Plans: An Enhanced Building Technology Evalua-tion Process, CERF Report #96-5021-02, Civil Engineering Research Foundation, 1996, 0-7844-0198-5, 42pp.

Addressing Current Issues in Structural Design Software, Julia D. Biedermann, CP Oct. 96, p286-294.

Applications of CFD Flow Modelling in Building Design, J. R. Sinclair, P. A. Irwin, K. M. Matsui, M. Vanderhey-den and F. Kriksic, (Building an International Communi-ty of Structural Engineers, S. K. Chosh, ed. and Jamshid Mohammadi, ed., 1996), p997-1004.

Architectural Anatomy: Interdisciplinary Multimedia Tools for Building Analysis and Design, Anthony Webster,

(Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p753-759. Comparison of ASD and LRFD Design of an Office Building Supported by Arches, King-le Chang and Shuang Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohamma-

di, ed., 1996), p550-557.

Compendium of Design Office Problems—Volume II,

Committee on Design of Steel Building Structures of the Committee on Metals, Structural Division, ST Feb. 96,

petition Spurs High-Rise Innovation, CE Aug. 96, p10. The Design of Building Structures by Wolfgang Schueller, Bijan Mohraz, AE June 96, p82-83.

Designs for Blast Protection (Available only in *Structures* special issue), Martin J. Fertal, P.E., CE Sept. 96, p3A-5A.

Development of Natural and External Man Induced Design Code Requirements Applicable to Special Facilities, John D. Stevenson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p149-

Environmental Assessment of a Site for Civil Construction, S. M. Govorushko, UP Mar. 96, p18-31.

Establishing R, and C, Factors for Confined Masonry Buildings, María O. Moroni, Maximiliano Astroza, Juan Gómez and Rafael Guzmán, ST Oct. 96, p1208-1215.

Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammath, ed., 1996), p860-965.

Glazed Opening Designs for Windborne Debris Impact, Joseph E. Minor, (Natural Disaster Reduction, George W. sepin E. Minlot, violated Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), pl17-118. The Idea of Building: Thought and Action in the Design and Protection of Buildings by Steven Groak, Jeffrey S. Russell, ME July/Aug. 96, p15-17.

Information Models for Integrated Building Design at the Preliminary Stage, Claude Bédard, (Analysis and Com-putation, Franklin Y. Cheng, ed., 1996), p246-252.

Inverse Damping Perturbation for Stiffness Design of Shear Buildings, Tsuneyoshi Nakamura and Masaaki Tsuji, ST June 96, p617-625. Investigation of Design Profession Closes, CE May 96, p8. Investigation of Design Frobesis Closes, CE May 90, pos-struction, Christopher P. Jones, Vernon K. Hagen, Chris-topher S. Hanson, Thomas C. MacAllen, David Green-wood and Clifford E. Oliver, (Natural Disaster Reduc-tion).

tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p339-340.

Postoccupancy Indoor Environmental Quality Evaluation of an Institutional Building, Brian A. Rock, P.E. and Craig A. Hillman, AE Sept. 96, p88-94.

Practitioners' Forum, AE June 96, p45-48. Practitioners' Forum, AE Sept. 96, p85-87. Practitioners' Forum, Frederick S. Merritt, AE Dec. 96,

p125-128.
Preliminary Design of 2-Story Buildings Using a Hybrid System, Hyeong-Taek Kang, C. John Yoon and Feng-Bao Lin, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p335-340.
Re-engineering Cowboy Heaven (Available only in Focus on Structures Special Edition), Richard G. Weingardt

and John F. Davis, CE Jan. 96, p10A-13A.
Seeking Structural Solutions, Virginia Kent Dorris, CE Nov. 96, p46-49.

Seismic Analysis and Retrofit Design of the Anheuser-Busch Bevo Building in St. Louis, Missouri, Nathan C.

Gould and Christopher I. Deneff, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p381-388. Seismic Vulnerability and Repair Cost of the University of

Memphis Buildings, Howard H. M. Hwang, Min Xu and Jun-Rong Huo, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p143-144.

Soil-Structure Interaction for Base-Isolated Buildings, Maria I. Todorovska, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p172-175. Structural Evaluation of Existing Buildings for Seismic and

Wind Loads, Charles Lindbergh, Maurice R. Harlan and James L. Lafrenz, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p317-318

Structural Serviceability Review and Standard Implementation, Bruce Ellingwood, (Building an International Com munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p436-443.

Translucent Structural Beacon, Drew A. Norman, CE Feb. 96, p50-52.

Building frames
Analytical Modeling of Composite Reinforced ConcreteSteel Systems, Joseph M. Bracci, Sashi K. Kunnath and
Ali O. Atahan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p379-380.

An Assessment of Wind Damage to Wood-Frame Houses, Maher Jaafari and Henry Liu. (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p347-348.

1997), p.347-346. Minimizing Floor Vibrations from Occupant Activities, Sarah E. Mouring and Bruce R. Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p405-412

A Program for the Reduction of Seismic Hazards Posed by Welded Steel Moment Frame Structures, Stephen A. Mahin, Ronald O. Hamburger and James O. Malley,

Mahin, Ronald O. Hamburger and James O. Malley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p157-158. Seismic Analysis and Retrofit Design of the Anheuser-Busch Bevo Building in St. Louis, Missouri, Nathan C. Gould and Christopher I. Deneff, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p381-388. Seismic Rehabilitation of a Non-Ductile Concrete Frame Building Using Shearwalls, Paul A. Murray and James H. Parker, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p373-380.

Super-Element' to Represent the Behavior of Architectural Stud Partition Walls, Vicki L. Vance, H. Allison Smith and Luciana R. Barroso, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1106-1109.

Acquisition and Use of Coastal-Storm Related Data for Zoning Purposes, Andrew W. Garcia, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p393-394.

After Oklahoma City, Structural Redundancy Should Be Required, A. Longirow, CE Feb. 96, p28,31.

Analysis of the Nonlinear Hysteretic Response of an RC Building, Sarwidi and Apostolos S. Papageorgiou, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1099-1106.

Application of Ground-Penetrating Radar to a Site Investi-gation Involving Shallow Faults, Christopher L. Liner and Jeffrey L. Liner, (Case Histories of Geophysics Ap-plied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p101-111.

Automated Code Compliance Checking for Building In-spection, Tang Hung Nguyen, Claude Bédard and Kinh Huy Ha, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p1020-1026.

Autonomous Mapping System for an Interior Finishing Robot, Abraham Warszawski, Yehiel Rosenfeld and Igal Shohet, CP Jan. 96, p67-77.

Building Collapse Rescue Engineering, Sólveig Thorvald, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p41-42.

Building Evaluation Techniques by George Baird et al. Frederick S. Merritt, AE Sept. 96, p122-123.

Chanel Fashions Stylish Building, CE Sept. 96, p25-26. Column Design in Fire Exposed Steel Frames, Ricardo Ramos Cabeza, Ali Saffar, Robert W. Fitzgerald and Hossein Davodi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p906-909.

Computational Model for Wind-Induced Pressure Underneath Paver Roofing Systems, Yawei Sun, Bogusz Bienkiewicz and Sungsu Lee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1013-1020.

Control of Floor Vibrations, Linda Morley Hanagan, Cheryl Rottmann and Thomas M. Murray, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p428-435

Correlation of Component Damage, Insurance Losses and Wind Storm Severity, Timothy A. Reinhold, Gregory L. F. Chiu and Robert Akins, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p191-192.

Cost-Performance Criteria for Seismic Retrofitting, Alberto L. Guzmán, Ali Saffar and Leandro Rodríguez Agrait, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Culture of Using Mobile Cranes for Building Construction, Aviad Shapira and Jay D. Glascock, CO Dec. 96, p298-307.

A Damage Simulation Model for Buildings and Contents in a Hurricane Environment, N. Stubbs and D. C. Perry, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p989-996.

Design and Construction Criteria for Hurricanes - Preventing Your Pre-Engineered Building from Becoming a Scrap Metal Heap, Michael K. H. Yee, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p269-271.

Dynamics of Multi-DOF Stochastic Nonlinear Systems, Timothy M. Whalen, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p82-85.

Grigoria, (cs., 1990), ps2-93.
Effect of Ground Condition on Earthquake Damage, Makoto Nasu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p233-234.

Effect of Uncertainty on an Active Mass Damper System, H. S. Deoskar, R. V. Tappeta and B. F. Spencer, Jr., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p426-429.

Effects of Hurricane Luis on Structures in Antigua, Tony Gibbs, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p295-296.

An Electrorheological Damper with Annular Duct, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1197-1204.

Engineers Seek Better Way to Market New Building Technology, CE Sept. 96, p26-27.

Evaluation of Structural Integrity of Damaged Masonry Building, Sherif A. Mourad and Farouk A. El-Hakim, CF May 96, p73-78.

Examples of Structural Identification from Measured Earthquake Response: Buildings, Bridges, and Dams, G. L. Fenves, E. Safak and M. Raghavendrachar, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p659-

Exhibit Highlights Oklahoma's Building, CE Feb. 96, p8. Experimental Implementation of Hybrid Control, J. Pandya, Z. Akbay, M. Uras and H. Aktan, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1172-1179.

Exterior Cladding Methods: A Technoeconomic Analysis, Igal M. Shohet and Alexander Laufer, CO Sept. 96, p242-247

The Federal Government's Existing Building Inventory, Ann Bieniawski, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p161-

Feds Study Seismic Guidelines, CE Dec. 96, p8.

Feedback Service for Reducing Losses Due to Building Problems, D. E. Allen, CF May 96, p67-72.

The FEMA Program of Seismic Safety of Buildings, Ugo Morelli, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p159-160.

Field and Laboratory Measurements of Shoring Loads, Dryver R. Huston, Peter L. Fuhr and Jamie Willsey, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p704-710.

Ground-Movement-Related Building Damage, Storer J. Boone, GT Nov. 96, p886-896.

Guidelines and Commentary for the Seismic Rehabilitation of Buildings (ATC - 33), L. D. Reaveley, D. Shapiro, J. Moehle, T. Atkinson, C. Rojahn and W. Holmes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1123-1130.

Housing Losses, Mary C. Comerio, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p167.

Implications of Measured Near-Field Ground Motion on Structural Response, Wilfred D. Iwan, (Building an International Community of Structural Engineers, S. ed. and Jamshid Mohammadi, ed., 1996), p1213-1220.

Incorporation of Fuzzy Damage States in Seismic Fragility Analysis, Jun-Rong Huo and Howard H. M. Hwang, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Inelastic Vibration Phase Theory for Seismic Pounding Mitigation, Kazuhiko Kasai, Anil R. Jagiasi and Van Jeng, ST Oct. 96, p1136-1146.

Innovative Building Construction Technique: Modified Up/Down Method, Joon H. Paek and Jong H. Ock, CO June 96, p141-146.

A Knowledge Based System for the Evaluation of Earth-Anowiedge Based System for the Evaluation of Earth-quake Damaged Structures, John A. Kuprenas and John Manios, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p742-749.

The Kobe Earthquake: Performance of Engineered Buildings, David R. Bonneville. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p917-925.

Lessons of the Recent Earthquakes in Sakhalin Region, Russia, Mark Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p5-6.

Moisture Conditions and Control in Buildings in Fairbanks. Alaska, Ross Adkins, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996),

Multidisciplinary Product Modeling of Buildings, W. P. S. Dias, CP Jan. 96, p78-86.

Nationally Applicable Guidelines for the Seismic Rehabiliationally Applicable Guidelines for the Seismic Rehabili-tation of Existing Buildings, Christopher Rojahn, Daniel Shapiro, Lawrence D. Reaveley, William T. Holmes, Jack P. Moehle, James R. Smith and Ugo Morelli, (Natu-ral Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p276-277.

Natural Disaster Losses to Conventional Construction and their Mitigation (An Insurance Company Response to Catastrophic Losses Since Hurricane Hugo), Edward M. Laatsch, Rose Geier Grant and Laird Macdonald, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p778-785.

Negative Shear Lag in Framed-Tube Buildings, Y. Singh and A. K. Nagpal, ST Nov. 94, p3105-3121.

New Educational Course "Sustainable Development Eco-City", Alexandr Tetior, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p31-32.

New Metric Guide Stresses "Preferred Numbers" to Aid in

Building Construction, NE June 96, p10.

New Orleans Rolls the Dice (Available only in *Structures* Special Issue), Richard G. Weingardt and John F. Davis, CE May 96, p3A-7A.

CE may 96, p. 26.7-7A.

Numerical Simulation of Flow Field Around Buildings,
Da-hai Yu and Ahsan Kareem, (Probabilistic Mechanics
& Structural Reliability, Dan M. Frangopol, ed. and
Mircea D. Grigoriu, ed., 1996), p490-493.

Performance Evaluation of Dual-Level Versus Current Design Using 1994 Northridge Earthquake Records, K. J. Sign Osing 1994 Northridge Earthquake Records, R. J. Elwood and Y. K. Wen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p796-799.

Performance of Multiple Mass Dampers Under Random Loading, Ahsan Kareem and Samuel Kline, ST Feb. 95, p348-361.

Performance-Based Seismic Design of Building Structures, Kevin R. Collins, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p792-795.

Practitioners' Forum, Frederick S. Merritt, AE Dec. 96,

Praise for Arena Story, Arthur Meenen, CE Dec. 96, p31. President Nominates ASCE Fellow to NIBS Board, NE Sept. 96, p15.

Probabilistic Diagnosis of Seismic Design Load-To Harmonize Seismic Design Codes of Various Engineering Structures, Tsuyoshi Takada, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p190-193.

Protecting an American Folklore Legend, Arthur J. Sortet, III and Harry B. Thomas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p274-275.

Protection of the Building Envelope in Maintaining Struc-tural Integrity, Clifford Oliver, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p121-122.

Public Policy and Building Safety, Marjorie Greene and Chris D. Poland, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p155-156

Rehabilitation of Masonry Buildings per the ATC-33 Guidelines, Daniel P. Abrams, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1131-1138.

Research on Semiactive Dampers Makes Headway, Monica Maldonado, ET Aug./Sept. 96, p6-7.

Resistance Factors for High Strength Blind Bolts, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p784-787

Retrofitting a Nuclear Lab, CE Dec. 96, p12,13.

Retrofitting for Flood Protection: A Status Report, French Wetmore, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p278-279.
Safety Evaluation of Current Concrete Slab Formwork

Safety Evaluation of Current Concrete Stab Formwork Practices, Saeed Karshenas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p656-659.Safety of Concrete Members Designed by ACI 318 Chapter 9 and Appendix C Load Combinations, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p218-221

Screening Hospitals and Fire Stations for Seismic Potentials in City of Tehran, F. Nateghi-A, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p349-350.

Seismic Base Isolation Study for a Kentucky Building, John P. Miller and Nathan C. Gould, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p389-

Seismic Behavior of Structures with Flexible Diaphragms, Arturo Tena-Colunga and Daniel P. Abrams, ST Apr. 96,

p439-445.

Seismic Motion Incoherency Effects on Dynamic Response, Dan M. Ghiocel, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-

cea D. Grigoriu, ed., 1996), p624-627.

cea D. Urigoriu, ed., 1990), p024-027.
Seismic Response Assessment of Active-Controlled MultiStory Buildings with Soil-Foundation Influence, F. Y.
Cheng, S. Suthiwong and P. Tian, (Building an International Community of Structural Engineers, S. K. Ghosh,
ed. and Jamshid Mohammadi, ed., 1996), p1155-1163.
A Shoreline Risk Index for Northeasters, David Kriebel,
Robert Delaymed Computer Structural Vision of Computer Structure (Computer Vision).

Robert Dalrymple, Anthony Pratt and Vincent Sakovich,

(Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p251-252.

A Simulator to Study the Effects of Earthquakes on Segmental Paving, John Clifford, Rob Avenall and Don Brown, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p1-2.

Stability of a Steep Slope Supporting a Building, Stephen G. Wright and Frank G. Bryant, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p434-450.

Kotti, cu., 1990, pp.39-40.7. Statistical Aspects of Damages Due to the Great Hanshin Earthquake, Hitoshi Seya and Michio Sugimoto, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Steel Tops Off Chicago Orchestra Hall, CE Dec. 96, p17. Stress Factors Explained, Robert T. Ratay, CE Dec. 96,

Structures Firm Adds Industrial Focus, CE Dec. 96, p22. These Straw Houses Won't Blow Down, CE Nov. 96, p13-

Two Recent Russian Far East Destructive Earthquakes. and A. M. Melentyev, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p235-236.

U.S. Engineers See the Before and After in Kobe a Year

after the Big Earthquake, NE June 96, p8. Value Engineering in the Assessment of Exterior Building Wall Systems, Abdulmohsen Al-Hammad and Moham-

mad A. Hassanain, AE Sept. 96, p115-119. Vulnerability Curves for Buildings in Tropical-Cyclone Regions, John Holmes, (*Probabilistic Mechanics & Struc*tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p78-81.

Wind-Induced Failure of Buildings and Structures Caused by Typhoons in Japan, Yukio Tamura, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p62-65.

71

Wind-Tunnel Studies of Buildings and Structures, ASCE Aerospace Division Task Committee on Wind Tunnel Studies of Buildings and Structures, AS Jan. 96, p19-36.

"'Meigs Among the Ruins': Montgomery C. Meigs and the Construction of the United States Capitol Extension", Dean A. Herrin, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p96-97.

Buildings, hotels

Aerated Concrete Finds First U.S. Commercial Application, CE June 96, p14.

Environmental Assessment of a Site for Civil Construction, S. M. Govorushko, UP Mar. 96, p18-31.

New Hybrid Seismic System Set for Seattle, CE Oct. 96,

Suit Filed Over Alleged ADA Violations, CE Apr. 96, p8.

Buildings, nonresidential

Accessing Atlantic City, Paul Regenscheid, CE Mar. 96, p62-63.

Another Times Square Attraction (Available only in Structures Special Issue), Howard Shin, CE May 96, p12A-

Architect Chooses Slenderwall for Gothic Church, CE July 96, p84.

Deflection Serviceability Design for Wood Members and Systems, D. Rosowsky and K. Fridley, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p452-459

Development of Natural and External Man Induced Design Code Requirements Applicable to Special Facilities, John D. Stevenson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p149-150

Meter Helps Rescuers Keep Level Heads After Roof Collapse, CE Aug. 96, p78.

Plans for Embassy Appear in Show, CE Nov. 96, p23. Postoccupancy Indoor Environmental Quality Evaluation of an Institutional Building, Brian A. Rock, P.E. and Craig A. Hillman, AE Sept. 96, p88-94.

Power of Prayer, Francis A. Hahn, CE Aug. 96, p31. Rock 'N' Roll in Cleveland, Rita Robison, CE Feb. 96,

p48-49. University Arts Building Presents Structural Challenge, CE Nov. 96, p10.

Buildings, office

Civil Engineer Archie Carter Remembered by Campaign Gift from Wife, NE Sept. 96, p14.

Comparison of ASD and LRFD Design of an Office Building Supported by Arches, King-le Chang and Shuang Chen, (Building an International Community of Structur-al Engineers, S. K. Ghosh, ed. and Jamshid Mohamma-

al Engineers, S. N. Ontosi, etc. and Jansson etc., di, ed., 1996), p550-557.

Compendium of Design Office Problems—Volume II, Committee on Design of Steel Building Structures of the Committee on Design of Steel Building Structures on St Committee on Metals, Structural Division, ST Feb. 96,

p116-124.

Dynamic Analysis of Tall Building Using Reduced-Order Continuum Model, Michael J. Chajes, Liyang Zhang and James T. Kirby, ST Nov. 96, p1284-1291.

Gain-Scheduled Adaptive Control of a Hybrid Structure, Moises A. Abraham, James R. Morgan and Alexander G. Parlos, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p260-261. Los Angeles Section Pledges \$25,000 to ASCE's Building

Campaign, NE Aug. 96, p1,4. New Address for the 21st Century, Virginia Fairweather, CE Sept. 96, p42-45.

Proud to Be a Civil Engineer, G. Andrew Reti Makes Major Gift to ASCE Building Campaign, NE Nov. 96, p2.

Buildings, residential

Bad Vibrations, Lawrence W. Gubbe, P.E., CE Aug. 96,

Case of Residential Foundation Failure and Preservation by Grouting, A. Khalilian and F. Amini, CF Nov. 96, p159-

Competition Spurs High-Rise Innovation, CE Aug. 96, p10.

Deflection Serviceability Design for Wood Members and Systems, D. Rosowsky and K. Fridley, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p452-

Design of Vibration Control System for High-Rise Residential Buildings in Consideration of Wind-Induced Re-sponse, Yukio Tamura, Kiyoshi Uesu and Takeshi Ohkuma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1244-1251.

ed., 1990), p1244-1251.
An Expert System for Wind-Resistant Residential Construction, James R. McDonald, Douglas A. Smith and Kishor C. Mehta, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p315-316

An Expert System for Wind-Resistant Residential Conrespect System for Wind-Resistant Resistantial Con-struction, James R. McDonald, Douglas A. Smith and Kishor C. Mehta, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p982-988.

Handrail Graspability, Donald O. Dusenberry and Howard Simpson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p466-469.

Quality Control in Seismic Design and Construction, G. G. Schierle, CF Aug. 96, p90-95. Reliability Analysis of Masonry Walls, A. S. Al-Harthy and D. M. Frangopol, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-

goriu, ed., 1996), p338-341. Residential Construction Failures Caused by Hurricane Andrew, Wimal Suaris and Mohammed S. Khan, CF Feb.

95, p24-33.

Structural Damage due to Hurricane Marilyn in St. Thomas and Culebra, Luis A. Godoy, Roberto Huyke, Ricardo R. Lopez, J. A. Martinez-Cruzado and Raul Zapata, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p135-136.

Structural Evaluation of Existing Buildings for Seismic and Wind Loads, Charles Lindbergh, Maurice R. Harlan and James L. Lafrenz, (Natural Disaster Reduction, Georg W. Housner, ed. and Riley M. Chung, ed., 1997), p317-318

Survey to Estimate Residential Solid Waste Generation, Benjamin F. King and Raymond C. Murphy, EE Oct. 96, p897-901.

Take-Home Toxin Pathway, John Zirschky, EE May 96, p430-436.

Wastewater and Condo Jobs Are Highest Risks, CE Dec. 96, p22.

Water-Price Effect on Residential and Apartment Low-Flow Fixtures, Donald E. Agthe and R. Bruce Billings, WR Jan./Feb. 96, p20-23.

Bulgaria

Site Selection and Evaluation of Geological Disposal of Radioactive Waste: Regulatory Aspects, G. Guentchev and L. Katzarska, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p86-88.

Composite Holds Back Seawater at 13 Fathoms, CE June 96, p87.

Buoyancy

Application of the Model SPECIES to Kaneohe Bay, Oahu, Hawaii, Clifford J. Hearn, (Estuarine and Coastal Mod-eling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p355-366.

1970, p.53-53-00.
Application of Vertical Turbulence Closure Schemes in the Chesapeake Bay Circulation Model — A Comparative Study, Harry V. Wang and Raymond S. Chapman, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p.283-297.
Characteristics of Radial Jets and Mixing under Buoyant Conditions, Zhen-Ren Guo and James J. Sharp, HY Sept.

96, p495-502.

Development of a Pressure Suit Simulation System for Neutral Buoyancy Operations, David L. Akin and Claudia U. Ranniger, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p552Dynamics of Turbidity Current with Reversing Buoyancy, B. E. Hürzeler, J. Imberger and G. N. Ivey, HY May 96,

Mechanisms Involved in Vibratory Destabilization of NAPL Ganglia in Sands, Lakshmi N. Reddi and Hui Wu, EE Dec. 96, p1115-1119.

Natural Ventilation of an Exothermic Waste Repository, George Danko and Steven Saterlie, (High Level Radioac-tive Waste Management, Technical Program Committee, 1996), p426-428.

Thermohaline Buoyancy Effects on Turbulent Flows, R. E. Baddour, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p454-457.

Buovant jets

Effect of Finite Source on Vertical Round Dense Jets, Hua Zhang and Raouf E. Baddour, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p919-922.

General Integral Formulation of Turbulent Buoyant Jets in Cross-Flow, Vincent H. Chu and Joseph H. W. Lee, HY Jan. 96, p27-34.

Bureau of Reclamation

United States Bureau of Reclamation (USBR) Perspectives on the Management Improvement Program As a Vehicle for Integrated Resource Planning, Thomas G. Burbey and Stephen M. Jones, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3490-3495.

Buried pipes

Engineers Outfox Nature to Bury Sewer Line, CE Dec. 96,

Evaluation of a Bedrock DNAPL Pool Site, Daekyoo Hwang, Christopher Reitman and William Richardson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p731-742.

New Materials and Methods for Insitu Rehabilitation of Underground Pipe, Richard D. Blackmore, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1298-

Steel Water Pipe for Exposed and Buried Crossings, George Ruchti and Robert Card, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996), p105-111.

Thermal Impact of a Buried Chilled Gas Pipc⁵me, Lufi Raad, Xioalin Yuan and Dieter Weichert, (Cold Regions Engineering: The Cold Regions Infrastructure—An In-ternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p203-214.

Dynamic Responses of Shallow-Buried Flexible Plates Subjected to Impact Loading, Hung-Liang (Roger) Chen and Shen-En Chen, ST Jan. 96, p55-60.

Dynamic Through-the Soil Interaction of Adjacent Surface or Buried Structures, D. C. Rizos and D. L. Karabalis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Bus lanes

Bus Gate, Pre-Signal and Queue Relocation: The Park View Road Bus Priority Scheme, Daniel D. G. T. Metz-ger, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p81-86.

High-Capacity Bus Systems Based on Transit Centres and Convoying, P. Delle Site and F. Filippi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p1-5.

Bus usage

A Systematic Review of Busways, David R. Martinelli, TE May/June 96, p192-199.

Bus Gate, Pre-Signal and Queue Relocation: The Park View Road Bus Priority Scheme, Daniel D. G. T. Metz-ger, Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p81-86.

Flexible Dynamic Scheduling: A Major Improvement for Public Transport, Antonio Marqués, Manuel Torregrosa, Arturo Camarena, K. Darby-Dowman, Shirley Moody and James Little, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p134-138.

High-Capacity Bus Systems Based on Transit Centres and Convoying. P. Delle Site and F. Filippi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed.,

Local Urban Transit Bus Impact on Pavements, Reed Gib-by, Rebecca Dawson and Peter Sebaaly, TE May/June 96, p215-217.

Methodologies for the Analytic Definition of Uniform Travelling Time-Shifts of an Urban Public Transporta-tion Service, Severo Pace and Graziana Ghio, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p139-143.

A Strategy for Urban Transit Route Selection, Stefano Car-rese and Stefano Gori, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p144-148.

A Systematic Review of Busways, David R. Martinelli, TE May/June 96, p192-199.

Business administration

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Analysis of Alternative Governance Models for Space Business Parks, Charles J. Lauer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p177-185.

Business Plans Live and Grow, Jack E. Reinhard, P.E., ME Nov./Dec. 96, p3-4.

Engineering Firm Accounts for Twice the Business, ME Jan./Feb. 96, p11-13.
Free Checking, ME Jan./Feb. 96, p13.

Government Actions to Enable Space Business Parks, Brent Sherwood, Charles J. Lauer and Joseph P. Hopkins, Jr., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p186-193.

Business cycles

CEOs Warned: Enviro Business Won't Pick Up, ME Jan./ Feb. 96, p11.

Business districts

Accessing Atlantic City, Paul Regenscheid, CE Mar. 96,

p62-63. Lifeline Failure and Disaster Preparedness of Businesses, Melvin J. D'Souza, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p105-106

Byrne, Robert, McGinley, Michael

Writing the Great American (Civil Engineering) Novel, Eric Rasmussen, NE Jan. 96, p1,5.

Analytical Solution for Galloping Oscillations, Mykhaylo I. Kazakevych and Oleksiy H. Vasylenko, EM June 96, p555-558.

Cable Corrosion in Bridges and Other Structures, Frank I Stahl and Christopher Paul Gagnon, 1996, 0-7844-0014-

Statistical Communication of the Communication of the New Millennium, Ken P. Chong, ed., 1996), p400-408.

Field Testing & Evaluating Carbon Cable Prestressed Pile, Srinivasa L. Iyer, Sivakumar Ramabhadran and Brian S.

STINIVASA L. Iyer, Sivakumar Ramabhadran and Brian S. Vulcan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p386-393.
First Post Tensioned Deck Bridge with Composite Cables, Srinivasa L. Iyer and Gopi Sripathy, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p375-385.
Mapping Underground, ET June/July 96, p7,11.
Practical Formulas for Estimation of Cable Tension by Vibration Method, Hiroshi Zui, Tohru Shinke and Yoshio Namita, ST June 96, p651-656. Namita, ST June 96, p651-656.

Preserving Williamsburg's Cables, Maria Grazia Bruschi and Terry L. Koglin, ČE Mar. 96, p36-39.

Rapid Slope Monitoring, William F. Kane and Timothy J. Beck, CE June 96, p56-58.
Safety Analysis of Suspension-Bridge Cables: Williamsburg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

Saved by the Net, CE Sept. 96, p22. Shock Waves in Curved Synthetic Cables, A. A. Tjavaras and M. S. Triantafyllou, EM Apr. 96, p308-315.

Cables, ropes

Aerial Pipeline Crossings - Inspection and Rehabilitation, Thomas Spoth, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p298-305.

Random Vibrations of an Isochronous SDOF Bilinear System with Secondary Structure, Mikhail Dimentberg and Philip Muller, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p958-961.

Mammoth Well Gurgles to Life, CE July 96, pl 1-12.

Wave Overtopping and Pressure Dependent on Crest Elevation, Tsutomu Sakakiyama, (Coastal Dynamics '95, Williams Published Burget B. Zeitler 45, 1006.) liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996).

Calcareous sand

Calcareous Sand, Observed Cyclic Performance of Piles in Calcareous Sand, Riadh H. Al-Douri and Harry G. Poulos, GT Jan. 95, p1-16.

Interactions Between Ozone, AOM, and Particles in Water Treatment, Mysore S. Chandrakanth, Sadasivam Krish-

Treatment, Mysore S. Chandrakanin, Sadasivam Kristnan and Gary L. Amy, EE June 96, 9459-468.
Shrinkage Control in Acrylamide Grouts and Grouted Sands, V. Jasti, C. Vipulanandan, David Magill and Don Mack, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p840-850.

Calcium aluminate

Leaching Characteristics of Solidification System of C3A/ CuO, Cheng-Fang Lin and Hwa-Wey Huang, EE Apr. 96, p323-326.

Calcium carbonate

Low Temperature Solidification of CaCO₃ Using Hydrothermal Hot-Pressing, Kazuyuki Hosoi, Toshiyuki Hashi-da, Hideaki Takahashi, Nakamichi Yamasaki and Takashi Korenaga, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p694-700.

3D Numerical Modeling of Cohesive Sediments, Scott A. Yost and Nikolaos D. Katopodes, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p478-489.

Calibration of a Water Quality Model Using the Influence Coefficient Algorithm, Kyung Soo Jun and Kil Seong Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

Calibration of Sediment Transport Model for the Upper End of Elephant Butte Reservoir, Mohammed A. Samad, Drew C. Baird and Frank P. Montoya, (North American Water and Environment Congress & Destructive Water. Chenchayya Bathala, ed., 1996), p2288-2293.

Calibration of XRF and Laboratory Analyses of Soil, Blair J. McDonald, Janice J. Trautner, Alan G. Seelos and Richard K. Glanzman, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p287-296.

Computational Tools for Subsurface Conceptualization, Earl V. Edris and Eileen Poeter, (North American Water

Earl V. Edris and Eileen Poeter, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2577-2582. Cropping Systems on the Delmarva Peninsula to Reduce Ground Water Contamination, W. F. Ritter and R. W. Scarborough, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, 2008-2004-2004. ed., 1996), p2341-2346.

Eastern San Joaquin County Groundwater Resource Plan-ning Model Development and Calibration, Najmus Sa-quib, Young Yoon and Mike Cornelius, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3509-3514.

Field Determination of Flow through a Pressure Regulating Valve, Jorge A. Garcia and Antonia M. Romero, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3610-3616.

Geometric Calibration of CCD Camera Using Planar Object, Mohammed Taleb Obaidat and Kam W. Wong, SU Aug. 96, p97-113.

Inverse Transient Analysis in Pipe Networks, James A. Liggett and Li-Chung Chen, HY Aug. 94, p934-955.

Microplane Model for Concrete: II: Data Delocalization and Verification, Zdeněk P. Bažant, Yuyin Xiang, Mark D. Adley, Pere C. Prat and Stephen A. Akers, EM Mar. 96, p255-262.

A Model of Meteoroid Atmospheric Entry with Implica-tions for the NEO Hazard and the Impact of Comet Shoemaker-Levy 9 on Jupiter, D. A. Crawford and M. B. Boslough, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p81-87.

On Calibration of the UZ Site-Scale Model of Yucca Mountain, Y. S. Wu, T. M. Bandurraga, C. F. Ahlers, S. Finsterle, G. Chen, C. Haukwa, G. S. Bodvarsson, E. Kwicklis, J. Rousseau and L. Flint, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p73-75.

One-Dimensional Clarifier Model with Sludge Blanket Heights, Randall W. Watts, Spyros A. Svoronos and Ben Koopman, EE Dec. 96, p1094-1100.

A One-Dimensional Cross-Shore Transport Model, J. Nicholson and B. A. O'Connor, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p795-805.

PRIMAVERA: Integrated ATT Strategies for Urban Arterials, F. O. Montgomery, A. D. May, K. A. Fox, F. Biora, V. Mauro and S. Jones, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Serviceability Reliability Analysis of Reinforced Concrete Structures, Mark G. Stewart, ST July 96, p794-803.

Simulation and Observation of ESF Tunnel Effects on Barometric Conditions, Parviz Montazer and Nick Stellava-to, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p92-94.

Simulation of Dune and Nourished Berm Erosion During Storm Surges, Jürgen Newe and Hans-H. Dette, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p850-861.

Sizes and Masses of Satellite Observed Meteoroids, Z. Ceplecha, R. E. Spalding, C. Jacobs and E. Tagliaferri, Cengineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p95-101.
Telerobotic Servicing with Virtual Reality Calibration and

Semi-Automatic Intermittent Model Updates, Won S. Kim and Robert Brown, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p43-49.

The 1994 California State University, Northridge Earth-quake Experience - A Case Study, Gerry Simila, (Natu-ral Disaster Reduction, George W. Housner, ed. and ral Disaster Reduction, George Riley M. Chung, ed., 1997), p45.

Agroforestry as a Method of Salt and Selenium Manage-ment on Irrigated Land in the San Joaquin Valley, Re-becca F. Muñoz and Vashek Cervinka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p400-405.

Anaheim State-of-the-Art Water Treatment Plant years from Conception to Completion, Isaac Pai, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2654-2659.

Analysis of Changes in Airport Ground Access Mode Use, Geoffrey D. Gosling, (Meeting the Challenge: Rebuild-ing Inner City Airports, Prianka Seneviratne, ed., 1996),

Application of Artificial Neural Networks to the Sacramento-San Joaquin Delta, Nicky Sandhu and Ralph Finch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p490-504.

Artificial Recharge Using Inflatable Rubber Dams, Michael R. Markus, Curtis A. Thompson and Matt Ulukaya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p736-741.

The Balanced Indigenous Population (BIP) and Statistical Process Control (SPC) in Marine Pollution Ecology, George Robertson, Mike Mengel, Don Maurer and Irwin Haydock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p1431-1436.

The Birth and Success of Orange County's Hydrology and Hydraulics Technical Group, Chenchayya T. Bathala, (North American Water and Environment Congress & 1909). Destructive Water, Chenchayya Bathala, ed., 1996), p2259-2263.

A California Handbook for Developing an Industrial/ Commercial Storm Water Inspection Program, Jill C. Bicknell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2625-2630.

California Probable Maximum Precipitation, John L. Vogel, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p55-56.

California State Route 91 Variable Toll Express Lanes: Op-erational Aspects and Impact Assessment, Edward C. erational Aspects and Impact Assessment, Edward C. Sullivan and Jerry C. Porter, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p547-551.

California's Response to Drought, Chester V. Bowling and Scott A. Jercich, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p869-874.

California's Visions of Groundwater: a Water Source and a Salt Sink, J. D. Oster, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1936-1941.

Changes in Ground Water-Surface Water Interaction in the Santa Ana River Caused by Independent Water Resources Management Activities, Mark J. Wildermuth, Timothy F. Moore and Traci Stewart, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3300-3313.

Changing Conditions and Water Elections, Charles H. Lawrance, James M. Stubchaer and Jon A. Ahlroth, WR

July/Aug. 94, p458-475.

A Comparison of Seismic Design Using ASD and LRFD, Jeffrey R. Soulages, Jon A. Heintz and James O. Malley, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p542-549.

Conjunctive Water Use Transforms a California Desert, Tom Levy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2672-2678.

Cooperative Approaches in Achieving Additional Water Conservation at Prado Dam, James A. Van Haun, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2352-2353.

Costs of Treatment for Wastewater Reclamation and Disposal: A Preliminary Assessment, Pamela Doughman, Stephen Lyon, Lydia Chiu and Charles Gunnerson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1425-1430.

A Critical Evaluation of Current Approaches to Earthquake Resistant Design, Christopher Rojahn and Andrew Whit-taker, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p331-332.

Debris Basin Design Procedures, J. J. DeVries and T. V. Hromadka, (North American Water and Environm Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1657-1662.

Development of a Regional Atmospheric-Hydrologic well of the Study of Climate Change in California, ZhiQiang Chen, M. Levent Kavvas, Liqin Tan and Su-Tzai Soong, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1093-1098.

Development of the Deterministic Caltrans Seismic Hazard Map of California, Lalliana Mualchin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p297-298.

Development of the San Joaquin County Hydrology Manual, T. V. Hromadka, J. J. DeVries, M. Callahan and J. Pulver, (North American Water and Environment Conress & Destructive Water, Chenchayya Bathala, ed., 1996), p2078-2083.

Developments in Effective Emergency Management: Means of Natural Disaster Cost Reduction, Gerald R. Schimke, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p37-38.

Dredging in the Southern Sacramento-San Joaquin Delta, Mike Mirmazaheri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2636-2641.

Drilled Shaft Load Testing Los Angeles Coliscum, Paul R. Schade and Barry J. Meyer. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p574–581.

Drought in California: When Does It Begin and When Does it End? Maurice Roos, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1081-1086.

Ductile Masonry Construction in California, Hanns U. Baumann, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p93-100.

Eastern San Joaquin County Groundwater Resource Plan-ning Model Development and Calibration, Najmus Saquib, Young Yoon and Mike Cornelius, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3509-3514.

Eastern San Joaquin County Groundwater Resource Plan-ning Alternative Analysis, Najmus Saquib, Alex Chen, Urnesh Lalwani, Mike Cornelius, Jeff Kishel, Cary Nuss and Mark Williamson, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Parbolo 4, 10065-2515 Bathala, ed., 1996), p3515-3520.

Economic Issues Regarding Water Quality Objectives in the Grassland Basin, Dennis Wichelns and Laurie Houston, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p661-666

Effect of Pump-Ins on California Aqueduct Water Quality, B. Auchard, C. Edwards, M. Morris, J. R. Phillips, L. A. Soo and Sun Liang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4004-4009.

Environmental Fluid Mechanics - A Review of Some Recent Results, Robert L. Street, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p30-32.

Evaluation of Modelling Needs for Central Valley Project Operations, John Burke and Donald Frevert, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p806-811.

Experimental Investigation of Cumulative Seismic Damas in Concrete Bridge Piers, Sashi K. Kunnath, Ashraf Eahy, William C. Stone and Andrew W. Taylor, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p381-382.

External Inspection of an Ocean Outfall, Mike Heinz, Don Siverts and Bob Ooten, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2056-2059.

Failure of Tapo Canyon Tailings Dam, Leslie F. Harder, Jr. and Jonathan P. Stewart, CF Aug. 96, p109-114.

Flexible Water Deliveries: One District's Experience, Eric Swenson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p679-684. Flooding from Rain-on-Snow Events in the Sierra Nevada. Richard Kattelmann, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1145-1146. Floodplain analysis of the Lower Santa Margarita River in Camp Pendleton Marine Air Base, California, Ruh-Ming Li, Anna Lantin and Hank Fehlman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1870-1874. Floodplain Management in Los Angeles County, Allen Ma,

(North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p4131-4135.

uidized Bed Denitrification of Secondary Effluent During Wastewater Reclamation in Southern California, Roger w. Babcock, Jr., Kapal Madireddi and Michael K. Stenstrom, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p788-793.

Fostering Reclamation through Cooperation, Cheryl K. Davis, Olujimi O. Yoloye and Mary Grace Pawson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p3696-3700.

Green Light, John Casey, CE May 96, p56-59

Groundwater Recharge with Reclaimed Water Another Step Closer to Potable Reuse, William R. Mills, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Habitat Preservation and Enhancement Associated with San Diego Creek Flood Control Channel Improvement, Yen-Hsu Chen and Ruh-Ming Li, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p530-535.

Implementing a Successful Conjunctive Use Program, William R. Mills, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3074-3078.

Irrigation Methods Used in California: Grower Survey, R. L. Snyder, M. A. Plas and J. I. Grieshop, IR July/Aug.

96, p259-262.

ocal Sponsorship and Floodplain Management, Herb Nakasone, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2350-2351.

Long-term Consequences of Recycling Drainage Water for Irrigation, S. R. Grattan and J. D. Rhoades, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1942-1947.

Los Angeles County Department of Public Works Storm Water Quality Assessments, Los Angeles, California, Novin Rashedi and David Liu, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3993-3997. Los Angeles River as a Water Source for a Freshwater Res-

ervoir, Philip O. Lowe and Novin Rashedi, (North Amer-

ican Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3987-3992. Mapping Groundwater Vulnerability to Nitrate and Pesticide Contamination in the Salinas Valley, Monterey County, California, Weibo Yuan, Joe LeClaire, Ali Diba, Michael Inada and Matt Zidar, (North American Water

micriae: inada and Matt Zidar, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1099-1104. A New Model of California's SWP/CVP Systems, Tariq N. Kadir and Miguel A. Marino, (North American Water and Environment Congress & Destructive Water, Chen-chayya Pathala ed. 1905-1906-20

chayya Bathala, ed., 1996), p3068-3073.

Oil Spills: Prevention, Prediction, and Preparation, Richard
E. Burke, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p770-775.

On Target: The Arrowhead East and West Tunnels, Jim Gallanes, Tobin Tellers and Victor Romero, CE Dec. 96,

Optimum On-Farm Irrigation Efficiency for Sustainable Agriculture, B. Davidoff, E. Craddock, M. Roos and F. Karajeh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p189-194. Performance of San Fernando Dams During 1994 North-ridge Earthquake, J. P. Bardet and C. A. Davis, GT July 96, p554-564

Performance of Two Reservoirs during 1994 Northridge Earthquake, C. A. Davis and J. P. Bardet, GT Aug. 96,

Probabilistic Seismic Hazard and Sensitivity Analysis: A Case Study from Southern California, Mehrdad Mahdyiar, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p299-300.

A Regional Management Plan to Improve Water Quality in the Grassland Basin, Dennis Wichelns, Laurie Houston, Dan Nelson and Joseph McGahan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p655-660.

Risk Factors for Physical Injury During Earthquakes: Lessons from Previous Studies, Robin M. Wagner, Nicholas P. Jones, Gordon S. Smith and Kirsten O. Waller, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p78-79.

Sacramento Valley Conjunctive Use - Future Water Supply for the State Water Project? John R. Fielden, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3062-3067.

Santa Ana River Salt Marsh Restoration: Orange County, California, U.S.A. Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p536-540.

The Secondary Inlet of the Eastside Pipeline Project, Antonio J. Perez and Aida G. Garabetian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p702-707.

Seismic Design Doubles Lateral Resistance (Available only in Structures special issue), James O. Malley, CE Sept. 96, p14A-16A

Seismic Design Issues of Water Pipelines at the Hayward Fault Crossing, Luke Cheng and Lota D. Nuguid, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996).

Source Apportionment Study of Nitrogen Species Meas-ured in Southern California in 1987, Meng-Dawn Cheng, Ning Gao and Philip K. Hopke, EE Mar. 96, p183-190.

Sources and Circulation of Salt in the San Joaquin River Basin, Leslie F. Grober, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p649-654.

Southern San Joaquin Drainage Water Management, Doug-las E. Davis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p382-387.

Stormwater Management for San Joaquin Hills Transporta-tion Corridor, Orange County, California, Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2826-2830.

Strategies for Operation of Orange County Water District Talbert Seawater Intrusion Barrier, California, Kevin McGillicuddy and Timothy Sovich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4078-4083.

Survival of Coliform Microorganisms in Sediments from a Treated Water Reservoir, Heesong Yoon and Joseph S. Devinny, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1626-1631.

Toward A.D. 2000 in the IDNDR, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p285-286.

Training for the Big One - A Proactive Approach, Andrew M. Hui and David R. Putnam, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p43-44.

Two- and Three-Dimensional Hydrodynamic Modeling of the Salton Sea, California, Christopher B. Cook and Ger-ald T. Orlob, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3752-3757.

Urbanization and Hydrologic Consequences in Simi Valley, California, M. Ali Tabidian, James M. Evensen, Jr., Don D. Adelman and Steve Elliott, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3332-3337.

Use of a Technical Clearinghouse during Emergencies, Carl E. Mortensen, Richard K. Eisner, James F. Davis and Michael S. Reichle, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p309-310.

Use of Reclaimed Water in Cooling Towers, William T. Bresnahan and Joseph D. Papia, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2660-2665.

Value Engineering Changes to the Eastside Pipeline, Antonio J. Perez, Francisco Becerra and John Vrsalovich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

Water Quality Improvement Program in Ventura County at Port Hueneme, Lynn M. Takaichi, Sachiko Itagaki and Dennis D. Wolfe, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p412-417.

Wave Climate Variability in Southern California, Richard

Seymour, WW July/Aug. 96, p182-186.

Westlake Farms Demonstration Wetlands A Cooperative Effort, John M. Shelton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p388-393.

"California Border Environment Activities Since Passage of NAFTA", James M. Stubchaer, Bart Christensen and Susan Phillips, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1807-1812.

Air Force Planetary Defense System: Initial Field Test Re-sults, Grant Stokes, Robert Weber, Frank Shelly, David Beatty, Herbert Viggh, Eugene Rork and Byron Hays, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p46-53.

Analysing Road Traffic Movement Patterns by Image Analysis Using an Array of Transputers, X. Zhang, R. E. Allsop and M. R. B. Forshaw, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

An Automatic System for the Definition of the Setting Rules for Speed Diagrams, Francesco Saverio Capaldo and Rodolfo Grossi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p193-197.

Control of Construction Robots using Camera-Space Ma-nipulation, Emilio Gonzalez-Galvan, Michael Seelinger, John-David Yoder, Eric Baumgartner and Steven B. Skaar, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p57-63.

DGT Architecture for Traffic Data Management Systems, Adrián Marín Puigpelat and Jesús López López, (Appli-cations of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p238-242.

A Flexible Machine-Vision System for Traffic Monitoring Applications, James F. Alves, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Geometric Calibration of CCD Camera Using Planar Object, Mohammed Taleb Obaidat and Kam W. Wong, SU

Aug. 96, p97-113.

Image Monitoring on Motorway: Pedestrian Detection Using Image Processing, Salah Bouzar, Roland Glachet, Jean-Marc Blosseville and François Lenoir, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p124-128.

Intrusion Detection by Linear Active Cameras, J.-P. DeParis, L. Duvieubourg and J.-G. Postaire, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p114-118.

Results from the PLEIADES Automatic Traffic Surveillance System in the Kent Sector of the Paris-London Corridor, Neil Hoose and Nigel Cox, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p233-237.

Adapting Water Resources of the Canadian Prairies under the impact of Climatic Warming, Thian Yew Gan, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2163-2168.

Application of GIS in Site Selection for Nuclear Waste Dis-posal Facility, Grant Sheng, Isaac N. Luginaah and John Sorrell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p95-97.

Biosphere Model for Assessing Doses from Nuclear Waste Disposal, Marsha I. Sheppard, R. Zach, S. C. Sheppard, B. D. Amiro, G. A. Bird, J. A. K. Reid and J. G. Szekely, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p240-243.

Controlled Drill & Blast Excavation at AECL's Under-ground Research Laboratory, G. W. Kuzyk, D. P. Onagi and P. M. Thompson, (*High Level Radioactive Waste Management*, Technical Program Committee, 1996),

Evaluation of Reliability of an Existing Concrete Bridge: A Case Study, Andrew Scanlon, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p522-525

Field Observations of Instrumented Highway Sections with Different Frost Protections, J.-M. Konrad, G. Dore and M. Roy, (Cold Regions Engineering: The Cold Region Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p652-663.

The Great Great Lakes, Murray Clamen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2300-2305.

History of Coastal Engineering in Canada, J. William Kamphuis, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p89-102.

Identification of a General Linear Model for Reservoir Inflows Forecasting, J. Ribeiro, J. Rousselle, J. D. Salas and H. Ta Trung, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2354-2359.

Impact of Commuter-Rail Services in Toronto Region, Sarah Stewart Wells and Bruce G. Hutchinson, TE July/

Aug. 96, p270-275.

Impacts of NAFTA on Environmental Engineering, Mark W. Killgore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2306-2311.

Innovative Design/Build Approach: Ambassador Bridge Project, Jay B. Shah, ME July/Aug. 96, p58-61.

Managing Great Lakes Water Levels: An International Partnership, Anthony J. Eberhardt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1317-1322.

Mapping History, Rebecca Balcom, CE Oct. 96, p54-56. Mechanistic-Probabilistic Vehicle Operating Cost Model, Curtis F. Berthelot, Gordon A. Sparks, Terry Blomme, Lyle Kajner and Mark Nickeson, TE Sept/Oct. 96, p337-341.

Microtunneling Database for the USA and Canada From 1984 to 1995, Alan Atalah and Paul Hadala, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p332-339.

NAFTA Pact May Change as U.S. Engineers Mull Licens-ing Details, NE May 96, p16.

Overview of the ISS Large Manipulator Operations, Catherine D. Bole, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p497Permafrost Formation and Aggradation in a 23-m High Homogeneous Dyke: A Case-Study, J.-M. Konrad and R. Ladet, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p700-711.

A Process Unit Based Approach to Media-Integrated Waste Minimization: A Paint Manufacturing Case Study, Rafal D. Walicki, Isobel W. Heathcote and Gordon Hayward, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1632-1637.

Recent Innovation for Concrete Highway Bridges, S. H. Rizkalla and A. A. Mufti, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p1063-1071.

Road and Airfield Development in the Subarctic and Arctic, Alaska and Northwest Canada, James W. Rooney and Ted S. Vinson, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p1-22.

The Status of Cold Regions Research, Thomas C. Kinney, Robert Carlson and Howard Thomas, (Cold Regions En-gineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p196-202.

Strengthening Requirements of Old, Timber Warren Truss-es, H. C. Foo and G. Akhras, CF Aug. 96, p127-134.

Structural Fire Resistance - Past, Present and Future, T. T. Lie and V. K. R. Kodur, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p345-351.

U.S.-Canadian Water Sharing, Kris G. Kauffman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3423-3428.

New water, Chenchayya Batnaia, ed., 1996), p342-3-3428. Validation of the Simplified Audit Process at a Roofing Tar Paper Speciality Product Manufacturer - Part 2, Pierre Sylvestre, Ronald Zaloum, Chantal Goyette and Claude Audet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p93-98.

Canal Design by Dynamic Programming, Goran Radovic, IR Jan./Feb. 96, p59-63.

Normal-Depth Equations for Irrigation Canals, Prabhata K. Swamee, IR Sept./Oct. 94, p942-948.

Big Tires Stabilize a Canal Bed, CE Jan. 96, p22,24.

Canal Control and Automation for the Central District Sys-tem, Michael A. Drain and Eric R. Hixson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2384-2389.

Canal Crossing of High-Pressure Pipelines, Hiroya Kishi-no, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p434-440.

Cellular Confinement System Helps Hold Slope, CE Dec. 96, p87.

Chandler Canal Fish Screen Facilities, Arthur Glickman and Rick Christensen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p887-892.

Characterization of Canal Operations under Ideal Anticipa-tory Control, E. Bautista, A. J. Clemmens and T. S. Strelkoff, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Coordination of Empirical and Rational Alluvial Canal For-mulas, Shrikrishna V. Chitale, HY June 96, p357-359.

Design of a Floodplain Road Crossing Using Two Dimensional Modeling, Nathan R. South, Andrzej J. Kosicki and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4300-4305.

Design of Global Control Algorithm for Irrigation Canals, J. Mohan Reddy, HY Sept. 96, p503-511.

Dynamic Analysis of Multi-Pool Irrigation Canal, V. M. Ruiz-C., Jorge Castillo and B. de León-M., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p818-823.

Evaluation of System Constant Volume Control, Zihui Lin and David H. Manz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4353-4358.

Evaluation of System Downstream Control, Zihui Lin and David H. Manz, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p1893-1898.

Full-Scale Test Studies on Prevention of Frost Damage for Retaining Wall Reinforced with Geotextile, Lun Chen, Guangxin Li and Wenfeng Huang, (Cold Regions Engineering: The Cold Regions Infrastructure-An Interne tional Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p724-735.

Normal-Depth Equations for Irrigation Canals, Prabhata K.

Swamee, IR Sept./Oct. 94, p942-948.

Portable Flumes with Adjustable Throats, John Replogle and Brian Wahlin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2409-2414.

Precast Concrete Low-Head Pressure Pipe Significant in Historic Irrigation Canal Rehab, John J. Meyer and Steven K. Wagner, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p265-274.

Saved by the Net, CE Sept. 96, p22.

Seepage from Surface Canals by Boundary Element Method, Alexander C. Demetracopoulos and Christos Had-jitheodorou, IR Jan./Feb. 96, p40-48.

Simulation of Interaction between Canal Regulation and Groundwater, Hsin-Chi J. Lin and Hwai-Ping Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1587-1591.

System Downstream Control for On-Demand Irrigation Canals, Zihui Lin and David H. Manz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p824-829.

Use of Geophysics to Aid in Mapping Basalts Relevant to Ground Water Flow and a Landslide Hazard at Hager-man Fossil Beds National Monument, P. Michaels, L. Growney and P. Donaldson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p14-26.

Venice, Italy: an Integrated Approach to Solve the Environ-mental Problems of Its Unique Collection System, Federico G. A. Vagliasindi, Vincenzo Belgiorno, Rodolfo M. A. Napoli and Giorgio Conti, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1801-1806.

Cancer

Crystal Growth in Microgravity, Grant Meyer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1295-1297.

Probabilistic Approach for Cancer Risk Assessment, Paul S. Watkins, Timothy L. Jacobs, Rory B. Conolly and Warren T. Piver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2366-2371.

Common Causes of Retaining-Wall Distress: Case Study, Edred T. Marsh and Richard K. Walsh, CF Feb. 96,

Deflection of Beams with Integral Elastic Supports, Karl K. Stevens, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p343-346.

Dynamic Behavior of Continuous and Cantilever Thin-Walled Box Girder Bridges, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, BE May 96, p67-75.

Huang and Mohsen Shahawy, BE May 96, p67-75.
Dynamic Response of Cantilever Retaining Walls, A. S. Veletsos and A. H. Younan, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p19-20.
Dynamic Response of Flexible Retaining Walls, A. H. Younan and A. S. Veletsos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p310-313.
In-Situ Dynamic Response of Cantilever Walls, Sreenivas Alampalli and Ahmed-W. Elgamal, (Analysis and Design of Retaining Structures Analyst Eersthwakes, Shamshor

of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p57-76.

Influence of Support Stiffness for Cantilever Beams Sub-jected to Modulated Filtered White Noise, Gongkang Fu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p689-692.

On the Shoulders of Giants-Part Three, Francis E. Griggs,

Jr., El Apr. 96, p55-64.

Roosevelt Bridge Spans Florida River, CE Jan. 96, p10.

Brittle-Ductile Transition in Porous Rocks by Cap Model, Vlado A. Lubarda, Sreten Mastilovic and Jaroslaw Knap, EM July 96, p633-642.

Anchorage Behavior of Shaft Anchors in Alluvial Soil, H. J. Liao, C. D. Ou and S. C. Shu, GT July 96, p526-533.

Capacity and Stiffness of Bridge Abutments During Earth-quakes, Rakesh K. Goel, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p.239-240.

Capacity Predictions for Full Scale Transmission Line Test Foundations, Robert E. Kondziolka and Peter M. Kandaris, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p695-

Determining Rehabilitated Sewer Flow Capacity, ASCE Task Committee on Flow Characteristics of Pipeline In-frastructure Committee of the Pipeline Division, TE

May/June 96, p258-261.

Barsoom, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p97-104.

Driven Pile Capacities in Warm Permafrost in Komi Re-public, Russia, Steven R. Thompson and Rupert G. Tart, Jr., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p254-265.

High-Capacity Bus Systems Based on Transit Centres and Convoying, P. Delle Site and F. Filippi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed.,

1996), p1-5.

Model Uncertainty in Anchorage Design for Anchored Bulkheads, Amurag Varde, Thomas C. Sandford and Habib J. Dagher, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p727-745.

Pigging Submarine Outfalls, Jonathan A. French, EE May 95, p396-401.

Practitioners' Forum, Georges Jacquemart, P.E., TE Nov./ Dec. 96, p411-413.

The Management and Policies of the BECC, April Lander, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1813-1818.

Capital improvement

Development and Implementation of a Capital Improve-ment Program for a Small Water Utility, Benito Avalos, Jorge Garcia, Louis Grijalva and Antonia M. Romero, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3236-3240.

Seawater Intrusion Solutions for the Salinas Valley, Howard Lauran L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p4312-4316.

Storm Drainage GIS, Modeling, and Master Planning for the City of Berkeley, H. Yee, J. Egeberg and D. Akagi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4239-4244.

Tilt of Stationary Capsule in Pipe, Chih-Chiang Cheng and Henry Liu, HY Feb. 96, p90-96.

Unsteady Flow in Hydraulic Capsule Pipeline, C. W. Lenau and M. M. El-Bayya, EM Dec. 96, p1168-1173.

Carbon

Alternative to CBOD; Based Load Allocation Studies on Low-Dilution-Ratio Streams, Gary G. Rott, EE July 96, p669-671.

Carbon Bags Help Trash Burn Cleaner, CE Jan. 96, p77.

Copper Precipitation Hardened, High Strength, Weldable Steel, Semyon Vaynman, Morris E. Fine, Gautam Ghosh and Shrikant P. Bhat, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1551-1560.

Effect of Biodegradable Carbon on Biological Phosphorus Removal, Syed R. Qasim, Walter Chiang, Guang Zhu and Rex Miller, EE Sept. 96, p875-878.

Effect of Sheet Bonding Condition on Concrete Members Having Externally Bonded Carbon Fiber Sheet, Hiroyuki Yoshizawa, Toru Myojo, Masayoshi Okoshi, Mutuki Mizukoshi and Howard S. Kliger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1608-1616.

Electrical Tagging of Fiber Reinforced Cement Composites, Jong Seh Lee and Gordon Batson, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p887-896.

Externally Bonded Carbon Fiber for Strengthening Concrete, Jay Thomas, Thomas Kline, Peter Emmons and Howard Kliger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p924-931.

Fatigue Strength of Externally Reinforced Concrete Beams, L. C. Muszynski and R. L. Sierakowski, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p648-656

Field Testing & Evaluating Carbon Cable Prestressed Pile, Srinivasa L. Iyer, Sivakumar Ramabhadran and Brian S. Vulcan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p386-393.

First Post Tensioned Deck Bridge with Composite Cables, Srinivasa L. Iyer and Gopi Sripathy. (Materials for the New Millennium, Ken P. Chong, ed., 1996), p375-385.

Grouted Anchors for Carbon FRP Tendon, Antonio Nanni and Jay Thomas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p527-534.

Inhibiting Action of Calcium Nitrite on Carbon Steel Rebars, M. Ramasubramanian, B. N. Popov and R. E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1007-1016.

Pitch-Based Carbon Fibre Reinforced Concretes, A. M. Brandt and L. Kucharska, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p271-280.

Strengthening Steel Composite Beams with CFRP Lam-inates, Rajan Sen, Larry Liby, Gray Mullins and Ken Spillett, (Materials for the New Millennium, Ken P. Chong, ed., 1996), pl601-1607.

Stress-Strain Behavior of High-Performance 70W Bridge Steel, E. M. Focht and S. J. Manganello, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1540-

Studies on Galvanized Carbon Steel in Ca(OH)₂ Solutions, Bala S. Haran, Branko N. Popov and Ralph E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p997-1006.

Carbon dioxide

Carbon Reduction of Iron Oxides in Lunar Simulants, Scott Hayes, Heather Hamlett and Roberta Bustin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p734-740.

Climate Change: What the North American Water Engineer Should Know, Maurice Roos, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1471-1476.

CO₂ and Temperature Effects on Evapotranspiration and Irrigated Agriculture, Jorge A. Ramírez and Bryce Finnerty, IR May/June 96, p155-163.

Corrosion Control of Drinking Water Using Tray Aerators, Enrique J. La Motta and Srinivas Chinthakuntla, EE July 96, p640-648.

Design Decision Making for Infrastructures under the Reesign Decision Making for infrastructures under the re-striction of the Energy Consumption, Minoru Matsuo, Yusuke Honjo and Ikuo Sugiyama, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p376-379.

Development of a CO2-Solidification Method for Recycling Concrete Wastes, Toshiyuki Hashida, Satoshi Teramura, J. C. Ha and Hideaki Takahashi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p674-683.

The Effect of Climatic Change on Hydrologic Variables, Jason R. Westmacott and Donald H. Burn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1465-1470.

Effect of Temperature and Salt Contamination on Carbonation of Cements, Mohammed Maslehuddin, C. L. Page and Rasheeduzzafar, MT May 96, p63-69.

Forcing Function and Climate Change, Bijaya P. Shrestha, Lucien Duckstein and Eugene Z. Stakhiv, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2151-2156.

Pulling Propellants Out of Thin Air: Demonstration of an End-to-End Mars In-Situ Propellant Production Unit, John F. Connolly and Robert M. Zubrin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p706-716.

Sea-Level Rise Predicted, CE Jan. 96, p8.

Terraforming Mars, Felix Zamora, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1311-1314.

Automobile Emissions Under Arctic Conditions Using Unleaded and 10 Percent Ethanol Admixed Gasolines, R. J. Andres, J. D. Goldbach and F. L. Williams, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p792-803.

Carbon Reduction of Iron Oxides in Lunar Simulants, Scott Hayes, Heather Hamlett and Roberta Bustin, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p734-740.

Carbonation

Effect of Temperature and Salt Contamination on Carbonation of Cements, Mohammed Maslehuddin, C. L. Page and Rasheeduzzafar, MT May 96, p63-69.

Carcinogens

Management of Contaminated Groundwater Using Natural tanagement of Contaminated Oronnawater Using Faultan Attenuation, David F. Laney, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2011-2020.

Probabilistic Approach for Cancer Risk Assessment, Paul S. Watkins, Timothy L. Jacobs, Rory B. Conolly and Warren T. Piver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2366-2371.

Risk Variability Due to Uniform Soil Remediation Goals, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE July 96, p612-621.

Careers

68,000 New Jobs Projected for CEs over Next 10 Years, NE May 96, p5.

ASCE Members Get Involved at the Local Level as They Seek to Inspire Civil Engineers of the Future, NE Apr.

Engineers Get Ready for 1996 Engineers Week, NE Jan. 96,

Johnson Sparkplugs Chicago's Engineers Week Events, CE May 96, p70.

On TRAC with Tate Jackson, William E. Kelly, NE Feb.

96, p14.

Promote People Skills, Jim Krug, ME Sept./Oct. 96, pl. Rain Making: The Professional's Guide to Attracting New Clients by Ford Harding, Judith Nitsch, P.E., ME Nov./ Dec. 96, p6-7.

Retaining Generation X Employees, Joan Lloyd, ME Nov./ Dec. 96, p5-6.

Room for Engineers in Corps? Angelo F. Coniglio, CE Apr. 96, p32,36

Room for Nonengineers in the Corps of Engineers, John Zirschky, CE Jan. 96, p6. Substitute Goals, James C. Porter, ME Jan./Feb. 96, p8-9.

What's 'NEW' for 1996?, CE Jan. 96, p69.

Who Do ASCE Members Work For? Jimmie Hinze, SC Aug. 96, p74-75.

Cargo

Dynamic Influence of Flexible Payloads on Space Shuttle RMS, Walter L. Peart, AS Apr. 96, p39-44.

International Space Station Payload Accommodations, Daniel W. Hartman, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p480-489.

Pathfinder: Commercial Payload Service on the Russian Mir Space Station. Brent Sherwood and Thomas J. Walmsley, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl 70-176.

Cargo handling

Analysis of Rules and Regulations for Metal Coil Truck Transport, W. Bradford Cross, Richard Romick-Allen, Nader Panahshahi and Steven J. Hanna, TE Nov/Dec. 96, p475-480.

Decatur Airport Off-Peak Construction Allows Airport to Continue Operations, Charles A. Hagloch, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p115-127.

Cargo transportation

Analysis of Rules and Regulations for Metal Coil Truck Transport, W. Bradford Cross, Richard Romick-Allen, Nader Panahshahi and Steven J. Hanna, TE Nov/Dec. 96, p475-480.

Caribbean

The Caribbean Disaster Mitigation Project: Introducing Disaster Mitigation in Highly Vulnerable Small Islands, Keith B. Ford and Jan C. Vermeiren, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p29-30.

Effects of Hurricane Luis on Structures in Antigua, Tony Gibbs, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p295-296.

Geo-data System for Landslide Hazard Assessment, Cassandra T. Rogers, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p70-

Carter, Archie N.

Civil Engineer Archie Carter Remembered by Campaign Gift from Wife, NE Sept. 96, p14.

The Largest Water Reservoirs of Russia in Flood Control, S. E. Bednarouk, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2538.

Case reports
The 1994 California State University, Northridge Earthquake Experience - A Case Study, Gerry Simila, (Nanural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p45.

Addressing Non-Aqueous Phase Liquids and Dissolved Plumes at Two Adjacent Superfund Sites with Commingled Groundwater Contamination, Jeffrey A. Dhont and Udai P. Singh, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p812-823.

Analysis of the Gasoline Spill at East Patchogue, New York, James W. Weaver, Joseph E. Haas and John T. Wilson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p707-718.

Application of Ground-Penetrating Radar to a Site Investi-gation Involving Shallow Faults, Christopher L. Liner and Jeffrey L. Liner, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p101-111.

Application of Regime Theory in Practice: A Case Study, James A. Turpin and Martin J. Teal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1663-1668.

The Application of Time Domain Electromagnetics to a Regionai Groundwater Investigation in Western Washing-ton, Rory Retzlaff and Robert H. Anderson, (Case Histo-ries of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p27-41. gional Groundwater Investigation in Western WashingArchitectural Anatomy: Interdisciplinary Multimedia Tools for Building Analysis and Design, Anthony Webster, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p753-759.

ASR Case Study - City of Salem, Oregon, Joe Glicker and Paul Eckley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2679-2684.

Beach and Nearshore Profile Evolution at Different Tempo ral Scales: The Case of Duck, North Carolina, U.S.A. Michele Capobianco, Rina Basana and Riccardo Pesaresi, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p629-638.

Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Geotechnical Special Publication No. 62, Paul Michaels, ed. and Richard Woods, ed., 1996, 0-

7844-0208-6, 128pp.

Case History - Outfall Pipeline Failure - Burlington, VT, Nelson L. Thibault and Eugene J. Forbes, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996),

- Case History of a Lined Wastewater Treatment Lagoon Failure, Kelly S. Merrill and Matt Stephl, (Cold Regions Engineering: The Cold Regions Infrastructure—An In-ternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p518-532.
- Case History of Swimming Pool Foundation Failure, Bernard H. Hertlein, CF Feb. 96, p33-34.
- Common Causes of Retaining-Wall Distress: Case Study, Edred T. Marsh and Richard K. Walsh, CF Feb. 96,
- A Comparison of Seismic Design Using ASD and LRFD, Jeffrey R. Soulages, Jon A. Heintz and James O. Malley, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p542-549.
- Comparison of Worst-Case and Probabilistic Approaches to Ocean Outfall Mixing Zone Analysis, Hening Huang and Robert E. Fergen, (North American Water and Environment Congress & Destructive Water, Chenchavya Bathala, ed., 1996), p3674-3679.
- Constructability in Public Sector, G. E. Gibson, Jr., C. I. McGinnis, W. S. Flanigan and J. E. Wood, CO Sept. 96, p274-280.
- The Danger to Satellites from Meteor Storms—A Case Study of the Leonids, P. Brown, J. Jones and M. Beech, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p13-19.
- Defects in Soft Clays: A Challenge to Site Characterization for Stability Analysis, G. A. Leonards and R. J. Deschamps, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996).
- Deriving a General Operating Policy for Reservoirs Using Neural Network, H. Raman and V. Chandramouli, WR Sept./Oct. 96, p342-347
- Design and Construction for Asphalt Pavements in Permafrost Areas: Case Study of Qinghai-Tibet Highway, Nin-gyuan Li and Ralph Haas, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p866-877.
- Diagnosis and Treatment of Structures in Distress by R. N. Raikar, Kenneth L. Carper, CF Feb. 96, p42.
- Earthquake Fault Rupture Propagation Through Soil, Jonathan D. Bray, Raymond B. Seed, Lloyd S. Cluff and H. Bolton Seed, GT Mar. 94, p543-561.
- Editor's Note, Kenneth L. Carper, CF May 96, p45.
- Effects of Approach Flow Conditions on Pump Sump De-sign, Gustavo Arboleda and Mutasem El-Fadel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p376-381.
- Effects of Approach Flow Conditions on Pump Sump De-sign, Gustavo Arboleda and Mutasem El-Fadel, HY Sept. 96, p489-494.

Establishing the Relative Process Risks for Chlorination and Ozonation - A Case Study Illustrates the Need to Evaluate the Process Hazard Implications of a Change in Drinking Water Disinfection Process due to D/DBP Regulations, Paul G. Beswick, Craig E. Brackbill and L. Donald Duke, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1021-1026.

Clase Studies in Developing Countries, Philip Roark, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996).

Evaluation of Potential Impacts to Endangered Species That Use Wetland Areas: A Case Study, Andrea Rosenthal, David Reutter, Roger Menendez and Barbara Michael, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2033-2038.

Evaluation of Reliability of an Existing Concrete Bridge: A

Evaluation of Reliability of an Existing Conferce Bridge; A Case Study, Andrew Scanlon, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p522-525.

Expert System for Water Treatment Plant Operation, Xin X. Zhu and Angus R. Simpson, EE Sept. 96, p822-829.

Factors Affecting the Selection of a Crossing Method, David E. Heinster, (Pacifica Conscience, 1006). David E. Hairston, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p214-221.

F. Catalano, ed., 1996), p214-221.
Failures in Civil Engineering: Structural, Foundation and Geoenvironmental Case Studies by Robin Shepherd and J. David Frost, Kenneth L. Carper, CF May 96, p87.
Geophysical Characterization of Florida Limestone—An Investigative Case History, D. S. Saxena, R. M. Dickinson and A. Saxena, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p73-85.
Georgebrical Study and Remediation Design for Coul Mine.

Geotechnical Study and Remediation Design for Coal Mine Spoil Instability in Discontinuous Permafrost—A Case Study, Andrew J. Hardy, Patrick G. Corser and Daniel C. Graham, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p712-723.

Ground and Airborne Magnetic and Electromagnetic Surveys at a Hazardous Waste Site, Jonathan E. Nyquist, Les P. Beard and Don Johnson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), pl-

Ground Motion Estimation and Nonlinear Seismic Analysis, David B. McCallen and Lawrence J. Hutchings, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p416-427.

How Strategies Happen: A Decision-Making Framework, Karen Lee Hansen and C. B. Tatum, ME Jan./Feb. 96,

p40-48.

p40-48.
In Situ Groundwater Treatment by Granular Zero-Valent Iron Design, Construction and Operation of an In Situ Treatment Wall, Frank S. Szerdy, John D. Gallinatti, Scott D. Warner, Carol L. Yamane, Deborah A. Hankins and John L. Vogan, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p245-256.
Incomparating Uncertainty, Objective, and Subjective Data

Incorporating Uncertainty, Objective, and Subjective Data in Geologic Site Characterization, Patrick G. Kinnicutt and Herbert H. Einstein, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p104-118.

Innovative Methods for Informing the Public—A Case
Study, Stan Reid, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p507-509.

Insect Robots: Case Studies for Teaching Students About Design of Computer-Aided Experimentation, James Moller and Osama Ettouney, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p310-316.

Interaction Between Nearshore Natural Processes on Macro-Tidal Beaches. Case Study Along the Capricorn Coast, Australia, Jerzy Piorewicz and Paul Boswood, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p489-500.

Liability to Asset: Beneficial Reuse of Stabilized Contami-Laurilly to Asset: Benenicial Reuse of Stabilized Contami-nated Soils, Michael F. Conway, (Engineered Contami-nated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p47-56.

Management Framework for Large-Scale Water Problems, Neil S. Grigg, WR July/Aug. 96, p296-300.

Management of the Hanford Engineer Works in World War II. Harry Thayer, 1996, 0-7844-0160-8, 225pp.

Modeling 3D Free Surface Flow in Compound Channels: A

II. Harry Hayer, 1990, 67-84-6700-8, 225p.

Modeling 3D Free Surface Flow in Compound Channels: A
Validation Case Study, Fraincisco J. M. Simões and Sam
S.-Y. Wang, (North American Water and Environment
Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2719-2724.

Monitoring Prestressed Structures, Jack F. Elliott, CE July

96, p61-63.

Johnson P, Delmorn's Failure and Repair - Case Studies, T. S. Thandavamoorthy and A. R. Santhakumar, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p181-182.

Optimal Regional Scheduling of Solid Waste Systems. II: Model Solutions, Abhijit R. Modak and Jess W. Everett, EE Sept. 96, p793-799.

Pavement Evaluation with Seismic Tomographic Imaging, S. Nazarian, D. Yuan, D. Doser and K. Dhanasekharan, Nazarian, D. Tuan, D. Doser and R. Daniasekharan, (Case Histories of Geophysics Applied to Civil Engineer-ing and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p56-72.
 PC-Based Remote Monitoring of an Instrumented Struc-ture: Case Study and Lessons Learned, R. J. Helgeson, S. Chen and K. Kuhl, (Analysis and Computation, Franklin

Y. Cheng, ed., 1996), p310-321.

Y. Cheng, ed., 1996), p310-321.
 Performance Evaluation of Overland Flow Wastewater Treatment System under Winter and Summer Condi-tions, R. Y. Surampalli, P.E., S. C. Chou and S. K. Ban-erji, P.E., CR Dec. 96, p163-177.
 Performance of Hot Mix Asphalt Using Coarse and Skip Graded Aggregates, Moses Karakouzian, Michael R. Dunning, Robert L. Dunning and Jerold D. Stegeman, MT May 96, p101-107.
 Performance of San Fernando Dams During 1994 North-ridge Earthquake, J. P. Bardet and C. A. Davis, GT July 96, p554-564.
 Permafrost Formation and Aggradation in a 23-m High Ho-Permafrost Formation and Aggradation in a 23-m High Ho-

Permafrost Formation and Aggradation in a 23-m High Ho-mogeneous Dyke: A Case-Study, J.-M. Konrad and R. Ladet, (Cold Regions Engineering: The Cold Regions In-frastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p700-711.

Pipe Network Analysis and Design in Developing Regions. Case Study: Novokuznetsk, Siberia, Dan Gessler, Johannes Gessler and Randy Hoffman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1255-1260. Please Include Site Plans, Jon Kraft, CE Feb. 96, p31.

Practical Methods for Managing Uncertainties for Geosynthetic Clay Liners, David E. Daniel and Robert B. Gilbert, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1331-

Preliminary Overview of Radiological Data Validation: Problems Found in Laboratory Data, LeRoy F. Wenrick, (High Level Radioactive Waste Management, Technical

Program Committee, 1996), p312-314, remaining Program Committee, 1996), p312-314, remaining Deterioration of Concrete Structures—Case Study, Ishitaque Ahmed and M. Zakaria Ahmed, CF Nov. 96, p164-170.

Process Unit Based Approach to Media-Integrated Waste Minimization: A Paint Manufacturing Case Study, Rafal D. Walicki, Isobel W. Heathcote and Gordon Hayward, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1632-1637.

Public Policy and Building Safety, Marjorie Greene and Chris D. Poland, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p155-

156.

Quail Creek: A Case Study of Restoration Using Native Materials, James W. Gracie, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2891-2896.

San Diego County Water Authority's Emergency Storage Project: A Major Planning Achievement, Ken Steele, Lee Judd, Richard Pyle and Uli Kappus, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2815-2819.

Seismic Rehabilitation of Earth Dams, W. F. Marcuson, III, P. F. Hadala and R. H. Ledbetter, GT Jan. 96, p7-20.

Seven Guidelines for Managing Uncertainty in Geoenviron-mental Design, Robert B. Gilbert and Travis C. McGrath, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p774-796.

Shake, Rattle and Map, Stephanie A. King and Anne S.

Kiremidjian, CE June 96, p50-52.

Surficial Stability of Compacted Clay: Case Study, Robert W. Day, GT Nov. 94, p1980-1990.

A Technique for the Direct Measurement of the Aerated Zone Resulting from Field Air Sparging Operations, Lee D. Morton, Ron W. Falta, David S. Henderson and Chris D. Motton, (Non-Aqueous Phase Liquids (NAPLs) in Sub-surface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p127-138.

Technology Standards and Deployment of Transportation Technologies: A Comparative Case Study of Electronic Toll and Traffic Management (ETTM) in the United States and France, Jonathan L. Gifford and Jean-Luc Ygnace, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p535-541.

Training as a Potential Profit Center, Matt O'Connell, ME Sept/Oct. 96, p25-27.

Tunneling Progress on the Yucca Mountain Project, William H. Hansmire and Richard J. Munzer, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p385-387

Uncertainties in Characterising Soil Properties, Suzanne Lacasse and Farrokh Nadim, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p49-75.

Watershed Modeling and Flood Routing for Safety Assess-ment of an Existing Dam, C. F. Lee, WR Sept./Oct. 96, p334-341.

"Acts of God": The Symbolic and Technical Significance of Foundation Failures, Jane Morley, CF Feb. 96, p23-

Caspian Sea

The Caspian Sea Transgression (Environmental Medical Aspect), L. I. Elpiner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3498.

Cast-Iron-Column Strength in Renovation Design, Donald Friedman, CF Aug. 95, p220-230.

"Ductile Iron Microtunneling Pipe, Non-Traditional Instal-lation Applications", Ralph R. Carpenter and Randall C. Conner, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p312-321.

Cast-in-place structures

Defect Detection (Available only in Geo/Environmental Special Issue), Tracy Brettmann and Larry Olson, CE July 96, p2A-6A.

Telling Florida's Water Story, David W. Landis and Blair K. Hanuschak, CE Feb. 96, p40-43.

Debris Flow Events at Mountainous Creeks near Santiago, Chile- Hydrologic Analysis, X. Vargas and P. Lara, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Design of Runoff Recycling Irrigation System for Rice Cultivation, R. C. Srivastava, IR Nov/Dec. 96, p331-335.

Diffusion Wave Modeling of Distributed Catchment Dy-namics, Stefano Orlandini and Renzo Rosso, HE July 96, p103-113.

Flash Floods and Their Warning in Vietnam, Cao Dang Du, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Flooding from Rain-on-Snow Events in the Sierra Nevada Richard Kattelmann, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1145-1146.

Investigation of Some Heavy Flood Hazards in Small Al-pine Catchments in Austria, A. Watzinger, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p715.

Simulation of Catchment Response Using RC Network, M. J. Abedini, W. T. Dickinson and R. P. Rudra, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3381-3386. Temporal Variation of Sediment Yield, U. C. Kothyari, A.

K. Tiwari and Ranvir Singh, HE Oct. 96, p169-176

Cathodic protection

Currents Stop Seawall Corrosion, CE May 96, p10-11.

Evaluation of the Performance of Sprayed Zinc Anodes for Protecting Reinforcing Bars, John S. Tinnea and R. P. Brown, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1531-1539.

Impacts of Cathodic Protection on Waste Package Performance, Joel E. Atkins, Joon H. Lee and Robert W. Andrews, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p459-461.

New Alloy Prevents Corrosion, ET Oct./Nov. 96, p1,9. New Sacrificial Anode for Cathodic Protection of Reinforced Concrete Structures, Miki Funahashi and Steven F. Daily, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1256-1265.

Repair of Main Pass 69 Waterflood Platform, G. E. Sgouros, T. E. Webster and N. M. Hennegan, WW July/

Aug. 96, p165-171.

Thermal-Sprayed Zinc Anodes for Cathodic Protection of Reinforced Concrete Structures, B. S. Covino, Jr., S. D. Cramer, G. R. Holcomb, S. J. Bullard, G. E. McGill and C. B. Cryer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1512-1521.

Cation exchange

Surface Thermodynamics of an Organoclay, Muniram Budhu and Rossman Giese, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p17-30.

Causeways

Hydrodynamic Modeling for Assessing Engineering Alter-natives for Elevating the Kennedy Causeway, Corpus Christi, Texas, Cheryl A. Brown, Nicholas C. Kraus and Adele Militello, (Estuarine and Coastal Modeling, Mal-colm L. Spaulding and Ralph T. Cheng, 1996), p681-694

Mobile Bay Scour Analysis for Mobile and Baldwin Counties, Alabama, Bryan Hancock, Charles D. Powell and Conor Shea. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p719-728.

West Dock Causeway Bridge Piers, A. B. Christopherson, T. Nottingham, J. W. Pickering and K. W. Braun, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p315-326.

Caverns

Whither Nuclear Waste Disposal—A 50th Anniversary View, William W.-L. Lee, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1592-1596.

Prediction of Cavitation Damage for Spillways, Wenping Lee and John A. Hoopes, HY Sept. 96, p481-488.

Cavities

Fluid Pressure Polarization and Effective Response of Fluid-Saturated Materials with Cavities of Various Shapes, Mark Kachanov and Boris Shafiro, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p487-490.

Using Cavity Well to Determine Aquifer Thickness and Constants, Mohammad Saleem, IR May/June 94, p504-519.

Analysis of Cone Pressuremeter Tests in Sands, H. S. Yu, F. Schnaid and I. F. Collins, GT Aug. 96, p623-632.

Determination of Drained Friction Angle of Sands from CPT, J. W. Chen and C. H. Juang, GT May 96, p374-

State Parameter from Self-Boring Pressuremeter Tests in Sand, H. S. Yu, GT Dec. 94, p2118-2135.

Environmental Standards Digitized, CE Dec. 96, p20.

First Interactive Drought Atlas Released, CE Oct. 96,

Ceilings

Moisture Penetration of Concrete Floor Slabs, Basement Walls, and Flat Slab Ceilings, Robert W. Day, SC Nov. 96, p104-107.

Cellular structures

Cellular Rigid Pavement, John K. Bright and John R. Mays, TE Sept./Oct. 96, p381-387.

Environmental Impacts of Autoclaved Cellular Concrete, M. C. Latona, R. D. Neufeld, L. E. Vallejo, W. Hu and C. Kelly, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p57-69.

Limit Design of Axisymmetric Shells with Application to Cellular Cofferdams, P. de Buhan and A. Corfdir, EM

Oct. 96, p921-929.

Cement grouts

Practical Guide to Grouting of Underground Structures, Co-published in the UK by Thomas Telford Publications, Raymond W. Henn, 1996, 0-7844-0140-3, 198pp.

Cement paste

Alkali-Silica Reaction in Concrete with Waste Glass as Aggregate, Christian Meyer, Stephen Baxter and Weihua Jin, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1388-1397.

Computer Vision and Fracture Process in Cement-Based Materials, Sokhwan Choi and Surendra P. Shah, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

The Effect of the Interfacial Transition Zone on Concrete Properties: The Dilute Limit, E. J. Garboczi and D. P. Bentz, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1228-1237.

Pore Structure Evolution and State of Pore Water in Hydrating Cement Paste at Cryogenic Temperatures, J-Y. Jehng, D. T. Sprague, S. Bhattacharja and W. P. Halperin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p600-607.

Rheology of Fresh Concrete, Leslie Struble and Richard Szecsy, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1121-1128.

Cement Among Grains, Jack Dvorkin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p869-872.

Cone Penetration in Very Weakly Cemented Sand, Anand J. Puppala, Yalcin B. Acar and Mehmet T. Tumay, GT Aug. 95, p589-600.

Apron Reconstruction at Kansas City International Airport, John R. Anderson and Renita M. Mollman, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p158-169.

ASR Behavior of Class C Fly Ash Modified Cement, Anil Misra, H. P. Niu, Bryan R. Becker and Jinshi Liu, (Mate-rials for the New Millennium, Ken P. Chong, ed., 1996),

p348-355.

Behavior of Cementitious Composites with Randomly Dis-persed Microfibers, D. A. Lange, C. Ouyang and S. P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p281-287.

Behavior of Fresh Mortar in a Vacuum and Microstructure of Mortar Hardened in a Vacuum, L. J. Powers-Couche and T. D. Lin, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p608-613

A Computer Controlled Filament Winding Technique for Manufacturing Cement Based Cross-Ply Laminates, B. Mobasher and A. Pivacek, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1347-1356.

Concrete — A Practical Construction Material for Mars, David S. McKay and Carlton C. Allen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), 9566-570.

Corrosion Effects of Cement Stabilized Backfill on Galvanized Steel Reinforcement, S. N. Popova, B. N. Popov, R. E. White, M. F. Petrou and D. Morris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p988-

Durability and Long Term Performance of Cementitious Composites, A. Bentur, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1502.

Effect of Copper Slag on the Hydration of Blended Cementitious Mixtures, B. Mobasher, R. Devaguptapu and A. M. Arino, (*Materials for the New Millennium*, Ken P. Chong, ed., 1996), p1677-1686.

Effect of Temperature and Salt Contamination on Carbonation of Cements, Mohammed Maslehuddin, C. L. Page and Rasheeduzzafar, MT May 96, p63-69.

and resincedization, will May 30, 190-39.

Electrical Tagging of Fiber Reinforced Cement Composites, Jong Seh Lee and Gordon Batson, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p887-896.

Evaluation of the Troxler Model 4430 Water-Cement Gauge, CERF Report: HITEC 96-03-F, Highway Innovative Technology Evaluation Center, Civil Engineering Research Foundation, 1996, 0-7844-0167-5, 51pp.

Fast Track Basics, James D. Grove and Kevin B. Jones, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p466-474.

Fiber Sensors for Damage Detection on Large Structures and for Assessment of Deformation Behavior of Cementitious Materials, W. R. Habel, D. Hofmann, B. Hil-lemeier and F. Basedau, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p355-358.

Finite Element Analysis of Fracture Behavior of ECC Shear Beams, Petr Kabele and Hideyuki Horii, (Materi-als for the New Millennium, Ken P. Chong, ed., 1996),

Flash-Setting Lightweight Material—A First Step to Float-ing Island Construction, Sumio Horiuchi, Noburu Uchi-yama, Takuro Odawara and Kazuya Yasuhara, MT Aug. 96, p138-146.

Freeze-Thaw Durability of Concretes With and Without Class C Fly Ash, C. Ouyang and O. J. Lane, (Materials for the New Millennium, Ken P. Chong, ed., 1996), Heat of Hydration of Pure Cement Compounds with Steam,

Wei-Ming Lin, T. D. Lin, Chao-Lung Hwang and Yaw-Nan Peng. (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p585-591.

High Performance Concrete for Giles Road Bridge, Amin Einea, Xiaoming Huo, Mohsen Saleh and Maher K. Tadros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p133-140.

High Performance Fiber-Cement Composites by Extrusion Processing, Yixin Shao and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

High-Strength, Rapid-Setting Concrete with Blended Cement, Billy D. Neeley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1627-1636.

HPFRCC - Extruded Pipes, Henrik Stang and Carsten Pedersen, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p261-270.

Investigation of the Use of Carpet Waste PP Fibers in Con-crete, Antoine E. Naaman, Sandra Garcia, Marwan Korkmaz and Victor C. Li, (Moterials for the New Millenni-um, Ken P. Chong, ed., 1996), p782-791.

Lunar Concrete Made with the Dry-Mix/Steam-Injection Method, T. D. Lin, Liang Tseng and Sam Chou, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p592-599.

Matrix First Cracking Strength in Continuous Fiber Cement Composites, Jamil M. Alwan and Antoine E. Naaman, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

Micromechanics Based Design of FRCC Components, Christopher K. Y. Leung and Y. Philip Geng, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Microstructural and Phase Characteristics of Phosphogyp-sum-Cement Mixtures, Amitava Roy, Ramesh Kal-vakaalva and Roger K. Seals, MT Feb. 96, p11-18.

Mixing Influences on Cement-Based Waste Forms, James B. Stong, James R. Weber and Kevin J. Hull, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1597-1601.

Modeling of Sinkholes in Weakly Cemented Sand, Waleed
A. Abdulla and Deborah J. Goodings, GT Dec. 96,

Performance of Repair Materials Exposed to Fluctuation of Temperature, A. S. Al-Gahtani, Rasheeduzzafar and A. A. Al-Mussallam, MT Feb. 95, p9-18.

Performance of Stabilized Base Course at DFW, William P. Grogan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p308-317.

Recent Advances in the Development of High Performance Cement-Based Materials, J. Francis Young, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1101-1110.

Resilient Modulus of Cement-Stabilized Phosphogypsum, M. I. Pericleous and J. B. Metcalf, MT Feb. 96, p7

Sorption of Water in Mortars and Concrete, Nicos S. Martys and Chiara F. Ferraris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1129-1138. State-of-the-Art of Roller Compacted Concrete Pavement,

Kwabena Ofori-Awuah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1439-1448. Study of Clay-Cement Slurries with Mechanical and Elec-

tromagnetic Waves, M. A. Fam and J. C. Santamarina, GT May 96, p365-373.

Study on Lunar Cement Production Using Hokkaido Anorthite and Hokkaido Space Development Activities, T. Horiguchi, N. Saeki, T. Yoneda, T. Hoshi and T. D. Lin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p621-629.

Stewart W. Jonnson, ed., 1996), p621-629. Treatment of Metal Industrial Wastewater by Fly Ash and Cement Fixation, C. H. Weng and C. P. Huang, EE Nov./Dec. 94, p1470-1487.

Using Ultra High Solar Flux in the Lunar Environment: Production of Cement and Other Applications, Joseph J. O'Gallagher, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p571-

Wisconsin Fast-Track Paving Experiences, Michael J. Hall, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p456-465.

Rotation of Large Gravity Walls on Rigid Foundations under Seismie Loading, R. S. Steedman and X. Zeng, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p38-56.

Self Deployable Mechanism for Large Disk Antenna Using Centrifugal Force, Takanori Sato, Shinji Matsumoto, Haruyuki Namba, Kenji Takagi, Hisashi Tadokoro, Hiroshi Yamakawa, Takao Oura, Kenji Nozaki and Nobuyuki Kaya, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1155-1161.

Centrifuge model

Centrifuge Modeling of Geotextile-Reinforced Cohesive Soil Retaining Walls, A. Porbaha and D. J. Goodings, GT Oct. 96, p840-848.

Modeling of Sinkholes in Weakly Cemented Sand, Waleed A. Abdulla and Deborah J. Goodings, GT Dec. 96, p998-1005.

Modeling the Behavior of LNAPLs Under Hydraulic Flushing, S. Ratnam, P. J. Culligan-Hensley and J. T. Germaine, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environmens: Assessment and Remediation, Laksh. mi N. Reddi, ed., 1996), p595-606.

Corrosion Test on Candidate Waste Package Basket Materials for the Yucca Mountain Project, Richard A. Van Konynenburg and Paul G. Curtis, (High Level Radioac-tive Waste Management, Technical Program Committee,

1996), 9464-467.
Surface Reactivity of High Level Waste Matrices Characterized by Radiometric Emanation Method, Vladimír Balek, Zdeněk Málek and A. Clearfield, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p474-476.

Certification

Certificate Program in Construction Engineering and Management, Amarjit Singh and Harold S. Hamada, El July 96, p114-122.

90, pt 14-12.
90, pt 14-12.
Mobile Field Data Acquisition for Construction Quality Control and ISO 9000 Certification, Robert F. Cox and Raja R. A. Issa, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1041-

Using Process Modeling to Gain ISO 9000 Certification in Construction, Raja R. A. Issa and Robert F. Cox, (Com-puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1013-1019.

At AWWA Conference. Public Utilities Put Up a Fight, CE Sept. 96, p24-25.

Change orders

Geotech Design Reports Get a Litmus Test, Brenda Myers Bohlke, CE Dec. 96, p47-49. Survey of Change Order Markups, Herbert Saunders, SC Feb. 96, p15-19.

Thinking Ahead with Forward Pricing, Brian E. Kasen and Victor C. Oblas, ME Mar/Apr. 96, p12-16.

Channel Scour Protection at Roadway Crossings, Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3278-3285.

Manning's Roughness Coefficient for Coarse-Bed Chan-nels With High In-Bank Flows, David Froehlich and Craig A. Benson, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p436-441. Scour Study for Bridge Design on Temecula Creek, How-

ard H. Chang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1162-1166.

Study of Hydraulic Jump Lengths on Inclined Channel Beds, Tiao J. Chang, Cheng F. Li and Hong Y. Sun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4064-4071.

Chunnel design

Dynamic Analysis of Multi-Pool Irrigation Canal, V. M.

Ruiz-C., Jorge Castillo and B. de León-M., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p818-823.

Effect of Grade Control Structures on DEC Streams, R. L.

Bingner, E. J. Langendoon, L. Li and C. V. Alonso, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Oblique Wave Interaction with Vertical Wall Structures,

Oblique Wave Interaction with Vertical Wall Structures, Xugui Ren and Keh-Han Wang, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p507-510. Optimal Sizing of Width- and Depth-Constrained Trapezoi-dal Channels, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4294-4299. Rock Riprap for Grade Control, Charles E. Rice, Kerry M. Robinson and Kem C. Kadavy, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed. 1996), p588-533.

chayya Bathala, ed., 1996), p588-593.

Use of Channel Forming Discharge Concepts for Flood Control Channel Design, Brad R. Hall and Richard D. Hey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1507-1512.

Channel erosion

Channel Restoration Project Along Toby Creek, Dennis N. Jermeland, Daniel Billman and William R. Tingle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3521-3526.

Stream Instability in Loess Base Channels, Jon A. Zellars, Rollin H. Hotchkiss and Thomas Franti, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3369-3374.

Channel flow

Analysis of Bank Stabilization in Steep Complex Streams Using A Two-Dimensional Model, Raymond Walton, Using A Iwo-Dimensional Model, Raymond Walton, Wilfredo A. Moneda and Jeffrey B. Bradley, (North American Water and Environment Ungress & Destructive Water, Chenchayya Bathala, ed., 1996), p352-357. Application of High-Resolution Schemes to Free Surface Flows in Irregular Channels & Alliana Theorems.

Flows in Irregular Channels, Ke-Qiang Zheng and Eddy J. Langendoen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p201-206.

Bed Configuration and Hydraulic Resistance in Alluvial-Channel Flows, Fazle Karim, HY Jan. 95, p15-25.

Channel Junction Effects in Channel Network Flow Simu-lation, Gye-Woon Choi, Keun-Heung Kim and Sang-Jin Ahn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1899-1904.

Depth-Averaged Boussinesq Equations Applied to Flow in a Converging Channel, Thomas Molls and Gang Zhao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p328-333.

p326-333.

Depth-Averaged Equations for Free Surface Flows,
Guohong Duan and Guixian Wang, (North American
Water and Environment Congress & Destructive Water,
Chenchayya Bathala, ed., 1996), p213-218.

Distribution of Reynolds Stress above a Packed Bed in
Open Channel Flow, Mahesh Balakrishnan, Clinton Dan-

open Channel Flow, Mahesh Balakrishnan, Clinton Dan-cey, Thanais Papanicolaou and Panos Diplas, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p665-668. The Effects of Water Surface Profiles on Manning's Roughness Coefficient, P. Michael DePue, II and Ta Wei Soong, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3639-3644.

1990), p.60.39-3044.
Evaluation of Flow Resistance in Ice-Covered Channels, Florin Braileanu, Robert Etterna and James Wuebben, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p.606-616.
Field Verification of Dem-Derived Watershed Response,

Randal F. Bodnar, Mark Michelini and Rafael G. Quimpo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Fish Passage Pool Bedding Analysis, Louis S. Coletta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

posto-3623.

Flushing and Recharge of Inlet Channel for an Ephemeral Coastal River, Howard H. Chang and Daniel Pearson, (Estuarine and Coastal Modeling, Malcolom L. Spaulding and Ralph T. Cheng, 1996), p659-668.

Hydraulic Effects of Habitat Structures in Flood Control

Channels, Rebecca Seal, (North American Water and Environment Congress & Destructive Water, Chenchayya

vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1519-1524.
Investigation into the Possibilities of Using Bristol Channel Models for Tidal Predictions, M. Amir and R. A. Flath-er, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p41-52.
Jamming of the Flow of Granular Materials, Yi Sun and Oleg Vinogradov, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p265-268.

Modeling 3D Free Surface Flow in Compound Channels: A Validation Case Study, Fraincisco J. M. Simões and Sam S.-Y. Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2719-2724

ed., 1990), p2/19-2/24.
Overview of the US Army Corps of Engineers Flood Control Channels Research Program, Ronald R. Copeland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1501-1506.

Quasi Two-Dimensional Hydraulic Analysis of Drop Structures, William C. Taggart, Katherine J. Chase and Peter L. Nelson, (North American Water and Environment) Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p600-605.

Role of Vegetation in Hydraulics of Channel Restoration, Marcelo H. García, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2607-2612.

Simulation of Dilute Gas-Solid Flows in Horizontal Cha nels, Cliff K. K. Lun and Hong S. Liu, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p390-393. Vegetative Roughness in Flood Control Channels, Gary E.

reeman, David R. Derrick and William J. Rahmeyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1513-1518.

Channel improvements

Chainter improvements

Drop Structures in the Real World: Guidelines for Drop

Structures in Grass Lined and Wetlands Channels, William C. Taggart, William G. DeGroot, Katherine J.

Chase and Peter L. Nelson, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p594-599.

Habitat Preservation and Enhancement Associated with San Diego Creek Flood Control Channel Improvement, Yen-Hsu Chen and Ruh-Ming Li, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p530-535. Santa Ana River Mainstem Project, Brian M. Moore,

(North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2169-2175.

Description of Straight Sand-Bed Rivers. I Models be Driven at the Estuary Mouth, B. H. Johnson, H. V. Wang and K. W. Kim, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p.255-267.
Numerical Simulation of Widening and Bed Deformation of Straight Sand-Bed Rivers. I Model Development, Straight Sand-Bed Rivers. I Model Development.

Stephen E. Darby and Colin R. Thorne, HY Apr. 96,

Scour Processes Observed in Field Data, Mark N. Landers and David S. Mueller, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3052-3061. Simulation of Channel Changes Induced by a Reservoir, Howard H. Chang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2109-2113.

Use of Channel Forming Discharge Concepts for Flood Control Channel Design, Brad R. Hall and Richard D. Hey, (North American Water and Environment Congress Destructive Water, Chenchayya Bathala, ed., 1996), p1507-1512.

e of Geomorphic Data for Assessing Stream Stability at Bridge Structures, Jonathan Fuller and Steven R. Walker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p3294-3299.

Channel stabilization Application of Regime Theory in Practice: A Case Study, James A. Turpin and Martin J. Teal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1663-1668.

Channel Restoration Project Along Toby Creek, Dennis N. Jermeland, Daniel Billman and William R. Tingle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3521-3526. Habitat Preservation and Enhancement Associated with San Diego Creek Flood Control Channel Improvement, Yen-Hsu Chen and Ruh-Ming Li, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p530-535.

Quail Creek: A Case Study of Restoration Using Native Materials, James W. Gracie, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2891-2896.

River Restoration Considerations Beyond Channel Design, William T. Fullerton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3091-3096.

Toe-Scour Estimation in Stabilized Bendways, Stephen T.

Maynord, HY Aug. 96, p460-464.

Tributary No. 9 Restoration, Maryland State Highway Administration, James W. Gracie, Robert Shreeve and Linda Kelbaugh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3539-3544.

Channelization

Channel Restoration of Incising, Mixed Grain Size Streams: Lessons Learned, F. D. Shields, Jr., M. W. Doyle, S. S. Knight and C. M. Cooper, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3363-3368.

From Natural Disaster to Human-Caused Disaster, Antoni Palau and Jorge Alcázar, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3497.

Grade-Control Structures for Salt River Channelization, Dennis L. Richards and Tim Morrison, (North American

Dennis L. Richards and I Im Morrison, (vorth American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p606-611.

Restoration of Abandoned Meanders on the Middle Fork Forked Deer River, Tennessee, B. J. Doeing, R. A. Gaines and W. A. Thomas, (North American Water and Environment Control of the Proceedings of the Control of the Co Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3375-3380.

Santa Clara River Fluvial Analysis, Jun Wang, Ruh-Ming Li and Sree Kumar, (North American Water and Envi ronment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p358-363.

Channels, waterways

Design of Flocculating Baffled Channel, Prabhata K. Swamee, EE Nov. 96, p1046-1048.

Energy Dissipators edited by D.L. Vischer and Willi Hager, Henry T. Falvey, HY Aug. 96, p478.

Environmental Restoration Measures on the Tennessee-Tombigbee Waterway (TENN-TOM), Nathaniel D. McClure, IV and Norman L. Connell, Sr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3326-3331.

An Extended Relaxation Technique for Unsteady Flows in Networks, J. M. Lewis, D. L. Fread and Ming Jin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p195-200.

A Marine Geophysical Investigation to Determine the Cause for Failure of the Yaquina Bay Jetty, Newport, Or-egon, Richard E. Sylwester, Jon L. Dasler and Terry C. Sullivan, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p42-55.

Numerical Model of Flow Ice-Covered Channel, J. Y. Yoon, V. C. Patel and R. Ettema, HY Jan. 96, p19-26. Numerical Model of Turbulent Flow over Sand Dune, J. Y.

Yoon and V. C. Patel, HY Jan. 96, p10-18.

Numerical Simulation of Widening and Bed Deformation of Straight Sand-Bed Rivers. I: Model Development, Stephen E. Darby and Colin R. Thorne, HY Apr. 96, p184-193.

Numerical Simulation of Widening and Bed Deformation of Straight Sand-Bed Rivers. II: Model Evaluation, Stephen E. Darby, Colin R. Thorne and Andrew Simon, HY Apr. 96, p194-202.

Ordinary Operating Conditions of Large Channels of Mos-cow's Sewerage Network, Yuri A. Ermolin, IR May/ June 96, p145-148.

Predicting Stage-Discharge Curves in Channels with Bank Vegetation, Stephen E. Darby and Colin R. Thorne, HY Oct. 96, p583-586.

Oct. 90, po85-380.

Reliability of the Navigation Channel of the Upper Mississippi River, Vijay Tulsiani, James H. Lambert, Yacov Y. Haimes and S. K. Nanda, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p142-

133. Risk-Based Spatial Decision Support System for Mainte-nance Dredging of Navigation Channels, Samuel J. Ra-tick and Holly Morehouse Garriga, IS Mar. 96, p15-22. Study of Wind Waves in Gulf Intracoastal Waterway at

Aransas National Wildlife Refuge, Darla A. Hershberger and Francis C. K. Ting, WW Sept./Oct. 96, p239-244.
Ultimate Strength of Underwater Pipe-Soil Systems, Mehdi
S. Zarghamee, (Pipeline Crossings 1996, Lawrence F.

Catalano, ed., 1996), p230-236.

Velocity Distribution in Compound Channel Flows by Numerical Modeling, Giuseppe Pezzinga, HY Oct. 94, p1176-1198.

Water Surface Profiles in Compound Channel with Multi-ple Critical Depths, Terry W. Sturm and Aftab Sadiq, HY Dec. 96, p703-709.

Chanute, Octave

Octave Chanute: One of the First in Flight, David T. Biggs, NE Feb. 96, p15.

Application of Chaotic Dynamics to Stochastic Resonance, Marek Franaszek and Emil Simiu, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p86-89.

Chaotic Advection in a Bioengineering System, Ahmet C. Omurtag, Victor Stickel and Rene Chevray, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p450-453.

A Comparative Analysis of FORM/SORM and Polynomial Chaos Expansions for Highly Nonlinear Systems, R. Ghanem and D. Ghiocel, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p535-538.

Controlling Chaos to Prevent Ship Capsizing, Mingzhou Ding, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p434-437

Dynamics of Multi-DOF Stochastic Nonlinear Systems, Timothy M. Whalen, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p82-85.

Hybrid Stochastic Finite Elements and Generalized Monte Carlo Simulation, R. Ghanem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p182-185.

Hysteretic Systems: Chaotic Region and Control, M. Battaini, F. Casciati and L. Faravelli, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p499-502.
Melnikov Processes and Noise-Induced Exits from a Well,

Emil Simiu and Michael R. Frey, EM Mar. 96, p263-270. Nonlinear Rocking Motions. I: Chaos under Noisy Periodic Excitations, H. Lin and S. C. S. Yim, EM Aug. 96, p719-727

Nonlinear Rocking Motions. II: Overturning under Random Excitations, H. Lin and S. C. S. Yim, EM Aug. 96,

Strange Attractors and Chaos in Wastewater Flow, Donald I. Angelbeck and Rafic Y. Minkara, EE Jan./Feb. 94, p122-137.

Characteristics

Comparison of High-Speed Rail and Maglev Systems, Fazil T. Najafi and Fadi Emil Nassar, TE July/Aug. 96, p276-281.

Deformation Characteristics of Piedmont Residual Soils, Chainchye E. Wang and Roy H. Borden, GT Oct. 96,

An Effective Characteristic Method for Plastic Plane Stress Problems, Zongda Yan and Xiaoming Bu, EM June 96,

Modeling Non-Uniform-Sediment Fluvial Process by Characteristics Method, Keh-Chia Yeh, Shian-Jang Li and Wen-Lin Chen, HY Feb. 95, p159-170.

New Approach to Roadway Performance Indices, Chiu Liu and Robert Herman, TE Sept./Oct. 96, p329-336.

Optimizing Haul Unit Size and Number Based on Loading Facility Characteristics, Douglas D. Gransberg, CO Sept. 96, p248-253.

Vertical Uplift Capacity of Horizontal Anchors, Kanaka-pura S. Subba Rao and Jyant Kumar, GT July 94. p1134-1147.

Charcoal

Bioenergy in Transition, Ralph P. Overend, Charles M. Ki-noshita and Michael J. Antal, Jr., EY Dec. 96, p78-92.

Chelating agents

Flushing of a Pb(II) Contaminated Soil Using HCl, EDTA, and CaCl, Brian E. Reed, Patrick C. Carriere and Roderic Moore, EE Jan. 96, p48-50.

Chemical additives

Recreational Impoundments Retrofit of Existing and Design of New Facilities, Dream L. Atallah and Michael P. Ru-dinica, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2945-2950.

Chemical application

Field Evaluation of Water and Solute Distribution from a Point Source, Akbar Ali Khan, Muluneh Yitayew and A. W. Warrick, IR July/Aug. 96, p221-227.

Chemical grouting
Turnback Project Moves Ahead, David A. Sutter, James P.
Connolly and Ching Wu, CE Jan. 96, p36-39.

Chemical oxygen demand

Brewery Wastewater Treatment in UASB Reactor at Ambient Temperature, Yue-Gen Yan and Joo-Hwa Tay, EE June 96, p550-553.

An Experimental Study on the Use of Constructed Wetlands for Stormwater Management, Shih-long Liao, Shaw L. Yu and Stephen J. Long, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2462-2467.

Chemical reactions

Alkali-Silica Reaction in Concrete with Waste Glass as Aggregate, Christian Meyer, Stephen Baxter and Weihua Jin, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1388-1397.

Detection of ASR in PCC Using Ultrasonic Waves, N. M. Al-Akhras, I. L. Al-Qadi and M. R. Hajj, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p897-

Leachate Chemistry: Its Implications for Clogging, Bruce E. Rittmann, Ian R. Fleming and R. Kerry Rowe, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p28-33.

Leaching Characteristics of Solidification System of C,A/ CuO, Cheng-Fang Lin and Hwa-Wey Huang, EE Apr.

96, p323-326. Modeling Natural Hydrodynamic Systems with a Differential-Turbulence Column, Brett Brunk, Monroe Weber-Shirk, Anna Jensen, Gerhard Jirka and Leonard W. Lion, HY July 96, p373-380.

Naturally-Occurring Chemical Analogues for Repository-Derived Radionuclides, Bill Miller, (High Level Radio-active Waste Management, Technical Program Committee, 1996), p50-52.

A Program to Assess Microbial Impacts on Nuclear Waste Containment, Joanne Horn and Annemarie Meike, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p1-3.

gram Commutee, 1990, pr. 1990, pr. 200, tee, 1996), p122-124.

Pyrolysis Kinetics of Uncoated Printing and Writing Paper of MSW, Ching-Yuan Chang, Chao-Hsiung Wu, Jiann-Yuan Hwang, Jyh-Ping Lin, Wan-Fa Yang, Shin-Min Shih, Leo-Wang Chen and Feng-Wen Chang, EE Apr.

96, p299-305.

Scoping Analysis of In Situ Thermal-Hydrological Testing at Yucca Mountain, Thomas A. Buscheck and John J. Nitao, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p130-132.

When Toxics Meet Metal, Virginia Fairweather, CE May 96, p44-48.

Chemical resistant materials

ASTM A913/A913M: The Perfect Steel for Seismic Design, J. C. Gérardy, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p558-565.

Chemical treatment

Engineering Models of Combined Chemical and Biological Processes, Jon P. Scott and David F. Ollis, EE Dec. 96, p1110-1114.

Environmental Engineers Take Aim at Firing Range, CE Aug. 96, p18.

Impact of System Chemistry on Electroosmosis in Contaminated Soil, Gerald R. Eykholk and David E. Daniel, GT May 94, p797-815.

Chemical wastes

"Do Nothing" Title Misleading, Bruce E. Rittmann, Michael C. Kavanaugh and Jacqueline A. MacDonald, CE Nov. 96, p36,38.

Chemicals

Alachlor Transport in Laboratory Soil Columns, Mutasem El-Fadel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1999-2004.

Assessing Water Quality Impacts of Stormwater Runoff, G. Fred Lee and Anne Jones-Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3103-3108.

Bacterial and Chemical Pollution of Littoral Waters of Lake Ohrid at Pogradec - Town Area, Valer Angjeli, Vasilika Petro and Ramazan Bukli, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2536.

Design and Implementation of a Multi-Faceted Site Remediation, Stephen A. Kessel and Arnold S. Vernick, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p541-546.

Effect of Surface Water and Ground Water Interaction on Atrazine Transport to Pumping Wells, Chittaranjan Ray, David Soong, Deva K. Borah and George R. Koadcap, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1575-1580.

Electromigration of Nitrates in Soil, George Cairo, Dennis Larson and Donald Slack, IR Sept./Oct. 96, p286-290.

Enhancing Performance of Soundless Chemical Demolition Agents, Jimmie Hinze and Andrew Nelson, CO June 96, p193-195.

EPA Targets Suspected Fertility Disrupters, CE July 96, p25.

Health Risk Sensitivity to Variable and Uncertain Parameters, Reed M. Maxwell and Susan D. Pelmulder, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1285-1290.

Modeling Concentration-Polarization in Reverse Osmosis Spiral-Wound Elements, Benito J. Mariñas and Richard I. Urama, EE Apr. 96, p292-298.

Modeling Transport of Bromide in Furrow-Irrigated Field, Behzad Izadi, Bradley King, Dale Westermann and Ian McCann, IR Mar./Apr. 96, p90-96.

Reflections on the Regulatory Reform Debate, Leonard Shabman, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), pl-9.

Risk Analysis of Drinking Water Treatment and Supply Facilities Handling Highly Hazardous Chemicals, Krishna Nand, Bruno Loran and Morley Male, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p776-780.

Strength Growth as Chemo-Plastic Hardening in Early Age Concrete, Franz-Josef Ulm and Olivier Coussy, EM Dec. 96, p1123-1132.

Transforms for Runoff and Sediment Transport, Pierre Y. Julien, HE July 96, p114-122.

Use of Artificial Neural Networks for Agricultural Chemical Assessment of Rural Private Wells, Chittaranjan Ray and Kristopher K. Klindworth, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1687-1692.

Wellhead Protection: Local and Community Efforts, Sharon Lien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p966-969.

Chesapeake Bay

Application of Vertical Turbulence Closure Schemes in the Chesapeake Bay Circulation Model — A Comparative Study, Harry V. Wang and Raymond S. Chapman, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p283-297.

A Hydrodynamic FVM Algorithm on Arbitrary Grids, Jinglian J. Liu, Billy H. Johnson, Bharat K. Soni and Victor L. Zitta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3668-3673.

Inverse Estimation of Parameters for an Estuarine Eutrophication Model, J. Shen and A. Y. Kuo, EE Nov. 96, p.1031-1040.

Chile

The Analysis of the Failure of the Minte Stream Culvert, L. Ayala and E. Brown, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3018.

New City Breaks Ground, CE Sept. 96, p20,22.

Chimney

Methods and Procedural Considerations in Demolishing Tall Concrete Chimneys, Kenneth K. Walker, Cliff Schexnayder, Richard E. Mayo and Kenneth D. Walsh, CO Sept. 96, p223-230.

China, People's Republic of

'96 Extraordinary Flood in the Middle Reach of the Yangtze River, Xuewu Ji, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p377-378.

Application of BOT System for Infrastructure Projects in China, Liyin Shen, Rowson K. H. Lee and Zhihui Zhang, CO Dec. 96, p319-323.

Assessment of Remaining Fatigue Life of Existing Railway Riveted Bridges, Luo Weiwen and Jamshid Mohammadi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p42-45.

Design and Construction for Asphalt Pavements in Permafrost Areas: Case Study of Qinghai-Tibet Highway, Ningyuan Li and Ralph Haas, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p866-877.

Estimate the Hazards of Bank Burst in the Lower Yellow River, Changxing Shi and Qingchao Ye, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p920.

Extraordinary Flood Disaster in Tai Lake Basin of China in 1991, Ruiju Liang, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p48-54

Flood Destruction and Abatement in China, Zhixin Liang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3017.

Full-Scale Test Studies on Prevention of Frost Damage for Retaining Wall Reinforced with Geotextile, Lun Chen, Guangxin Li and Wenfeng Huang, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p724-735.

The Influence of Peak-Regulation of the Three Gorges Power Plant on Navigation, Xinhua Yu, Xiang Fu and Changming Ji, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3863-3868. On Silt Abrasion Erosion of Three Gorges Hydraulic Tur-bine in the Future, Shehua Huang, Wei Li and Liangjun Cheng, (North American Water and Environment Co gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p3856-3862.

The Research of the Relationship Between Earthquakes and the 30 Years of Intensive Geological Surveys in Xin Feng River, China, Ru- Qi Lu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p388.

1997), p388.
Resettlement of the Three Gorges Project in China, Wenzheng Ma and Zonglou Guo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3847-3851.
Sediment Deposition in the Navigation Approach Channel of Three Gorges Project, Yitian Li and Jianheng Xie. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3852-3855.

The Three Gorges Project: Relocation of Reservoir Popula-tion, Chien-kuo Lo, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3841-3846.

Water Wisdom of the Ancients, L. Michael Trapasso, CE

Jan. 96, p64-65.

Wind Engineering Co-operation: A Perspective of Europe and of China, Brian E. Lee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, p1069-1074.

Chlorides

Boltzmann-Matano Analysis of Chloride Diffusion into Blended Cement Concrete, P. J. Turnidajski and G. W. Chan, MT Nov. 96, p195-200.

Chloride Migration through Clayey Silt Underlain by Fine Sand or Silt, R. Kerry Rowe and Kazem Badv, GT Jan.

96, p60-68.

Concentration Effects on Chlorinated Aliphatic Transfor-mation Kinetics, J. B. Hughes and G. F. Parkin, EE Feb. 96, p92-98.

Effectiveness of Blast-Furnace and Gasifier Slags at Reduc-ing Ingress of Chloride Ions into Portland Cement Con-cretes in Marine Environments, G. J. Osborne, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1503.

Electrochemical Treatment of Concrete: A New Approach to Extend the Service Life of Chloride Contaminated, Carbonated, or Alkali Silica Reactive Concrete Struc-tures, David W. Whitmore and Keith Stewart, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1504-1511.

Fundamental Modeling of Chloride Diffusion in Concrete, Pankaj. Arora, B. N. Popov and R. E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p203-212

Inhibiting Action of Calcium Nitrite on Carbon Steel Rebars, M. Ramasubramanian, B. N. Popov and R. E. White, (Materials for the New Millennium, Ken P.

White, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1007-1016.
Multi-Scale Models of the Diffusivity of Concrete, Dale P. Bentz and Edward J. Garboczi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p574-582.
The Nature of Passivity of Reinforcing Steel, Farrel Martin and Jan Olek, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p111-1120.
On Estimating the Effect of Passivating Inhibitor.

On Estimating the Effect of Passivating Inhibitors on the Time for Corrosion Initiation of Steel in Concrete, A. A. Sagüés, S. C. Kranc and R. G. Powers, (Materials for the

Sagües, S. C. Kranc and R. G. Powers, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1522-1530.
Permeability of High-Strength Concrete Containing Low Cement Factor, Tarun R. Naik, Shiw S. Singh and Mohammad M. Hossain, EY Apr. 96, p21-39.
Shrinkage Control in Acrylamide Grouts and Grouted Sands, V. Jasti, C. Vipulanandan, David Magill and Don Mack, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p840-850.
Stochastic Models for Choride-Initiated Corroction in Pein.

Crong, etc., 1990), po40-850.
Stochastic Models for Chloride-Initiated Corrosion in Reinforced Concrete, Svend Engelund and John D. Sørensen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p664-667.

Studies on Herbal Desalination, Godavarthy Ramprasad and Varanasi Kaliprasad, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1015-1020.

Use of 8thO and 8D to Define Seawater Intrusion, John A. Izbicki, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4306-4311.

Chlorinated hydrocarbon pesticides

Advanced Oxidation Processes for Removal of Natural Organics and Pesticides from Drinking Water, Badri N. Ba-driyha and Massoud Pirbazari, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3010-3016.

Establishing the Relative Process Risks for Chlorination and Ozonation - A Case Study Illustrates the Need to and Ozonation - A Case Study Hustrates the Need in Evaluate the Process Hazard Implications of a Change in Drinking Water Disinfection Process due to D/DBP Reg-ulations, Paul G. Beswick, Craig E. Brackbill and L. Donald Duke, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1021-1026.

Reductive Pyrolysis for the Destruction of Chloromethane: A Reaction Pathway Model Based on Thermodynamic and Thermokinetic Considerations, Varadarajan Ravindran, Massoud Pirbazari, Badri N. Badriyha and Sidney W. Benson, (North American Water and Environn Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1367-1372.

When Toxics Meet Metal, Virginia Fairweather, CE May 96, p44-48.

Back to Bacteria: A More Natural Filtration, Bruce E. Rittmann, CE July 96, p50-52.

Comparison of Worst-Case and Probabilistic Approaches to Ocean Outfall Mixing Zone Analysis, Hening Huang and Robert E. Fergen, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3674-3679.

Individual Biotransformation Rates in Chlorinated Aliphatic Mixtures, J. B. Hughes and G. F. Parkin, EE Feb. 96,

Model for Water Quality in Periphery of Distribution Sys-tems, Lin Wu, Steven G. Buchberger and Trent G. Schade, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3464-3469.

Modeling Low Velocity/High Dispersion Flow in Water Distribution Systems, David H. Axworthy and Bryan W. Karney, WR May/June 96, p218-221.

Risk Analysis of Drinking Water Treatment and Supply Fa-cilities Handling Highly Hazardous Chemicals, Krishna Nand, Bruno Loran and Morley Male, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p776-780.

Chromatographic analysis

Interference by Natural Organics in Diesel Analyses, Paul Dworian, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p71-81.

LNAPL Detection, Measurement, and Distribution in the Subsurface Environment, David W. Ostendorf, Alan J. Lutenegger, Russell J. Suchana, Paul S. Cheever and Samuel J. Pollock, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p91-102.

Chromium

Aggregates for Construction from Vitrified Chromium Contaminated Soils, Jay N. Meegoda, W. Kamolpornwijit, David A. Vaccari, A. S. Ezeldin, L. Walden, W. A. Ward, B. A. Noval, R. T. Mueller and S. Santora, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p31-46.

Specification of Cu, Pb and Cr in Contaminated Sediment Effected by pH, Chin-Yuan Chen, Jih-Gaw Lin and Cheng-Nan Chang, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1453-1458.

3D Model of Estuarine Circulation and Water Quality In-duced by Surface Discharges, Wenrui Huang and Mal-colm Spaulding, HY Apr. 95, p300-311.

Application of Circulation and Sediment Transport Modeling within San Diego Bay, Thomas L. Johnson and Claudio Fassardi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p596-607.
Application of Vertical Turbulence Closure Schemes in the

Chesapeake Bay Circulation Model — A Comparative Study, Harry V. Wang and Raymond S. Chapman, (Estu-arine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p283-297.

Modeling Outfall Plume Behavior Using Far Field Circula-tion Model, Alan F. Blumberg, Zhen-Gang Ji and C. Kirk Ziegler, HY Nov. 96, p610-616.

Modeling the Periodic Stratification and Gravitational Circulation in San Francisco Bay, California, Ralph T. Cheng and Vincenzo Casulli, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p240-254.

Observations of Tidal Circulation in Mamala Bay, Hawaii, Peter Hamilton, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3880-3885.

Two- and Three-Dimensional Hydrodynamic Modeling of the Salton Sea, California, Christopher B. Cook and Ger-ald T. Orlob, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3752-3757.

Two-Dimensional Boundary-Fitted Circulation Model in Spherical Coordinates, Muslim Muin and Malcolm Spaulding, HY Sept. 96, p512-521.

Asymptotic Analysis of Intraparticle Diffusion in GAC Batch Reactors, D. A. Lyn, EE Nov. 96, p1013-1022.

Hydraulic Residence Time of CSTRs under Unsteady-State Condition, Jian Peng, EE Nov./Dec. 94, p1446-1458.

Parametric Sensitivity of Comprehensive Model of Aerobic Fluidized-Bed Biofilm Process, A. B. Shahalam, R. El-Samra, G. M. Ayoub and A. Acra, EE Dec. 96, p1085-

Shock and Transient Loading on Anaerobic Reactor Coup-led with Adsorber, Peter Fox and Makram T. Suidan, EE Jan. 96, p18-24.

Cities

Cool Roofs and Pavements to Help Hot Smoggy Cities, Ar-thur H. Rosenfeld, Hashem Akbari, Haider Taha and Melvin Pomerantz, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1-13.

New City Breaks Ground, CE Sept. 96, p20,22.

Civil engineering

27 Years Documenting Engineering Heritage, Eric DeLony, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p162-

68,000 New Jobs Projected for CEs over Next 10 Years, NE May 96, p5.

Advanced Composites Build on Success, Frieder Seible and Vistasp Karbhari, CE Aug. 96, p44-47.

Alaska Students Triumph in 1996 Steel Bridge Finals, CE

Aug. 96, p64. ASCE's Orange County Branch Reaches into Past with Historic Landmark Designations, CE Nov. 96, p74-75.

Building the Infrastructure of the New Federal City: 1793-1800, Robert J. Kapsch, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p74-85.

Calling All Civil Engineer Inventors, CE Feb. 96, p68.

CERF Aids NSF in Revising Program That Reflects Needs of Construction Industry, NE July 96, p15.

Civil Engineer Archie Carter Remembered by Campaign Gift from Wife, NE Sept. 96, p14.

Civil Engineering and Disaster Responses in Developing Countries, Egon B. Westen, El Apr. 96, p89-92.

Civil Engineering Education: An Historical Perspective, Lawrence P. Grayson, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p44-52.

Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996, 0-7844-0209-4,

208pp.

Comments on the Movie "Apollo 13", Brian Brenner, EI Apr. 96, p53-54. Composite Repair/Upgrade of Concrete Structures, Orange Marshall, Jr. and John P. Busel, (Materials for the

New Millennium, Ken P. Chong, ed., 1996), p932-938. Construction Automation and Robotics in Civil Engineer-ing Education Programs, Walter W. Boles and Jing Wang, El Jan. 96, p12-16.

Construction Industry Research Prospectuses for the 21st Century, CERF Report # 96-5016.T, Civil Engineering Research Foundation, 1996, 0-7844-0186-1, 130pp

Creating the 21st Century through Innovation, CERF Report # 96-5016.E, Civil Engineering Research Foundation, 1996, 0-7844-0185-3, 60pp.

Dam Engineering Exhibit Wins Prize for New Museum in Arizona, NE Dec. 96, p9.

Early Surveys in the Nation's Capital, Steven M. Pennington, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p86-95.

Editorial, Earl F. Burkholder, SU May 96, p45-46. An Electro-Optical Accelerometer for Civil Structural Applications, Maria Q. Feng, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p877-886.

Emerging High-Tech Areas of Civil Engineering Attract Women, Wesley Scott and Walter Boles, El Jan. 96,

The Engineer and the Smithsonian Institution's Civil Engineering Collections, William E. Worthington, Jr., (Civil Engineering History: Engineers Make History, Jerry R.

Engineering History: Engineers Make History, Jerry K. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p34-43. Engineering and History: Manifestations in Monuments, Henry Petroski, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p155-161.

Ethics, Uncertainty and Postaudits, Charles G. Gunnerson, CE Dec. 96, p27.

Extending the Legacy: Planning America's Capital for the 21st Century, Reginald W. Griffith, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p25-33.

Four ASCE Student Chapters Win Awards for Excellence,

NE Oct. 96, p2.

Guest Editorial, F. Lawrence Bennett, CR Sept. 96, p119-

High-Performance Metals for Civil and Marine Structures, John W. Fisher, Richard Sause and Robert J. Dexter, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p23-37. How to Make Our Heroes—Their Heroes, Francis E.

Griggs, Jr., (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p144-154.

Hydrothermal Effects on the Bearing Strength of GFRP Composite Joint, Stephanie Hurd and Robert Yuan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p243-250.

1990, p243-220.
The Impact of Multiple Failure Modes in Risk Analysis for Civil Infrastructure Management, James H. Lambert, Lori R. Johnson and Yacov Y. Hairnes, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Hairnes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p80-105.

In Pursuit of a Stamp, Ronald E. Boenau, P.E., CE Oct. 96. p31-32

Innovation Award Named for Charles Pankow, NE Feb. 96, p15.

It Has a Ring to It, Stephen Auffinger, CE Nov. 96, p30,32. J.A.L. Waddell and the Diffusion of Civil Engineering Techniques, George F. W. Hauck and Louis W. Potts, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p53-65.

Johnson Sparkplugs Chicago's Engineers Week Events, CE May 96, p70.

Los Angeles Section Pledges \$25,000 to ASCE's Building Campaign, NE Aug. 96, p1,4.

Montgomery C. Meigs: The Eclectic Engineer, Dean A. Herrin, (Civil Engineering History: Engineers Make His-tory, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p66-73.

A Nationwide Survey of Civil Engineering-Related R&D, CERF Report #93-5006, Civil Engineering Research Foundation, 1993, 0-87262-970-8, 80pp.

New Educational Course "Sustainable Development Eco-City", Alexandr Tetior, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p31-32.

OCEA Entries for 1997 Are Due Soon, CE Dec. 96, p68. On the Shoulders of Giants-Part II, Francis E. Griggs, Jr.,

El Jan. 96, p17-25. On the Stamp Campaign, Robert B. Johnson, CE Dec. 96, p28-29.

Reader Dismayed, Roy Gittings, CE Dec. 96, p30-31.

Readers Respond to Thomey Letter, Norm Hoffman, P.E., James S. Pol, Jim Coppock, P.E., J. Frank Brennan, P.E., John A. Mundell, P.E. and F. Weston Starratt, P.E., CE Aug. 96, p28-29.

Recent Innovations in Undergraduate Civil Engineering Curriculums, Joy M. Pauschke and Anthony R. Ingraffea, El July 96, p123-133.

Research Conclave Takes Aim at Global Sustainable De-

research Conclave Takes Aim at Global Sustainable Development, CE Apr. 96, p76.

So Mrs. Roebling—What's Your Side of the Story—About the Brooklyn Bridge? Patricia D. Galloway, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p23-24.

Spheres of Influence: Federalism, Politics, and Engineering Design, Todd Shallat, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Ken-non, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr.,

ed., 1996), p136-143.

State Engineers as Policymakers: Apolitical Experts in a Federalist System, Bruce E. Seely, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed. Donald Kennon, ed., Robert T. Jaske, ed. and Francis E.

Griggs, Jr., ed., 1996), p123-135.

A Surveying Trip Report from George Washington's Diary, Michael P. Johnson and William P. Johnson, Jr., (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p1-12.

Suspicious Inspection Begs ASCE Intervention, Marshall D. Collins, CE Dec. 96, p28.

Ted Williams Tunnel Gets OCEA Plaque at Boston Cere-

mony, NE Aug. 96, p14. Using Computers Effectively in Today's Civil Engineering Office, John P. Menniti, CP Oct. 96, p261-262.

The World's Oldest Civil Engineering Professor, Daniel S. Turner, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p13-22

"Meigs Among the Ruins': Montgomery C. Meigs and the Construction of the United States Capitol Extension", Dean A. Herrin, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p96-97.

Civil engineers

1996 Elections: Get Involved, Casev Dinges, CE Apr. 96, Article Should Be Required Reading, James Warner, P.E.,

CE Nov. 96, p32.

ASCE Joins Ranks of Congressional Fellows, Martin Hight, CE Dec. 96, p114.

Ballard Picked as Army Engineers Chief, NE Sept. 96, p15.
Benjamin Wright—The Father of American Civil Engineering, Neal FitzSimons, (Civil Engineering History: Engineering History) neers Make History, Jerry R. Rogers, ed., Donald Ken-non, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p98-107.

The Changing Role of the Civil Engineer in the Past 25 Years, F. Thomas Young, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p55-62.

Civil Engineer Named to Transportation Safety Board, NE

Civil Engineer Anneu to Transportation Safety Board, Ne. Apr. 96, p15.

Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996, 0-7844-0204-3, 144pp.

Construction Engineers Driving into the 21st Century, Vir K. Handa, CO Mar. 96, p1-6.

Elvis, Marilyn Mouroe, John Roebling, Clarence A. P. Ha-

merson, ČE June 96, p28.

Emerging Role of Management in Civil Engineering, Louis Berger, ME July/Aug. 96, p37-39. The Engineering Profession as a Major Role Player in the

New South African Political Order, Kevin Wall, El Apr. 96, p73-77.

Engineers of Dreams Is Well Worth the Read as Petroski Zeroes in on Bridges, Augustine J. Fredrich, NE Nov. 96,

Fiscal '97 Budget Likes Infrastructure, Martin Hight, CE Nov. 96, p116.

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The importance or being rinsorical: Civil Engineers and Their History, Jane Morley, El Oct. 94, p419-428. John Scoville, Killed in Croatia Plane Crash, Headed Harza Engineering in Chicago, NE May 96, p15. Market, Not Engineers, Makes Decisions, Gerald L. De-Mers, CE Feb. 96, p32.

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Nonstructural Evaluation of Competing Bridge Materials,
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Not on Our Salary, Kimball L. Ohsiek, P.E., CE Dec. 96, p31. Octave Chanute: One of the First in Flight, David T. Biggs,

NE Feb. 96, p15. President Nominates ASCE Fellow to NIBS Board, NE

Sept. 96, p15.
Professional Associations Offer Design Resources for Civil Engineers, Ben Northcutt, (North American Water and Environment Congress & Destructive Water, Chen-

chaya Bahala, ed., 1996), p3343-3348.

Protection from Vibrations, S. Drabkin, P.E. and H. Lacy, P.E., CE Nov. 96, p30.

Proud to Be a Civil Engineer, G. Andrew Reti Makes Major

Gift to ASCE Building Campaign, NE Nov. 96, p2.
Role of Computing: Practitioners' Perspective, Robert J.
O'Neill, Robert M. Henry and Thomas A. Lenox, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p670-676. Salary Growth Slows for Civils; Location a Major Factor,

Says New ASCE Survey, NE May 96, p1,5. Section Lauds Utah Governor, CE Oct. 96, p74,76.

Selecting Design-Build: Public and Private Sector Owner Attitudes, Anthony D. Songer and Keith R. Molenaar, ME Nov./Dec. 96, p47-53.

Seven ASCE Members Elected to NAE, CE Aug. 96, p67. Slim Environmental Outlook, Casey Dinges, CE Aug. 96,

Statute of Limitations for Civil Engineering Liability, Robert W. Day and Michael M. Angello, El Apr. 96, p86-88.

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Wastewater and Condo Jobs Are Highest Risks, CE Dec. 96, p22. Who Do ASCE Members Work For? Jimmie Hinze, SC

Aug. 96, p74-75. Women in Civil Engineering and Science: It's time for Recognition and Promotion, V. L. Khazanet, El Apr. 96,

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Exterior Cladding Methods: A Technoeconomic Analysis, Igal M. Shohet and Alexander Laufer, CO Sept. 96, p242-247.

Lateral Strength of Brick Cladded Frames, Stephen P. Schneider and Stephen J. Favieri, (Worldwide Advances in Structural Concrete and Massony, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p112-122.

Mathematical Model for Durability of Cladding, K. D. Hjelmstad, D. A. Lange, I. D. Parsons and F. V. Law-rence, MT Aug. 96, p172-174.

Seismic Performance of Cladding: Responsibility Revisited, Julie Mark Cohen, CF Nov. 95, p254-270.

Wind-Induced Fatigue Loading and Damage to Hip and Gable Roof Claddings, Y. L. Xu, ST Dec. 96, p1475-1483

Claims

ADR, 25 Years of Progress, Robert A. Rubin, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p21-29.

Bad Vibrations, Lawrence W. Gubbe, P.E., CE Aug. 96, p58-60.

nnot Indemnify for Own Negligence, CE Oct. 96, p30.

Claim Review Process, CE May 96, p24.

Claims Analysis from Risk-Retention Professional Liability Group, Jack R. Janney, C. Roy Vince and Jack D. Mad-sen, CF Aug. 96, p115-122. Construction Claims and Disputes: Causes and Cost/Time Overruns, Cheryl Semple, Francis T. Hartman and George Jergeas, CO Dec. 94, p785-795.

Contractor Responsible for Own Negligence, CE Jan. 96, p26.

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Malpractice Suit Against Engineer, CE May 96, p24.

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No Subcontractor Indemnity for Contractor's Negligence, CE Sept. 96, p28.

Professional Liability — An Approach that Works, John G.

Professional Liability — An Approach that Works, John G. Tawresey, (Bulding an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1288-1295.
Residential Vulnerability Functions and Their Variability Based on Claims Data, Ben Lashkari and Ronald Wardrop, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p307-308.
Risk Allocation in Lump-Sum Contracts—Concept of Latent Dispute, Francis Hartman and Patrick Snelgrove, CO Sept. 96, p291-296.
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Risky Business, ME Nov./Dec. 96, p12.

Risky Business, July Nov July - 96, p12 Subcontractor's Pass-Through Claim Forfeited Due to Fraudulent Conduct of Prime Contractor, Michael C. Loulakis and William L. Cregger, CE Nov. 96, p29. Suit Filed Over Alleged ADA Violations, CE Apr. 96, p8.

Wastewater and Condo Jobs Are Highest Risks, CE Dec. 96, p22.

Claire, William H.

William Claire, 84, Editor of ASCE's Urban Planning Guide, NE July 96, p15.

Solution to Reissner Plate with Clamped Edges, M. M. Aghdam, M. Shakeri and S. J. Fariborz, EM July 96, p679-682

Vibrations of Clamped Rectangular Plates on Elastic Foundations Subjected to Uniform Compressive Forces, S. Sacit Tameroğlu, EM Aug. 96, p714-718.

Charmers

One-Dimensional Clarifier Model with Sludge Blanket Heights, Randall W. Watts, Spyros A. Svoronos and Ben Koopman, EE Dec. 96, p1094–1100.

Use of NaOH to Control pH for Solubilization of Waste Activated Sludge, Jih-Gaw Lin, Cheng-Nan Chang and Shih-Jin Hsu. (Nacht American Watter, and Environmental Charles and Charles Shih-Ling Hsu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2468-2473.

Classification Methodology for Coupled Shear Walls, O. Chaallal, D. Gauthier and P. Malenfant, ST Dec. 96, p1453-1458.

on an Auditory Model, Denis McKeown, Stephen Had-land, Howard Kirby, Mark Dougherty, Luke Ibbetson, Louis Lopes and Peter Roach, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p711-715.

Turbulent Transport Effect on Hydrocyclone Performance, Michio Nonaka and Hisami Tashiro, EE Apr. 96, p306-

Clay liners

Bearing Capacity of Hydrated Geosynthetic Clay Liners, Robert M. Koerner and Dhani Narejo, GT Jan. 95, p82-85.

Clay Liner Crack Propagation, Joseph F. Boward and Luis E. Vallejo, (Engineered Contaminated Soils and Italians E. Vallejo, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), 197-113. Electrical Resistivity of Compacted Clays, Zeyad S. Abu-Hassanein, Craig H. Benson and Lisa R. Blotz, GT May 96, 2027. 42

96, p397-406.

Hydraulic Conductivity of Desiccated Geosynthetic Clay Liners, B. Tom Boardman and David E. Daniel, GT Mar. 96, p204-208.

96, p204-208.
Permeability of Clay Liners with Contaminants, Puvvadi V. Sivapullaiah and Asuri Sridharan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p506-511.
Practical Methods for Managing Uncertainties for Geosynthetic Clay Liners, David E. Daniel and Robert B. Gilbert, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1331-1346. 1346.

Random Network Modeling for Determination of Representative Specimen Size of Compacted Clays, Suri Thangavadivelu, Lakshmi N. Reddi and Sunil Menon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-

son, ed. and Mary J. S. Roth, ed., 1996), p1303-1317.
Shear Strength of Reinforced Geosynthetic Clay Liner,
Robert B. Gilbert, Federico Fernandez and David W.

Horsfield, GT Apr. 96, p259-266. Statistical Sample Size for Construction of Soil Liners. Craig H. Benson, Huaming Zhai and Salwa M. Rashad, GT Oct. 94, p1704-1724.

Winter Effects on Hydraulic Conductivity of Compacted Clay, C. H. Benson, T. H. Abichou, M. A. Olson and P. J. Bosscher, GT Jan. 95, p69-79.

Clay soils

Contraction Scour at Bridges Founded on Clay Soils, W. R. Ivarson, F. Qadir and M. Phelps, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1358-1366.

Fabric Anisotropy and Its Relationship to Macroscopic Constitutive Behavior of Clays, A. Anandarajah, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

Macroscopic Constitutive Behavior of Clays from Microscopic Considerations, A. Anandarajah and J. Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p709-712.

Modeling Aspects Associated with Time Dependent Be-havior of Soils, Toshihisa Adachi, Fusao Oka and Mamoru Mimura, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Victor N. Kaliakin, ed., 1996), p61-95. Sheahan, ed. and

Modeling Stress-Strain Response of Clay Using Neural Nets, Yacoub M. Najjar, Imad A. Basheer and Hossam A. Ali, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p697-700.

Permeability of Clay Liners with Contaminants, Puvvadi V. Sivapullaiah and Asuri Sridharan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p506-511.

Retention of Multiple Heavy Metal lons by Fly Ash, A. Sridharan, N. S. Pandian and C. Rajasekhar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1608-1613.

Time Effects on Pile Skin Resistance, Juan M. Antorena and G. Thomas McDaniel, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p582-589.

Clay structure

Radwaste Disposal in Clay-E. C. Everest Project, IPSN Contribution, Catherine Certes, Patrick Goblet and André Levassor, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p170-171.

Analysis of Deep Excavation with Column Type of Ground Improvement in Soft Clay, Chang-Yu Ou, Tzong-Shiann Wu and Hsii-Sheng Hsieh, GT Sept. 96, p709-716.

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S. Roth, ed., 1996), p1417-1431.

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N. Kaliakin, ed., 1996), p214-227.
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Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p976-981. Liability of Engineers When Wetlands Laws Change, Peter

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Fuzzy Rule-Based Estimation of Flood Probabilities under Climatic Fluctuations, Istvan Bogardi, Roland Reiter and Peter Nachtnebel, (Risk-Based Decision Making in Water Resources VII. Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p61-79

Impacts of Climate Change in the Missouri River Basin, Rollin H. Hotchkiss, Steven F. Jorgensen, Ranjan S. Muttiah, Jeffrey G. Arnold, Thomas A. Fontaine, Scott J. Kenner and John M. Antle, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3399-3404.

Integrated Hydrological/Ecological/Economic Modeling for Examining the Vulnerability of Water Resources to Climate Change, John P. Kochendorfer and Jorge A. Ramirez, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1995, 2147, 2147. 1996), p2157-2162.

Looking for Evidence of Climatic Change in Streamflow Time Series, K. H. Hamed and A. R. Rao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1459-1464.

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Policy and Engineering Decision-making under Global Change: Case of the Upper Rio Grande River Basin, Lu-cien Duckstein, Bijaya P. Shrestha and Marvin Waterstone, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p38-60.

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chayya Bathala, ed., 1996), p1442-1446.

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Oblique Reflection Characteristics of Rubble-Mound Struc-tures, Michael Isaacson, David Papps and Etienne Man-

sard, WW Jan./Feb, 96, pl-7.
Optimal Management of a Coastal Aquifer in Southern Tur-key, Khosrow Hallaji and Hasan Yazicigil, WR July/ Aug. 96, p233-244.

Aug. 30, p235-244.

Scientific Visualization Techniques for Wave Transforma-tion Models, David A. Leenknecht and Wayne W. Tan-ner. (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p704-710.

Web Tour: Antonio Baptista, ET June/July 96, p10-11. With Respect to Coasts, Darryl Hatheway, CE Dec. 96,

p29-30.

Coastal environment

Constal environment

Acquisition and Use of Coastal-Storm Related Data for Zoning Purposes, Andrew W. Garcia, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p393-394.

Cnung, ed., 1997), p.593-594.

Coastal Flood Hazard Analysis Using Digital Photogrammetry, Margery Overton, Cheryl Petrina and John Fisher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p.187-188.

Coastal Ocean Model Performance in Eastern Australia, William L. Peirson and Ian P. King, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p632-643.

Combined Flood Hazard Mitigation Techniques for Comprehensive Planning - the Saugus River Coastal Flood Risk Reduction Plan, Barbara D. Hayes, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2312-2317.

waier, Chenchayya Bainaia, ed., 1996), p.2312-2517.
Condition Assessment of Marine Timber Piles Using Stress Wave Method, Shunyi Chen and Y. Richard Kim, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p853-860.

Environmental Fluid Mechanics — A Review of Some Recent Results, Robert L. Street, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p30-32.

Estuarine and Coastal Modeling, Malcolm L. Spauldin and Ralph T. Cheng, 1996, 0-7844-0165-9, 730pp. Evacuation Strategies for Public Officials, T. Michael Car

Evacuation Strategies for Public Officials, T. Michael Carter, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p109-110. For Sure Shores, Monica Maldonado, CE Oct. 96, p57-60.

For Sure Shores, Monica Maidonado, C.E. Oct. 90, pp.7-60.
History of Coastal Engineering in Italy, Leopoldo Franco, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p275-335.

History of Coastal Engineering in Spain, M. A. Losada, R. Medina, C. Vidal and I. J. Losada, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p465-499.

History of Coastal Engineering in Taiwan, Ching-Ton Kuo, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p500-512.

Hydraulic Studies for a Large Wetland, Stephane Asselin, Phillip R. Mineart and Pierre-Yves Saugy, (North American Water and Environment Congress & Destructive Water, Chenchayva Bathala, ed., 1996), p512-517.

Water, Chenchayya Bathala, ed., 1996), p512-517.
Impacts of Sea Level Rise on Coastal Water Resources
Management, Chin Y. Kuo, (North American Water and
Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1822-1827.

Modeling Horizontal Diffusion with Sigma Coordinate System, Wenrui Huang and Malcolm Spaulding, HY June 96, p349-352.

A Multi-Objective Analysis for Cyclone Shelter Planning in Bangladesh, Jahir U. Chowdhury, Rezaur Rahman, Fazlul Karim and David W. Watkins, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p213-214. Numerical Model for On-Offshore Sediment Transport with

Numerical Model for On-Offshore Sediment Transport with Moving Boundaries, Cheol-Eung Lee, Moo-Hyun Kim and Billy L. Edge, WW Mar/Apr. 96, p84-92.
Permeable Pile Groins, Arved J. Raudkivi, WW Nov/Dec.

96, p267-272.

Pier Scour at Wide Piers, Peggy A. Johnson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2193-2201.

Robert Dalrymple, Anthony Pratt and Vincent Sakovich, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p251-252.

(Vaturai Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p.251-252. Simulation of Three-Dimensional, Non-Hydrostatic Free-Surface Flows for Estuaries and Coastal Seas, Vincenzo Casulli and Stelling Guus S., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p.1-12.

This Is Not Good News, Percival A. Miller, CE May 96, p29.

Velocity Profile in Shallow Coastal Waters, Habib D. Anwar, HY Apr. 96, p220-223.

Watershed Management for a Limited Coastal Aquifer System, James P. Rhodes. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1087-1092.

A Windstorm Damage Model for the Identification of Insurance and Reinsurance Risk, Brian E. Lee and David R. Whiting, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p197-198. With Respect to Coasts, Darryl Hatheway, CE Dec. 96,

p29-30.

WQMAP in a Windows Environment, Daniel Mendelsohn, Eoin Howlett and J. Craig Swanson, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p555-569.

Coastal management

Empirical Simulation Technique Based Storm Surge Frequency Analyses, Norman W. Scheffner, Leon E. Borgman and David J. Mark, WW Mar./Apr. 96, p93-101.

History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996, 0-7844-0196-9, 610pp.

History and Heritage of German Coastal Engineering, Hanz D. Niemeyer, Hartmut Eiben and Hans Rohde, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed. 1996), p169-213.

History of Coastal Engineering in Australia, Michael R. Gourlay, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p1-88.

History of Coastal Engineering in Canada, J. William Kamphuis, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p89-102.

History of Coastal Engineering in Denmark, Torben Sørensen, Jørgen Fredsøe and Per Roed Jakobsen, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p103-141.

History of Coastal Engineering in Great Britain, Rendel Palmer, ed. and Tritton Limited Development and Engineering Consultants, ed., (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p214-274.

History of Coastal Engineering in Portugal, F. Vasco Costa, F. Veloso Gomes, F. Silveira Ramos and Claudino M. Vicente, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p413-428.

The History of Coastal Engineering in South Africa, D. H. Swart, ed., (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p429-464.

History of Coastal Engineering in Taiwan, Ching-Ton Kuo, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p500-512.

History of Coastal Engineering in the USA, Robert L. Wiegel and Thorndike Saville, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p513-600.

An Integrated Coastal Management Plan for Mamala Bay, Donald R. F. Harleman and Susan E. Murcott, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4096-4100.

The Mamala Bay Study, Oahu, Hawaii: Introduction, Gerald T. Orlob, Camilla M. Saviz, Jerry R. Schubel and Rita R. Colwell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4101-4106.

Wetland Restoration in Southern North Sea Coastal Areas: The Experience of Britain and The Netherlands, Henk Smit and John S. Pethick, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3740-3745.

Coastal morphology

Behaviour-Oriented Models of Shoreface Evolution, Marcel J. F. Stive, Huib J. De Vriend, Peter J. Cowell and Alan Wm. Niedoroda, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p998-1005.

Dynamic Processes on a Ridge and Runnel Beach, David Simmonds, George Voulgaris and David Huntley, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p868-878.

Dynamics of Sand Bars in Coastal Zones, B. Boczar-Karakiewicz, J. L. Bona, A. Naguszewski and W. Romańczyk, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p862-867.

Field Validation and Application of a Coastal Profile Model, J. A. Roelvink, Th. J. G. P. Meijer, K. Houwman, R. Bakker and R. Spanhoff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p818-828.

Mathematical Modelling of Coastal Morphodynamics Near a Tidal Inlet System, Jan S. Ribberink, Eeleo H. Negen and Gerrit Hartsuiker, (*Coastal Dynamics* '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p915-926 Modelling of Hydro- and Lithodynamic Processes in Kollobrzeg Region, Leonard Gajewski, Elżbieta Zawadz-ka, Juliusz Gajewski and Andrzej Lewandowski, (Coast-al Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p891-902.

Morphological Impact Assessment of Artificial Islands for the Øresund Link Between Denmark and Sweden, Kar-sten Mangor, Andrew M. Driscoll, Ida Brøker and Ann Skou, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p939-950.

A Morphology Model to Predict Erosion Near a Seawall, K. A. Rakha and J. W. Kamphuis, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p879-890.

Numerical Morphodynamic Modelling of Keta Lagoon, Tim J. Chesher, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p927-938.

Remote Sensing of the Polish Coasts Morphology, Kazimierz Furmańczyk and Stanisłław Musielak, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p1018-1023.

South Carolina Coastal Erosion Study: Inlet Morpho-dynamics and Sediment Transport, P. A. Work, W. E. Rogers and E. J. Hayter, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1047-

Spingat, Frank, Hans-H. Dette and Karsten Peters, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p477-488.

Time Series Analysis of Long-Term Beach Level Data from Lincolnshire, UK, Howard N. Southgate and Luisa M. Beltran, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1006-1017

Vertical Profiles of Longshore Currents and Bed Shear Stress, E. B. Thomton, C. M. C. V. Soares and T. P. Stanton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p449-459.

Coastal plains

Assessment of Risks of Flooding by Use of a Two-Dimensional Model, A. Paquier and P. Farissier, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3915-3916.

Soft-Ground Subway Construction, Mohammad Irshad, P.E. and John R. V. Dickson, P.E., CE Nov. 96, p54-57.

The 'Dynamics of Beaches' Project, P. Prinos, A. S. Arcilla, N. Christiansen, J. van de Graaf, M. Hogedal, A. Lewis, B. O'Connor, F. Rivero and J. de Rouck, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582.

2D Velocity Distributions in Nearshore Currents, Marek Szmytkiewicz, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p366-376.

Animation Techniques for Visualizing Coastal Flow Dy-namics, Brian King, Patrick Collins, Duncan Galloway and Eric Wolanski, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p192-203.

Anticyclonic Upper Layer Residual Circulation and Estua-rine Circulation in Osaka Bay, Kejji Nakatsuji and Tateki Fujiwara, (*Estuarine and Coastal Modeling*, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p128-142.

Application of the Model SPECIES to Kaneohe Bay, Oahu, Hawaii, Clifford J. Hearn, (Estuarine and Coastal Mod-eling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p355-366.

BAYMAP: A Simplified Embayment Flushing and Trans-port Model System, J. Craig Swanson and Daniel Men-delsohn, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p570-582.

Beach Nourishment: Planform Considerations, Robert G. Dean, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p533-546.

Beach Profile Evolution Under Mean Conditions, José-María Medina V., Luis Moreno and José C. Santás, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p595-606. Boundary Layer Theory and Field Bedload, Leszek M. Kaczmarek, Rafall Ostrowski and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p664-675.

Coast, T. M. Peck, R. J. M. Sweet, H. N. Southgate, S. Boxall, A. Matthews, R. Nash, J. Aiken, H. Bottrell and R. Wilson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1024-1034.

Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996, 0-7844-0154-3, 1065pp.

Coastal Evolution Downdrift of St. Joseph Harbor on Lake Michigan, R. B. Nairn and L. E. Parson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p903-914.

Design of a Laboratory Facility for Longshore Sediment Transport Research, Julie D. Rosati, David G. Hamilton, Jimmy E. Fowler and Jane M. Smith, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p771-782.

97

Development of a Large-Scale Tidal Circulation Model for the Mediterranean, Adriatic and Aegean Seas, D.J. Mark and N. W. Scheffner, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Dynamics of Sand Bars in Coastal Zones, B. Boczar-Karakiewicz, J. L. Bona, A. Naguszewski and W. Romańczyk, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p862-867

Effect of Divergent Flow on Mass Conservation in Eulerian-Lagrangian Transport Schemes, Ling Tang and E. Eric Adams, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p106-115.

Employment of Electronic Sand Level Gauges for Measurement of Beach Slope Deformation on Norderney Island, Kos'yan R., H. Kunz and I. Podymov, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p651-663.

Evaluation of the UK Coastal Research Facility, Richard R. Simons, Richard J. S. Whitehouse, Ruairi D. MacIver, Jonathan Pearson, Paul B. Sayers, Yingdao Zhao and Adrian R. Channell, (*Coastal Dynamics* '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p161-172.

Field Validation and Application of a Coastal Profile Model, J. A. Roelvink, Th. J. G. P. Meijer, K. Houwman, R. Bakker and R. Spanhoff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

Flushing and Recharge of Inlet Channel for an Ephemeral Coastal River, Howard H. Chang and Daniel Pearson, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p659-668.

For Sure Shores, Monica Maldonado, CE Oct. 96, p57-60.

Hindcast Simulations of Ocean Currents in Norwegian Coastal Waters; Part 2: Summary of the Main Results, Eivind A. Martinsen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Hindcast Simulations of Ocean Currents in the Norwegian Coastal Waters. Part 1: Model Set Up and Sensitivity Tests, Harald Engedahl, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p379-390.

History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996, 0-7844-0196-9, 610pp.

History of Coastal Engineering in Denmark, Torben Sørensen, Jørgen Fredsøe and Per Roed Jakobsen, (His-tory and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p103-141.

Influence of Seabed Topography and Roughness on Long-shore Wave Processes, Terry M. Hume, Brett Beamsley, Malcolm O. Green, Willem P. de Lange and D. Murray Hicks, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p975-986.

Interaction Between Nearshore Natural Processes on Macro-Tidal Beaches. Case Study Along the Capricorn Coast, Australia, Jerzy Piorewicz and Paul Boswood, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p489-500.

Lift Off and Entrainment of Sediments, J. M. Redondo, M. A. Sánchez and R. Castilla, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

Mitigation Measures for Eroding Muddy Shores, Ashish J. Mehta and Robert Kirby, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3728-3733.

Modelling Eddy Formation in Coastal Waters: A Comparison between Model Capabilities, Duncan Galloway, Eric Wolanski and Brian King, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p13-25.

Modelling of Hydro- and Lithodynamic Processes in Kollobrzeg Region, Leonard Gajewski, Elżbieta Zawadzka, Juliusz Gajewski and Andrzej Lewandowski, (Coast-al Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p891-902.

Multiscale Shore Variability at Two Coasts, Pierluigi Am-inti, Zbigniew Pruszak and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p617-628.

Neptune-An Integrated Approach to Determining NW Eu-ropean Coastal Extremes, Jerzy Graff and Witold Cieślikiewicz, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1035-1046.

New Jersey Nearshore Hypoxia During the Summer 1976, Ross W. Hall and Mark S. Dortch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p608-617.

Optimized Boundary Conditions for Coastal Modeling, Igor Shulman and James K. Lewis, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p268-282.

Particle Dynamics in the Sound Between Denmark and Sweden, Jens R. Valeur, Morten Pejrup and Anders Jensen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p951-962.

A Quantitative Skill Assessment of Numerical Hydrodynamic Models of Coastal Currents, Timothy R. Keen and Scott M. Glenn, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p26-40.

Reproducibility of Beach Profiles and Sand Ripples Generated by Huge Waves, Masahiro Ito, Hiroshi Murakami and Takeshi Ito, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p698-708.

Signatures of Coastal Change at Mesoscales, Timothy W. Kana, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p987-997

Simulations of the Maine Coastal Current, Monica J. Hol-boke and Daniel R. Lynch, (Estuarine and Coastal Mod-eling, Malcolm L. Spaulding and Ralph T. Cheng,

1996), p156-167.

South Carolina Coastal Erosion Study: Inlet Morpho-dynamics and Sediment Transport, P. A. Work, W. E. Rogers and E. J. Hayter, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1047-

NOAA East Coast Ocean Model, Richard A. Schmalz, Jr. (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p442-453.

Spingat, Frank, Hans-H. Dette and Karsten Peters, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p477-488.

Storm Surge Frequency Computations for Long Island, NY: A Comparison of Methodologies, Norman W. Scheffner and H. Lee Butler, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p80-

Time Series Analysis of Long-Term Beach Level Data from Lincolnshire, UK, Howard N. Southgate and Luisa M. Beltran, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1006-1017.

Wave Motion in Vegetated and Non-Vegetated Coastal Zones, Stanisłław R. Massel, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1-12.

Wave Propagation in Shallow Waters: Modelling and Real Data, José C. Santás and José M. de la Peña, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p128-139.

Wind Wave Simulation in Coastal Zone, Tatjana Talipova, Efim Pelinovsky and Eliezer Kit, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p105-115.

Coastal structures

The Caspian Sea Transgression (Environmental Medical Aspect), L. I. Elpiner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3498.

Combined Structural and Non-Structural Flood Hazard Mitigation, Barbara D. Hayes, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p25-26.

Design Formulas for Block Revetments, Adam Bezuijen and Mark Klein Breteler, WW Nov./Dec. 96, p281-287. Estimating Wave-Induced Kinematics at Sloping Structures, Steven A. Hughes and Jimmy E. Fowler, WW July/Aug. 95, p209-215.

Evaluation of Design Wave Impact Pressures, G. Müller and T. J. T. Whittaker, WW Jan./Feb. 96, p55-58.

Florida DOT Applies Gravity Sealer to Seaway Bridges, CE Sept. 96, p96.

Groundwater Dynamics in Beaches and Coastal Barriers, Peter Nielsen and Hong-Yoon Kang, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p521-532.

History and Heritage in Coastal Engineering in The Nether-lands, Eco W. Bijker, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p390-412.

History of Coastal Engineering in Australia, Michael R. Gourlay, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p1-88.

History of Coastal Engineering in Portugal, F. Vasco Costa, F. Veloso Gomes, F. Silveira Ramos and Claudino M. Vicente, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p413-428.

The History of Coastal Engineering in South Africa, D. H. Swart, ed., (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p429-464. History of Coastal Engineering in Taiwan, Ching-Ton Kuo,

(History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p500-512. Marine Borers are Back, Vahan Tanal and Alex Matlin, CE Oct. 96, p71-73.

Multiple-Pit Breakwaters, William G. McDougal, A. Neil Williams and Keizo Furukawa, WW Jan./Feb. 96, p27-

Wave Run-Up: Recent IBW PAN Investigations, Jerzy Kolodko, Jaroslaw Kapiński, Marek Szmytkiewicz and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p197-208.

With Respect to Coasts, Darryl Hatheway, CE Dec. 96, p29-30.

Coating

Bridge Corrosion Cost Model Implementation and Coating Maintenance Model Using Dynamic Programming, C. K. Tam and S. F. Stiemer, CF May 96, p57-66.

Coating of Steel Structures in Cold Regions, Yuji Nakamura, Taiichi Inaba and Akihiro Tamada, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p173-184.

Evaluating Coatings for Concrete Wastewater Facilities, C. Vipulanandan, H. Ponnekanti, Dara N. Umrigar and A. D. Kidder, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p851-862.

Evaluation of the Performance of Sprayed Zinc Anodes for Protecting Reinforcing Bars, John S. Tinnea and R. P. Brown, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1531-1539.

Golden Gate Bridge Gets Its Color Back, CE Sept. 96, p12. Minnesota Featured State at Bridge Conference, CE Aug. 96, p16.

- Northern Climate Weathering Tests on Sealed Concrete, Luh-Maan Chang, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p141-150
- A Process Unit Based Approach to Media-Integrated Waste Minimization: A Paint Manufacturing Case Study, Rafal D. Walicki, Isobel W. Heathcote and Gordon Hayward, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1632-1637

Studies on Galvanized Carbon Steel in Ca(OH)2 Solutions, Bala S. Haran, Branko N. Popov and Ralph E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p997-1006.

Thermal-Sprayed Zinc Anodes for Cathodic Protection of Reinforced Concrete Structures, B. S. Covino, Jr., S. D. Cramer, G. R. Holcomb, S. J. Bullard, G. E. McGill and C. B. Cryer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1512-1521.

Codes

Area-average Wind Pressures on a Low-rise Building, Russ D. Leffler and Jack E. Cermak, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1037-1044.

Author Clarifies His Convictions, Oscar De Pineres, P.E.,

CE July 96, p31.

Automated Code Compliance Checking for Building In-spection, Tang Hung Nguyen, Claude Bédard and Kinh Huy Ha, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p1020-1026.

Containing Spills and Fire, William E. Wiley, CE Mar. 96,

Economic Evaluation of Design Codes—Case of Seismic Design, A. Warszawski, J. Gluck and D. Segal, ST Dec. 96, p1400-1408.

Girder Moments in Continuous Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE Feb. 96, p37-45.

- Loading and Material Behavior Effects on System Redundancy, Dan M. Frangopol and Keito Yoshida, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),
- Low Building Wind Load Variability for Code Applica-tions, T. C. Eric Ho, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1053-1060.

Optimization of Composite Highway Bridge Systems, M. Z. Cohn and J. J. Werner, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p135-146.

Performance-Based Seismic Design of Building Structures, Kevin R. Collins, (Probabilistic Mechanics & Structural Revin R. Comis, Proposition of the Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p792-795. Serviceability Reliability Analysis of Reinforced Concrete Structures, Mark G. Stewart, ST July 96, p794-803.

Structures, Nam. G. Stewart, 91 July 2007.
Wind Engineering Co-operation: A Perspective of Europe and of China, Brian E. Lee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1069-1074.

Wind Loads for Low-Rise Buildings on Escarpments, Brad Means, Timothy A. Reinhold and Dale C. Perry, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1045-1052

Wind-Tunnel Studies of Buildings and Structures, ASCE Aerospace Division Task Committee on Wind Tunnel Studies of Buildings and Structures, AS Jan. 96, p19-36.

AASHTO Layer Coefficients for Cement-Stabilized Soil Bases, David N. Richardson, MT May 96, p83-87.

Estimation of Annual Storm Runoff Coefficients by Continuous Simulation, Ashok Pandit and Ganesh Gopalakrishnan, IR July/Aug. 96, p211-220.

Cofferdame

Boston's Home Run, Rita Robison, CE July 96, p36-39.

Limit Design of Axisymmetric Shells with Application to Cellular Cofferdams, P. de Buhan and A. Corfdir, EM Oct. 96, p921-929.

Adhesion and Aerodynamic Resuspension of Fibrous Parti-cles, Nurtan A. Esmen, EE May 96, p379-383.

Constitutive Driver for Cohesive-Frictional Materials, K. Willam and M.-M. Iordache, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p751-760.

Surface Cleanliness Effects on Lunar Regolith Shear Strength, Howard A. Perko, John D. Nelson and Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p689-698.

Cohesionless sediment

Local Scour: By A Deeply Submerged Horizontal Circular Jet, Yee-Meng Chiew and Siow-Yong Lim, HY Sept. 96, p529-532

Cohesionless soils

Bearing Capacity of Shallow Foundations on Noncohesive Soils, Bohdan Zadroga, GT Nov. 94, p1991-2008.

Friction Characteristics of Cohesionless Soil Penetrated by Polymer and Mineral Slurries, Karnal Tawfiq, P.E. and Hubert Lee Broughton, III, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1170-1178.

Integrating the Refraction Seismic Method into Stream Crossing Characterization for Scour and Excavation Conditions, Michael L. Rucker, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1163-1177

Polymer Impregnation to Assist Undisturbed Sampling of Cohesionless Soils, Kevin G. Sutterer, J. David Frost and Jean-Lou A. Chameau, GT Mar. 96, p209-215.

Probabilistic Analysis of Randomly Distributed Fiber-Reinforced Soil, Gopal Ranjan, R. M. Vasan and H. D. Charan, GT June 96, p419-426.

Seismic Bearing Capacity of Foundation on Cohesionless Soil, L. Dormieux and A. Pecker, GT Mar. 95, p300-303.

Uniformity Evaluation of Cohesionless Specimens Using Digital Image Analysis, Chun-Yi Kuo and J. David Frost, GT May 96, p390-396.

Cohesive sediment

3D Numerical Modeling of Cohesive Sediments, Scott A. Yost and Nikolaos D. Katopodes, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p478-489.

Coastal Evolution Downdrift of St. Joseph Harbor on Lake Michigan, R. B. Nairn and L. E. Parson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p903-914.

Gravity Current of Fluid Mud on Sloping Bed, Thijs van Kessel and C. Kranenburg, HY Dec. 96, p710-717.

Multiphase Distribution of Cohesive Sediments and Heavy Metals in Estuarine Systems, Parmeshwar L. Shrestha and Gerald T. Orlob, EE Aug. 96, p730-740.

The Role of Macroflocs in Estuarine Sediment Dynamics and its Numerical Modeling, A. Malcherek and W. Zielke, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p695-706.

Settling and Erosion Characteristics of Mud/Sand Mixtures, Hilde Torfs, Helen Williamson and Heidi Huysentruyt, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p749-758.

Centrifuge Modeling of Geotextile-Reinforced Cohesive Soil Retaining Walls, A. Porbaha and D. J. Goodings, GT Oct. 96, p840-848.

Coefficient of Permeability from AC Electroosmosis Experiments. II: Results, R. J. Finno, K. Chung, J. Yin and J. R. Feldkamp, GT May 96, p355-364.

Collapse of Geogrid-Reinforced Retaining Structure, Gerald A. Leonards, J. David Frost and Jonathan D. Bray, CF Nov. 94, p274-292.

Cyclic Axial Loading of Drilled Shafts in Cohesive Soil, Kevin J. McManus and Fred H. Kulhawy, GT Sept. 94, p1481-1497.

Dynamic Properties of Cohesive Soils Treated with Lime, K. Fahoum, M. S. Aggour and F. Amini, GT May 96, p382-389. Fabric Anisotropy and Its Relationship to Macroscopic Constitutive Behavior of Clays, A. Anandarajah, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

Undrained Multidirectional Direct Simple Shear Behavior of Cohesive Soil, Don J. DeGroot, Charles C. Ladd and John T. Germaine, GT Feb. 96, p91-98.

Cold regions

Air Convection Embankments for Roadway Construction in Permafrost Zones, Douglas J. Goering, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p1-12.

Behavior of a Sand in Frozen and Unfrozen States, Christo-

pher W. Swan, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p483-493.

Biological Phosphorus Removal: Effect of Low Temperature, Pradeep Kumar, Indu Mehrotra and T. Viraragha-

van, CR June 96, p63-76.

Case History of a Lined Wastewater Treatment Lagoon Failure, Kelly S. Merrill and Matt Stephl, (Cold Regions Engineering: The Cold Regions Infrastructure—An In-ternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p518-532.

Coating of Steel Structures in Cold Regions, Yuji Nakamura, Taiichi Inaba and Akihiro Tamada, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p173-184.

Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996, 0-7844-0190-X, 965pp

Cold Regions Utilities Monograph, 3rd edition, Daniel W. Smith, ed., 1996, 0-7844-0192-6, 780pp.

Cold Regions' Icy Reach, Eric G. Johnson, CE Sept. 96, p6. Cold Temperature Nutrient Removal from Wastewater, Jan A. Oleszkiewicz and Shahnaz Danesh, (Cold Regions A. Oreszasewicz and Shannaz Danesh, cond Regions Engineering: The Cold Regions Infrastructure—An In-ternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p533-544. Cold-Related Electric Power System Considerations, John Aspnes and James Cote, (Cold Regions Engineering: The Cold Regions Infrastructure Cold Regions Engineering: The

Cold Regions Infrastructure—An International Impera-tive for the 21st Century, Robert F. Carlson, ed., 1996), p436-446.

Concrete Pavements in Tunnels, J. S. Berg and P. M. Noss, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p911-922.

CPT in Cold Regions Engineering: A Logging and Design Tool, Richard Fortier, Branko Ladanyi and Michel Al-lard, (Cold Regions Engineering: The Cold Regions Inuara, Cola Regions Engineering: Ine Cola Regions in-frastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p459-470.
Demonstrating Brine Water Wells and Toilets for Deering, Alaska, Robert H. Lundell, (Cold Regions Engineering:

The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p558-569.

1996), p.58-509.
Drinking Water Quality in Small Northern Communities, Daniel W. Smith, Stephen J. Stanley and Dennis S. Prince. (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p570-581.
Drying Sludge Saves Costs, CE Oct. 96, p11.

Dryning Studge Saves Costs, CE Oct. 96, p11. Dynamics of River Ice Jam Release, Hung Tao Shen and Shunan Lu, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p594-605. Environmental-Induced Longitudinal Cracking in Cold Regions Pavements, Robert L. Scher, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlional

tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p899-910.

Field Observations of Instrumented Highway Sections with Different Frost Protections, J.-M. Konrad, G. Dore and M. Roy, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p652-663. Frost Action, Dennis E. Pufahl, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p57-86.

100

Full-Scale Test Studies on Prevention of Frost Damage for Retaining Wall Reinforced with Geotextile, Lun Chen, Guangxin Li and Wenfeng Huang, (Cold Regions Engineering: The Cold Regions Infrastructure-An Interna tional Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p724-735.

Guest Editorial, F. Lawrence Bennett, CR Sept. 96, p119-

121.

Incorporation and Rejection of Alum Sludge Flocs by an Advancing Freezing Front, Philip J. Parker, Anthony G. Collins and John P. Dempsey, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p757-768.

Innovative Bioventing System Construction/Operation in Cold Regions, Kimberly K. Stricklan and Randall L. Mattzela, (Cold Regions Engineering: The Cold Regions

Mattzeii, (Cota Regions Engineering: The Cota Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p351-359.
Low Temperature Cracking and Rutting in Asphalt Concrete Pavements, Ted S. Vinson, R. Gary Hicks and Vincent C. Janoo, (Roads and Airfields in Cold Regions, Ted Vinson, ed., James W. Rooney, ed. and Wilbur H.

Haas, ed., 1996), p203-248.

Low Temperature Performance Rating Criteria for Lubrication Greases, Jan Lundberg and Terry McFadden, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p153-172

Material Properties, Specifications and Testing for Pavements in Cold Regions, Edwin J. Chamberlain, Vincent C. Janoo and Stephen A. Ketcham, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p289-318.

Mechanistic Design of Asphalt Concrete Pavements in Cold Regions, Ted S. Vinson and James W. Rooney, (Roads and Airfields in Cold Regions, Ted S. Vinson, Rooney, ed. and Wilbur H. Hans, ed., ed., James W. 1996), p151-202.

Minimizing Costs of Northern Highways by Using BST, D. R. MacLeod and Robin Walsh, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p935-946.

Modeling Ice-Cover Melting Using a Variable Heat Trans-fer Coefficient, Semaan Sarraf and Xiu Tao Zhang, EM Oct. 96, p930-938.

Modeling of Contaminant Transport in Groundwater in Areas of Discontinuous Permafrost, Ron Johnson, Doug Kane, Larry Hinzman, Greg Light and Ann Farris, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p82-93.

Moisture Conditions and Control in Buildings in Fairbanks,

Alaska, Ross Adkins, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996),

p372-383.

Municipal Solid Waste Characterization in a Cold Remote Region, Abigail A. Ogbe and Christina Behr-Andres, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p780-791.

A New, Low-Cost Ice Control Structure. Part 1: Concept Development, J. H. Lever, G. Gooch and A. Tuthill, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p617-628.

A New, Low-Cost Ice Control Structure. Part 2: Construc-tion and Performance, J. H. Lever, G. Gooch and C. Clark, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p629-639. Northern Climate Weathering Tests on Sealed Concrete,

Luh-Maan Chang, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p141-152. Occurrence and Significance of Cryptosporidium parvum and Giardia lamblia in Surface Waters on Alaska's North Slope, Michael R. Pollen, Cindy L. Christian, Craig D. Nordgren and Jonathan D. Pollen, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p494–505.

An Open Graded Base to Reduce Thaw Weakening in Flexible Pavements, Maureen A. Kestler, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p878-889.

Oxygen Supplies for Bioremediation in Tundra Soils, Dan-iel M. White and Robert L. Irvine, (Cold Regions Engineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p339-350.

Pavement Design Applying Allowable Frost Heave, Seppo Saarelainen, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p890-898.

213t Century, Robert F. Cartson, ed., 1996), p890-898.
Remote Monitoring and Technical Support for Drinking Water Systems in Remote Communities, Daniel W. Smith, Stephen J. Stanley and Dennis S. Prince, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Cartson, ed., 1996), p545-557.

Risk Assessment of Vapors in Cold Regions, Robert A.
Perkins, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p360-371.

Road and Airfield Design for Permafrost Conditions, David C. Esch, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas,

ed., 1996), p121-150.

Road and Airfield Development in the Subarctic and Arctic, Alaska and Northwest Canada, James W. Rooney and Ted S. Vinson, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p1-22.

Road and Airfield Maintenance, John C. Becker and David C. Esch, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas,

ed., 1996), p249-270.

Roads and Airfields in Cold Regions, Technical Council on Cold Regions Monograph, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996, 0-7844-Rooney, ed. a 0191-8, 330pp.

Route Location/Siting: A Review of Practices, Robert L. Schraeder, Charles H. Riddle and Willard H. Slater, (Raads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p23-56.

Snow Guards for Metal Roofs, Wayne Tobiasson, James Buska and Alan Greatorex, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p398-409.

Soil Thermal Properties for the Design of Underground Structures in Cold Regions, J. E. Steinmanis, D. Parmar, H. S. Radhakrishna and A. S. Judge, (Cold Regions Engi-neering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p471-482.

Solid Waste Management in Rural Alaska, Henriette Mol-berg Hansen and Howard P. Thomas, (Cold Regions En-gineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p769-779.

The Status of Cold Regions Research, Thomas C. Kinney, Robert Carlson and Howard Thomas, (Cold Regions Engineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p196-202.

300. (ed., 1990), p.190202.
301. A Strength Sensitivity Index for Assessing Climate Warming Effects on Permafrost, Branko Ladanyi, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p35-45.

Studded Tire Research in Norway, Finland and Sweden, Eric Johnson, Tony Barter and David Sterley, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p676-687.

Surface Modifications to Reduce Thaw Degradation of Per-mafrost, John P. Zarling and Jasper Rajesh, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p46-59.

Temporary Snow and Ice Pavement Structures, Robert L. Scher, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed.,

Thermal and Vapor Performance of Insulated Assemblies Axel R. Carlson, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p384-397.

Thermal Impact of a Buried Chilled Gas Pipeline, Lutfi Raad, Xioalin Yuan and Dieter Weichert, (Cold Regions Engineering: The Cold Regions Infrastructure—An In-ternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p203-214.

Three-Dimensional Simulation of River Ice Jams, Mark A. Hopkins, Steven F. Daly and James H. Lever, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p582-593.

Use of Geosynthetics in Road and Airfield Construction in Cold Regions, Thomas C. Kinney, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p271-288.

Utilities and Systems for the New U.S. South Pole Station, Amundsen-Scott Station, Antarctica, Steven Theno and Dick Armstrong, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p424-

Vehicle Traction Performance Comparison for Alaska Winter Seasons, J. John Lu, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p664-675.

Wastewater Treatment Facility Aeration Project, Gary L Eddy, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p506-517.

Wortley's Winter Wanderings: A Narrative, C. Allen Wortley, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p837-854.

Cold Regions Utilities Monograph, 3rd edition, Daniel W. Smith, ed., 1996, 0-7844-0192-6, 780pp.

Design and Construction for Asphalt Pavements in Perma-frost Areas: Case Study of Qinghai-Tibet Highway, Nin-gyuan Li and Ralph Haas, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p866-877.

Freeze-Thaw Durability of Concrete Cured Below 0°C Using Antifreeze Admixtures, Michael R. Mason and Herbert P. Schroeder, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Impera-tive for the 21st Century, Robert F. Carlson, ed., 1996),

Minimum Thermal Protection for Cold Weather Masonr C. J. Korhonen, E. R. Cortez and R. D. Thomas, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Debat E. Codenn ed. 1985; 1406. Robert F. Carlson, ed., 1996), p128-140.

Roads and Airfields in Cold Regions, Technical Council on Cold Regions Monograph, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996, 0-7844-Rooney, ed. at 0191-8, 330pp.

KOOIn Waish, Donatdson MacLeod and Dennis Cook, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p640-651.

Cold weather operations
Cold Weather Testing of Outdoor Gas-Fired Heaters, Debendra K. Das, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p410-

Constructional and Environmental Aspects of Structural Materials at Antarctica and Indian Himalayas, R. C. Pathak, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p968-977.

Chong, etc., 1990, p906-971.
Low Temperature Performance Rating Criteria for Lubrication Greases, Jan Lundberg and Terry McFadden, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p153-172.

Optimizing Municipal Wastewater Treatment in Cold Cli-mates: Scale, Process and Benefits, Isobel W. Heathcote and William J. Jewell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1419-1424.

Stably-Stratified Surface Thermal Jet in a Current: Cold Climate Condition, A. M. Zaghloul, R. Martinuzzi and R. E. Baddour, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1062-1065.

Cold-formed steel

Behavior of Cold-Formed SHS Beam-Columns, Raef M. Sully and Gregory J. Hancock, ST Mar. 96, p326-336.

Bending and Shear Behavior of Web Elements with Openings, M. Y. Shan, R. A. LaBoube and W. W. Yu, ST Aug. 96, p854-859.

Effect of Temperature and Galvanization on Cold-Formed Steel, A. B. Abdel-Rahim and D. Polyzois, MT Aug. 96,

Finite Element Computer Models for Analysis of Cold-Formed Steel Members, K. S. Sivakumaran and Nabil Abdel-Rahman, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p690-696.

Load Capacity of Nested, Laterally Braced, Cold-Formed Steel Z-Section Beams, Ahmad A. Ghosn and Ralph R. Sinno, ST Aug. 96, p968-971.

Neural Network Control for Accurate Rebar Bending, Phillip S. Dunston, S. (Ranji) Ranjithan and Leonhard E. Bernold, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p492-501.

Coliform bacteria

The Integration of Receiving Water Impacts in the Evalua-tion Process of Alternative Designs for CSO Abatement in Providence, RI, J. Craig Swanson, Joseph Grgin and Peter von Zweck, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1537-1542.

Design Guidelines for UV Disinfection Facilities, Heba Design Guidelines for UV Disinfection Facilities, Heba Awad, Jeff Kuo and Jamal Awad, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2999–3004. Modeling Coliform Mortality in Waste Stabilization Ponds, Aloice W. Mayo, EE Feb. 95, p140-152.

Survival of Coliform Microorganisms in Sediments from a Treated Water Reservoir, Heesong Yoon and Joseph S. Devinny, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1626-1631.

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, p2288-2309.

Bearing Capacity of Footings over Two-Layer Foundation Soils, Radoslaw L. Michalowski and Lei Shi, GT May

95, p421-428.

Building Collapse Rescue Engineering, Sólveig Thorvald, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p41-42.

Collapse Analysis of Steel Frame Structures Under Earth-quake Loading, Scott C. Martin and Roberto Villaverde, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Collapse of Geogrid-Reinforced Retaining Structure, Ger-ald A. Leonards, J. David Frost and Jonathan D. Bray, CF Nov. 94, p274-292.

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Collapse of Saturated Soil Due to Reduction in Confinement, Scott A. Anderson and Michael F. Riemer, GT Feb. 95, p216-220.

Collapse of Transmission Line Towers in Typhoon Gay, Panitan Lukkunaprasit, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p351-352.

Design and Construction Criteria for Hurricanes - Preventing Your Pre-Engineered Building from Becoming a Scrap Metal Heap, Michael K. H. Yee, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p269-271.

Ethics Not Dependent on Consequences, Robert F. Brown, P.E., CE Nov. 96, p40-41.

European Experiences in Fire Design of Structural Steel, Yngve Anderberg, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p357-364.

Forensic Evaluation of Guyed Tower Collapses, David F. Mazurek and Jonathan C. Russell, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p510-517.

Geophysical Investigation of Karst Collapse Features for a Proposed Waste Rock Stockpile Irian Jaya, Indonesia, Philip H. Duoos and Rowland B. Cromwell, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p86-100.

Investigating and Repairing of Wood Bowstring Trusses, Richard J. Kristie and Arne P. Johnson, SC Feb. 96,

p25-30.

Page 30. The Kobe Earthquake: Performance of Engineered Buildings, David R. Bonneville, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p917-925.

Lessons of the Recent Earthquakes in Sakhalin Region, Russia, Mark Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p5-6.

Loading and Material Behavior Effects on System Redun-dancy, Dan M. Frangopol and Keito Yoshida, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p674-681.

Meter Helps Rescuers Keep Level Heads After Roof Collapse, CE Aug. 96, p78.

A Method for Structural Reliability Analysis of Marine Structures Using Combined Plate and Frame Structure Models, Hiroo Okada, Koji Masaoka, Yoshisada Murotsu, Shigeyuki Hibi and Wataru Kiyokawa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p150-153.

Modeling of Sinkholes in Weakly Cemented Sand, Waleed A. Abdulla and Deborah J. Goodings, GT Dec. 96,

p998-1005

Modified Oedometer for Arid, Saline Soils, Omar Saeed Baghabra Al-Amoudi and Sahel N. Abduljauwad, GT

Oct. 94, p1892-1897.

A Monitoring System for High-Clearance Scaffold Systems during Construction, Y. L. Huang, T. Yen and W. F. Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p719-726.

On Housing Administration and Legislation of Egypt, A. S. Elnashai and M. M. Soliman, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p280-281.

Performance of Precast Parking Garages in the Northridge Earthquake: Lessons Learned, Sharon L. Wood, John F. Stanton and Neil M. Hawkins, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1221-1227. Two Recent Russian Far East Destructive Earthquakes. Case Studies and Post-Disaster Analysis, J. M. Eisenberg and A. M. Melentyev, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p235-236.

Collapse load

Down-Hole Collapse Test System, Sandra L. Houston, His-ham H. H. Mahmoud and William N. Houston, GT Apr. 95, p341-349.

Failure Criteria for Masonry Panels under In-Plane Load-ing, U. Andreaus, ST Jan. 96, p37-46.

Ing, O. Andreaus, S. F. Jan. 20, p.57-20.
Inelastic Response of Columns after Sudden Loss of Bracing, Rac-Hak Yoo and Raymond H. Plaut, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p.378-381.

Stability Analysis of Axisymmetric Thin Shells, Ashutosh Bagchi and V. Paramasivam, EM Mar. 96, p278-281.

Collapsible soils

Down-Hole Collapse Test System, Sandra L. Houston, His-ham H. H. Mahmoud and William N. Houston, GT Apr. 95, p341-349.

Barge Collision Design of Highway Bridges, M. W. Whit-ney, I. E. Harik, J. J. Griffin and D. L. Allen, BE May 96,

Earth-Crossing Asteroids and Comets, Tyler Donnell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1278-1280.

an W. Johnson, ed., 1996, pp. 1897. Inelastic Vibration Phase Theory for Seismic Pounding Mitigation, Kazuhiko Kasai, Anil R. Jagiasi and Van Jeng, ST Oct. 96, p1136-1146.

Motion Planning of a Robotic Arm on a Wheeled Vehicle on a Rugged Terrain, Yong K. Hwang, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p8-14.

Signal Processing Study for an FM/CW Collision Avoid-ance System, Pascal Deloof, Atika Menhaj, Jamal Assaad, Nathalie Haese and Christian Bruneel, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p661-665.

Space Debris, Trisha Chhabildas, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1270-1273.

Space Debris: A Growing Threat, Michelle Mancuso, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1290-1294.

Dimensional Analysis of Colloid-Facilitated Ground-Water Contaminant Transport, M. Yavuz Corapcioglu and Shi-yan Jiang, HE Oct. 96, p139-143.

Analysis of Rainfall-Induced Debris Flows, Scott A. Anderson and Nicholas Sitar, GT July 95, p544-552.

Collapse of Saturated Soil Due to Reduction in Confinement, Scott A. Anderson and Michael F. Riemer, GT Feb. 95, p216-220.

Streamflows Prediction Models for the Colombian Genera-tion System Considering El Niño Effect, Oscar J. Mesa, Ricardo A. Smith, Pedro J. Restrepo, José E. Salazar, Luis F. Carvajal and Juan D. Velásquez, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1477-1482.

Modified Jar Test Studies for Removal of Disinfection By-Products (DBPs) and Color Compounds from Groundwater, Mark Williams, Badri Badriyha, Shih-Chieh Tu, Jamal Awad and Massoud Pirbazari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1009-1014.

1995: Where the Past (Paleoflood Hydrology) Meets the Present, Understanding Maximum Flooding, Robert D. Jarrett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1148.

Drought Management in Northeastern Colorado, Darell D. Zimbelman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p863-868.

Integrated Planning Decision Support System (IPDS) Application: Glenwood Springs, Colorado, Mario Mejía-Navarro and Luis A. García, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p386-387.

Interruptible Option Contracts, John F. Scott, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3569-3573.

Paradox at the rocky Mountai Arsenal, Colorado: Benefits of Applied Research, Robert D. Jarrett, Joseph P. Capesius and Mark A. Gonzalez, (North American

P. Capesius and Mark A. Gonzalez, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1553-1554.
Reclaiming Denver's Central South Platte River, Nick Ski-falides, Lee Eisel, Brian Kolstad and Ben Urbonas, (North American Water and Environment Congress & Destructive Water, Chembers, Babball, ed. 1000.) Destructive Water, Chenchayya Bathala, ed., 1996), p3527-3532.

James P. Heaney, Leonard Wright and Samsuhadi, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p219-248.

Z. Stakniv, ed., 1990), p219-240.
South Platte River Restoration Through Maintenance, Ben R. Urbonas and Bryan W. Kohlenberg, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3533-3538.

Colorado River

Third Party Impacts of Proposed Water Banking in the Colnurd Party Impacts of Proposed Water Banking in the Cotorado River Basin, James F. Booker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4042-4045.

Columbia River

Juvenile Fish Separator Design, Daniel M. Katz, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1117-1122.

uve water, v.nencnayya Batnata, ed., 1996), pl 117-1122. Reliability Analysis in Support of Risk Assessment for Non-Routine Closure/Shutdown of Hydroelectric Generating Stations, T. V. Vo, T. R. Blackburn, L. O. Casazza, P. G. Heasler, N. L. Mara, T. M. Mitts and H. K. Phan, Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiy, ed. 1966, 226-248. Z. Stakhiv, ed., 1996), p326-345.

SpatioTemporal Stochastic Open-Dhannel Flow, Timothy K. Gates and Muhammad A. Al-Zahrani, (North American Water and Environment Congress & Destructive

can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p346-351. Surface Bypass-Collector Concepts and Performance, Peter C. Klingeman, Lisa M. Wieland, Kenneth R. Elbert and Thomas K. Lorz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p673-678.

A Surface Collection Design Approach on the Lower Co-lumbia River, Donald R. Chambers and John H. Plump, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p667-672.

Proce-Dimensional Numerical Model for Fish Bypass Studies, E. A. Meselhe, A. J. Odgaard and V. C. Patal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p159-164.

Column curves

Development of Column Curve for Steel Angles, Seshu Madhava Rao Adluri and Murty K. S. Madugula, ST Mar. 96, p318-325.

Columns
Applications of High-Performance Concrete in Columns and Piers, S. K. Ghosh, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996, p. 388-5.95.
Behavior of Reinforced Concrete Buildings: Deformations & Deformation Compatibility, John W. Wallace, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p.245-256.

Behavior of Three-Span Braced Columns with Equal or Unequal Spans, Raymond H. Plaut and Yu-Wen Yang, ST June 95, p986-994.

Blind Bolts Seek Spotlight, ET Apr./May 96, p8-9.

Bridge-Column Footings: An Improved Design Procedure, Lian Duan, SC Feb. 96, p20-24.

Buckling of Laminated Composite Beams, Carol Shield and Tim Morey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1010-1013.

Cast-Iron-Column Strength in Renovation Design, Donald Friedman, CF Aug. 95, p220-230.

Compression Failure in Reinforced Concrete Columns and Size Effect, Zdeněk P. Bažant and Yuyin Xiang, (Worldwide Advances in Structural Concrete and Masonry, A E. Schultz, ed. and S. L. McCabe, ed., 1996), p443-451.

Critical Concepts for Column Testing, Charles D. Shackelford, GT Oct. 94, p1804-1828.

Design of Round Reinforced-Concrete Columns, A. Tayem

Design of Round Rentorced-Concrete Columns, A. Tayem and A. Najmi, ST Sept. 96, p1062-1071.
Design of Seismic Resistant Concrete Columns for Confinement, Murat Saatcioglu, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p233-244.

Dynamics of Multi-DOF Stochastic Nonlinear Systems, Timothy M. Whalen, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p82-85.

Editor's Note, David Darwin, ST Sept. 96, p987-988.

Effective Length Factor for Columns in Unbraced Frames, Lian Duan and Wai-Fah Chen, ST Jan. 89, p149-165.

Effects of Load Path and Load Correlation on the Reliability of Concrete Columns, Dan M. Frangopol, Yutaka Ide and Ichiro Iwaki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p206-209.

Elastic Response of Columns After Sudden Loss of Brac-ing, Raymond H. Plaut and Rac-Hak Yoo, EM Apr. 96,

p383-384.

Experiments with Elasto-Plastic Oscillator, S. Randrup-Thomsen and O. Ditlevsen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p518-523.

A Framing System for a Lunar/Martian Inflatable Structure, Jenine E. Abarbanel, Ted A. Bateman, Marvin E. Cris-well and Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1069-1075.

Generalized Differential Quadrature Method for Buckling Analysis, H. Du, K. M. Liew and M. K. Lim, EM Feb.

96, p95-100.

Hybrid Columns of FRP and Concrete, Mohsen Shahav Amir Mirmiran and Michel Samaan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p73-82.

Improved Frame Stability Analysis With Effective Lengths, Jostein Hellesland and Reidar Bjorhovde, ST Nov. 96, p1275-1283.

Improving Design in Composite Thin-Walled Columns, Luis A. Godoy and Leonel I. Almánzar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1155-1158.

Inelastic Response of Columns after Sudden Loss of Bracing, Rae-Hak Yoo and Raymond H. Plaut, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p378-381.

Lateral Load Behavior of High Strength Fiber Reinforced Concrete Columns, Ramesh Nagarajah and David H. Sanders, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p396-407.

Long Term Behavior of Concrete Columns with CFRP, M. Arockiasamy, Ahmed Amer, S. Chidambaram and M. Shahawy, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p1050-1053.

New Analysis for Creep Behavior in Concrete Columns, Raed M. Samra, ST Mar. 95, p399-407.

An Overview of Techniques for Analyzing a System Mod-elled as a Duffing Oscillator Driven by Deterministic and Stochastic Excitations, M. A. Tognarelli and A. Kareem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p728-731.

Prediction of Buckling Load of Columns Using Artificial Neural Networks, A. Mukherjee, J. M. Deshpande and J. Anmala, ST Nov. 96, p1385-1387.

Riinaia, SI (1967), 1967–1967. Reliability Evaluation of Slender HSC Columns, Sofia M. C. Diniz and Dan M. Frangopol, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p242-245.

Reliability of High-Strength Concrete Columns, Sofia M. C. Diniz and Dan M. Frangopol, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p213-222.

Repair and Retrofit of Reinforced Concrete Columns. Rivad S. Aboutaha, (Natural Disaster Reduction, George Housner, ed. and Riley M. Chung, ed., 1997), p313-

Revised Rule for Concept of Strong-Column Weak-Girder Design, Han-Seon Lee, ST Apr. 96, p359-364.

Seismic Base Isolation Study for a Kentucky Building, John P. Miller and Nathan C. Gould, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p389-

Seismic Retrofitting of Bridge Pier Columns, William L. Gamble and Neil M. Hawkins, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p16-23.

Seismic Shear Strength of Reinforced Concrete Columns. M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Strain Localization in Confined High-Strength Concrete Columns, Daniel Cusson, François de Larrard, Claude Boulay and Patrick Paultre, ST Sept. 96, p1055-1061.

Strength and Ductility of Rectangular Concrete Columns: A Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Mar. 96, p267-274.

Strength and Reliability of Reinforced Concrete Columns with Sustained Loading, Stuart G. Reid, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p234-237.

Stress Factors Explained, Robert T. Ratay, CE Dec. 96, p27.

Structural Behaviour of High Strength Concrete Columns, Robert Park, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p365-374.

Ten Year Performance of a High Performance Concrete Used to Build Two Experimental Columns, Éric Dallaire, Michel Lessard and Pierre-Claude Aïtcin, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p375-384.

Columns, supports

Power of Prayer, Francis A. Hahn, CE Aug. 96, p31.

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-1849.

CSO Planning Model Development and Verification Strate-gy, Edward H. Burgess, Thomas Day, James T. Smullen and Larry A. Roesner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1230-1235.

Indianapolis Uses New Radar Technology to Refine Hyeto-graphs for CSO Model and SSES Studies, Patrick L. Stevens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1236-1241.

The Integration of Receiving Water Impacts in the Evaluation Process of Alternative Designs for CSO Abatement in Providence, Rl, J. Craig Swanson, Joseph Grgin and Peter von Zweck, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1537-1542.

Preparation of Notification Models Using Continuous Mod-eling Techniques, Mark TenBrock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2474-2479.

Swirl Technology: Enhancement of Design, Evaluation, and Application, Richard Field and Thomas P. O'Connor, EE Aug. 96, p741-748.

Treatment of Wet Weather Discharges in Columbus, Georgia, Stephen P. Hides, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p582-587.

Combustion

Combustion Processes and Applications in Reduced Gravity, Howard D. Ross, (Engineering, Construction, Operations in Space, Stewart W. Johnson, ed., 1996), p527-532

Evaluation of Lead-Bearing Phases in Municipal Waste Combustor Fly Ash, J. F. Sandell, G. R. Dewey, L. L. Sutter and J. A. Willemin, EE Jan. 96, p34-40.

Life Cycle Cost Analysis of a Storburn Propane Combus tion Toilet, Paul Ritz and Herbert P. Schroeder, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p816-827.

munication

A/E Firms See Future in the Web, ME May/June 96, p11. An Analysis of Effect of Dynamic Traffic Information Considering Driver's En-Route Route Switches, Yasunori lida. Nobuhiro Uno and Tetsuro Hasegawa, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p604-608. Approaches to Organization Development, Mel Hensey.

ME Sept./Oct. 96, p11.
Architectural Office Standards and Practices: A Practical Users Guide by Larry D. Jenkins et al. Frederick S. Mer-ritt, AE Mar. 96, p41.

ASCE Starts Up Its Own Home Page on the World Wide Web, NE Feb. 96, pl.

ASCE's New Logo: A Case of Corporate Identity, NE June

96, p15.

Communication Breakdowns, Philip C. Terry, SC Nov. 96.

Communication Strategies for Distributed Traffic Systems, Norman Hunt, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p256-270.
Connections of Large Steerable Antennas, Joseph Antebi

and Mehdi S. Zarghamee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p505-509. Delivering the Project in Technical Consulting, James L.

Hawley and John Frauenhoffer, AE June 96, p55-62.

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Engineering Automation Expands, CE Sept. 96, p22. Engineering Sales: Process of Understanding, Larry G.

Crowley, ME Mar./Apr. 96, p40-43. Golden Rule of Contractor-Subcontractor Relations, Joseph

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Guest Editorial, John McNown, HY Aug. 96, p427. Hazards to Personnel from Tower EMFs, James B.

Hatfield, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p499-504.

An Integrated Model for Network Traffic Management for Long Term Disruptions, Mithilesh Jha, Srinivas Peeta and Samer Madanat, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p335-340.

Interface Problems between Building Owners and Desig ers, Abdul-Mohsen Al-Hammad and Ibrahim Al-Hammad, CF Aug. 96, p123-126.

Iowa Touts Transportation, CE Nov. 96, p24. The Management of Engineering, Mel Hensey, ME July/ Aug. 96, p10.

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96, p10.

Traffic Control System for Metropolitan Areas Based on Radio Links between Vehicles and Infrastructure, Andrea Borella and Giovanni Cancellieri, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p398-402.

Use of Radio Frequency Spectrum in Lunar Environment, Shayla E. Davidson and Robert M. Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p847-853.

Johnson, Cu., 1990, poly-6-33.
Utilizing Communications Strategies to Educate the Public on a Major Program, David L. Pratt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p99-100.
Where the Interstate Meets the Information Highway, John Literature (Programmer)

Lynch, CP Apr. 96, p91-92. Writing is Work, David Purdy, SC May 96, p82-84.

Communication satellites

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Editorial, Thomas L. Theis, EE Sept. 96, p777. Editorial, Thomas L. Theis, EE Nov. 96, p955. Editorials, HY Sept. 96, p480.

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Communication systems

Communication Breakdown, Felix S. Wong and Jeremy Isenberg, CE Jan. 96, p52-54.
Construction Regulated by Performance Information, Dean

T. Kashiwagi and Chad T. Halmrast, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p551-558.

A Data Management Model for Change Control in Collabo rative Design Environments, Karthik Krishnamurthy and Kincho H. Law, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p536-543. Design Information Evolution in a Collaborative Engineer-

ing Software Environment, Beth A. Brucker and Annette L. Stumpf, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p732-738.

Editor's Letter, Joseph Kaplan, SC Nov. 96, p93-94.
Editorial, Harry Yeh, WW Nov./Dec. 96, pvii.
Facilitating Workgroup Activities through the Internet, Randall Guensler, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p459-465.

The Financial-Economic Evaluation of ATT Systems in Road Freight Transport, Ferdinand Ballhaus, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Vorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p465-469.

pi, ed., 1996), P463-469.
Global Project Documentation and Communications Using HTML on the World Wide Web, L. Y. Liu, A. L. Stumpf and S. Y. Chin, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p15-20.
Managing Interdisciplinary Project Teams through the Web, Robin E. Goodman and Paul S. Chinowsky, (Com-

Web, Robin E. Goodman and Paul S. Chinowsky, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p452-458.
Outage Probability in Mobile Radio Communications in a Three-Dimensional Space, Silvano Pupolin, Luciano Tomba and Michele Zorzi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), n271-275. p271-275.

Quicktime VR and Interactive CD-ROM Applications for Communicating Project Alternatives, Douglas D. Eberhard, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p806-811.

STEP and the Building Construction Core Model, Thomas Froese, (Computing in Civil Engineering, Jorge Vanegas,

Froese, Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p445–451.
Technology Potential and Limitations in a Vitual Design Studio, Mary Lou Maher, (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

'Marriage" of Fiber Optic and Wireless Communications Supporting Intelligent Transportation Systems, Bruce C. Abernethy, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p248-255.

Community development Appropriate Sanitation Technology Advisor: A Planner's Tool in Less Developed Countries, Larry Quinn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2993-2998. Engineering in Context: Engineering in Developing Countries, Laura Brigitte Parsons, El Oct. 96, p170-176.

EPA Proposes Rural Wastewater Grants, CE Dec. 96, p8. Integrating Drainage, Water Quality, Wetlands, and Habitat in a Planned Community Development, Michael R. Galuzzi and John M. Pflaum, UP Sept. 96, p101-108.

Students Aid Bolivian Village, CE Sept. 96, p14,19.
Traditional People and a Modern Mining Company Working Towards Sustainability in Indonesia, Bruce E. Marsh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2982-2992.

Community Involvement in Hazard Mitigation, Subodh A. Kumar, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p282. Drinking Water Quality in Small Northern Communities, Daniel W. Smith, Stephen J. Stanley and Dennis S. Prince, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p570-581.

FEMA Conference Stresses Preplanning for Natural Disasters, CE Feb. 96, p14,16.

Natural Hazard Zonation, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p361-362.

Community relations

Admit, Accept and Apologize to Restore Corporate Image, ME Jan/Feb. 96, p9.

Air Force Cadets Learn while Doing, NE Feb. 96, p9 The Changing Role of Construction Mitigation, Sallye E. Perrin and Kristin C. Lewis, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p63-69. Empowerment at ASCE's Grass Roots Starts to Take Hold, NE Apr. 96, p1,6. Engineers Get Ready for 1996 Engineers Week, NE Jan. 96,

p1. Environmental Justice: An Issue for States, Linda K. Murakami, Sia Davis and Deb Starkey, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p480-482.
Environmental Justice: The Department of Energy's Response to Executive Order 12898, Alvaro Nieves, Dee Wernette and Georgia Johnson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), a83, 485. 1996), p483-485.

R, for Risk Communication, Steven D. Perry, CE Aug. 96,

Understanding Why Stakeholders Matter, Richard C. Eschenbach and Ted G. Eschenbach, ME Nov./Dec. 96,

Unique Coalition Plans to Revitalize Neighborhood, CE Nov. 96, p12-13.

Community support Community Involvement Drives Chicago Viaduct Recon-

struction, CE Apr. 96, p10.

Community Preparedness and Disaster Response The City of Los Angeles: Community Emergency Response Team Program, Frank W. Borden, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p323-324.

Four ASCE Student Chapters Win Awards for Excellence, NE Oct. 96, p2. Minnesota DOT Pursues Privatization Projects, CE Feb. 96,

Mississippi State Students Take Top Chapter Title Again,

NE Oct. 96, p2 Natural Disaster Mitigation: It Needs to Begin at Home, NE

July 96, p1.

Public Attitudes, Behavior, and the Willingness to Sacrifice to Mitigate Uncertain Adversity: Water Management Implications for Climate Change, Robert E. O'Connor, Richard J. Bord and Ann Fisher, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1828-1833.

"Elevating the Importance & Visibility of Mitigation-Promoting Public Awareness", Kenneth A. Deutsch, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p165-166.

Commuting patterns

Electronic Coin, CE Sept. 96, p11. Impact of Commuter-Rail Services in Toronto Region, Sarah Stewart Wells and Bruce G. Hutchinson, TE July/ Aug. 96, p270-275.

Compacted soils

Effect of Gravel on Pumping Behavior of Compacted Soil, Robert W. Day, GT Oct. 96, p863-866.

Effects of Stress Ratio on Behavior of Quasi-Preconsolidated Compacted Clay under Plane Strain Compression, Hoe I. Ling and Fumio Tatsuoka, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p151-165.

Electrical Resistivity of Compacted Clays, Zeyad S. Abu-Hassanein, Craig H. Benson and Lisa R. Blotz, GT May

96, p397-406.

Random Network Modeling for Determination of Representative Specimen Size of Compacted Clays, Suri Than-gavadivelu, Lakshmi N. Reddi and Sunil Menon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p1303-1317.

Representation of Compacted Clay Minifabric Using Ran-dom Networks, Lakshmi N. Reddi and S. Thangava-

divelu, GT Nov. 96, p906-913.

Statistical Sample Size for Construction of Soil Liners, Craig H. Benson, Huaming Zhai and Salwa M. Rashad, GT Oct. 94, p1704-1724.

Studies on the Erosion of a Compacted Soil, G. J. Hanson and K. M. Robinson, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2427-2432.

Surficial Stability of Compacted Clay: Case Study, Robert W. Day, GT Nov. 94, p1980-1990.

Correlations Between a Simple Field Test and Relative Density Test Values, Danny K. McCook, GT Oct. 96,

Electrical Resistivity of Compacted Clays, Zeyad S. Abu-Hassanein, Craig H. Benson and Lisa R. Blotz, GT May

96, p397-406.

pop. p397-406.
 Evaluation of Engineering Properties of Problematic Soils in Highway Construction, W. Virgil Ping, Sean McDonald and Robert K. H. Ho, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p721-730.
 Geotechnical Properties of Oil-Contaminated Kuwaiti Sand, Hasan A. Al-Sanad, Walid K. Eid and Nabil F. Ismael, GT May 95, p407-412.
 Issim Measurement of Rockful Properties Anne Eckert

In Situ Measurement of Rockfill Properties, Anne Eckert Clift, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p37-48.

Probabilistic Solutions to Geotechnical Problems, Nagaratnam Sivakugan and Ali Al-Harthy, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p938-941.

Statistical Model for Sand Compaction Under Cyclic Shear Strain, R. Ghanem and M. El-Mestkawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p722.

Unsaturated Hydraulic Conductivity of Two Compacted Barrier Soils, J. S. Meerdink, C. H. Benson and M. V. Khire, GT July 96, p565-576.

A User's Experience in Design and Field Quality Control With the Superpave System, Gerald Huber, Xishun Zhang and Robin Fontaine, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p711-720.

Compaction grouting

Rethinking Foundation Design in Karst Residuum, Raymond A. DeStephen and Steven E. Conner, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p49-56.

Comparative studies

Channel Restoration of Incising, Mixed Grain Size Streams: Lessons Learned, F. D. Shields, Jr., M. W. Streams: Lessons Learney, F. D. Shiens, Jr., M. W.
Doyle, S. S. Knight and C. M. Cooper, (North American
Water and Environment Congress & Destructive Water,
Chenchayya Bathala, ed., 1996), p3363-3368.
Comparative Simulation of Oil Weathering, Hector R.
Fuentes, Rudolf Jaffé, Vassilios A. Tsihrintzis and Rahul

V. Shrotriya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p559-564.

Comparison of Algorithms for Nonlinear Integer Optimiza-tion: Application to Monitoring Network Design, Yuh-Ming Lee and J. Hugh Ellis, EE June 96, p524-531.

Comparison of ASD and LRFD Design of an Office Building Supported by Arches, King-le Chang and Shuang Chen, (Building an International Community of Structur-al Engineers, S. K. Ghosh, ed. and Jamshid Mohamma-di, ed., 1996), p550-557.

Comparison of Construction Alternatives Using Matched Simulation Experiments, Photios G. Ioannou and Julio C. Martinez, CO Sept. 96, p231-241.

Comparison of High-Speed Rail and Maglev Systems, Fazil T. Najafi and Fadi Emil Nassar, TE July/Aug. 96, p276-281.

Comparison of Methods for Estimating REF-ET, D. M. Amatya, R. W. Skaggs and J. D. Gregory, IR Nov./Dec. 95, p427-435.

Comparison of Methods for Sizing Secondary Treatment Filters for Wastewater, Paily P. Paily, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p565-570.

Correlations Between a Simple Field Test and Relative Density Test Values, Danny K. McCook, GT Oct. 96,

p860-862.

A Discussion of Two SVE/Bioventing Pilot Studies, Robin D. Wankum, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p751-761. Indoor Air Quality Cost Comparisons in Three Typical Buildings, Peter Rojeski, Jr. and Harmohindar Singh, AE Sept. 96, p107-114.

The Return of Masonry as a Structural Material, Daniel P. Abrams, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed.,

1996), p1-12

Selection of Sediment Transport Relations: Part I, Review of Sediment Transport Comparisons, Martin J. Teal and David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2831-2836.

Compensation

Bonuses Up Sharply, ME Nov./Dec. 96, p12.

Claim Review Process, CE May 96, p24

Clause in Contract Does Not Preclude Other Damages, CE Aug. 96, p24.

Overtime Overhaul Overdue, ME May/June 96, p11-12. Survey of Change Order Markups, Herbert Saunders, SC Feb. 96, p15-19.

Competition

21st Century Leadership and Technology, Malcolm J. Todd, ME July/Aug. 96, p40-49. A/E Firms See Future in the Web, ME May/June 96, p11.

Advice to Environmental Execs: Get Tougher, CE Dec. 96,

p14. Alabama-Huntsville Students Again Crowned as Concrete

Canoe Champs, NE Aug. 96, pl.6.
Competition Spurs High-Rise Innovation, CE Aug. 96, pl.0.
Designed by Jury, Frederick Gottemoeller, CE Oct. 96, p37

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Plans for Embassy Appear in Show, CE Nov. 96, p23.
Record 22 Entrants in Running for 1996 Outstanding C.E.
Achievement, CE Apr. 96, p78-79.
Research Relevance: Communication is Key, John B. Scal-

zi, CE Aug. 96, p6. Sea Launch: Commercial Launch Competitiveness, Derek Sea Launch. Commercial Launch Competuveness, Deriveness, E. Lang, Darrel L. Choate and Marcus L. Nance, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p419-425.
Small, Smaller Smallest, Howard F. Greenspan, CE June

96, p28. Why Satisfied Customers Defect, Thomas O. Jones, ME Nov./Dec. 96, p11.

Competitive bidding ASCE Opposes California Amendment on A/E Services, CE July 96, p70.

Bid Competition a Sign of the Times, James W. Johnson, CE Jan. 96, p28.

Bidding Competition Can Work, Stephen Auffinger, CE Jan. 96, p29.

COFPAES Supports House Bill on Design-Build Fee Re-imbursement, CE June 96, p73.

Commentary on MBE and FBE Participation in the Construction Industry, Amir Tavakoli, ME July/Aug. 96, p6-

Competition Should Be Based on Quality, Thomas W. Blackburn, CE June 96, p28. Cooperation Can End Bid Evils, David R. Chapman, P.E.,

CE July 96, p32. Corps Moves Closer to Bid Shopping, Allen W. Hatheway,

CE June 96, p35. Costs and Overhead Not the Same Thing, Ken Anderson,

CE May 96, p28-29. CSFs in Competitive Tendering and Negotiation Model for BOT Projects, Robert L. K. Tiong, CO Sept. 96, p205-211. Grateful for Bid Process, N. Stanley Good, CE Jan. 96,

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p.co-25.

Great Tips from Client Feedback Programs, Sylvia Wheeler, ME Nov./Dec. 96, p10.

Guest Editorial, Robert W. Foster, SU Aug. 96, p95-96.

Marketing is Top Priority for Construction Firms, ME Mar/Apr. 96, p9.

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Regarding Bid Competition, James F. Adams, CE May 96,

p31. TDA Profiles Opportunities in European Market, CE July 96, p8.

Total Bids Only, CE Mar. 96, p24.

Compliance Code Compliance Checking for Building Inspection, Tang Hung Nguyen, Claude Bédard and Kinh Huy Ha, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1020-1026.
Benchmarking of a Total-System Performance Assessment Model for WIPP, Joseph E. Hachey and Dawn A. Shutle, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p21.
Colculation of Stress Intensity Eactors, Using Finite Flee

BOILT EMISSIONS LTOP, CE NOV. 96, p.21.
Calculation of Stress Intensity Factors Using Finite Elements and the Compliance Approach, Hisham Abdel-Fattah and Sameer A. Hamoush, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p.154-159.

Comments Regarding the NAS Report on Yucca Mountain Standards, Chris Whipple, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p261-262.

Dynamic Response of Compliant Offshore Structures, R. Adrezin, P. Bar-Avi and H. Benaroya, AS Oct. 96,

An Expert System for Wind-Resistant Residential Con-struction, James R. McDonald, Douglas A. Smith and Kishor C. Mehta, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p315-316.

Final WIPP Compliance Criteria (40 CFR Part 194), Mary Kruger and Elizabeth Forinash, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p224-225.

Making a Case for "Cost-Effective" Compliance, Dale T. Bignell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p305-307

Mobile Field Data Acquisition for Construction Quality Control and ISO 9000 Certification, Robert F. Cox and Raja R. A. Issa, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1041-

NA River Project Environmental Compliance with the Na-tional Environmental Policy Act (NEPA), Ruth B. Vil-lalobos, (North American Water and Environment Con-

gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2347-2349.
Physical Sampling for Site and Waste Characterization, Ted L. Bonnough, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p217-219.

Postlesting Correction Procedure for Membrane Compli-ance Effects on Pore Pressure, Atilla M. Ansal and Ayfer

Erken, GT Jan. 96, p27-38. Regulatory Perspective on NAS Recommendations for Yucca Mountain Standards, Stephan J. Brocoum, Miguel A. Lugo, Steven P. Nesbit, Paul M. Krishna and James A. Duguid, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p272-273.

Review of the Performance Assessment in the WIPP Draft Compliance Application, William W.-L. Lee, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p228-230.

Screening, Combining and Tracking Features, Events and Processes in WIPP Performance Assessments, D. A. Galson, D. G. Bennett, R. D. Wilmot, D. R. Anderson and Peter N. Swift, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p231-

Understanding How to Maintain Compliance in the Current Regulatory Climate, Dale T. Bignell, Jeffry L. Newman and Ronald D. Burns, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Using Process Modeling to Gain ISO 9000 Certification in Construction, Raja R. A. Issa and Robert F. Cox, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul

Chinowsky, ed., 1996), p1013-1019.

Composite beams

Algebraic Methods For Creep Analysis of Continuous Composite Beams, Luigino Dezi, Graziano Leoni and Angelo Marcello Tarantino, ST Apr. 96, p423-430.

Buckling of Laminated Composite Beams, Carol Shield and Tim Morey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1010-1013.

Composite Beam Analogy Fracture Model for Concrete, Mohammed E. Haque and Farhad Ansari, EM Oct. 96,

p957-965.

Local Buckling Experiments on Pultruded Composite Beams, Roberto Lopez-Anido, Rachid Bendidi, Hota V. S. GangaRao and Mohammed Al-Megdad, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Nonlinear FE Solution for Thin-Walled Open-Section Composite Beams, B. Omidvar and A. Ghorbanpoor, ST

Nov. 96, p1369-1378.

Simplified Analysis of Thin-Walled Composite Members, A. Ghorbanpoor and B. Omidvar, ST Nov. 96, p1379-1383

Strengthening Steel Composite Beams with CFRP Lam-inates, Rajan Sen, Larry Liby, Gray Mullins and Ken Spillett, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1601-1607.

Warping Solution for Shear Lag in Thin-Walled Orthotrop-ic Composite Beams, Roberto Lopez-Anido and Hota V. S. GangaRao, EM May 96, p449-457.

Composite column

Analytical Modeling of Composite Reinforced Concrete-Steel Systems, Joseph M. Bracci, Sashi K. Kunnath and Ali O. Atahan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p379-380.

Concrete and Sand Confined with Composite Tubes, Srinivasa L. Iyer, A. Kortikere and A. Khubchnadani, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1308-1319.

Cyclic Analysis of Concrete-Filled Tubes and Design of Composite Frames, Jerome F. Hajjar, Brett C. Gourley and Katherine A. Stillwell, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p43-54.

Nonlinear Behavior of Composite Columns Under Varying Load Histories, A. Dall'Asta, EM Aug. 96, p743-752.

Physical Tests and Analyses of Composite Steel-Concrete Beam-Columns, S. Ali Mirza, Ville Hyttinen and Esko Hyttinen, ST Nov. 96, p1317-1326.

Composite fabrication

Effect of Fiber Waviness on the Buckling of Composite Plates, Raouf A. Raouf, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl 102-1107.

Composite masonry

Embedded Fiber Optic Displacement Sensor for Concrete Elements, Xi Chen, Farhad Ansari and Hong Ding, (En-gineering Mechanics, Y. K. Lin and T. C. Su, 1996), p339-365.

Plexural Characteristics of Two-Dimensional Advanced Composite Grid Reinforced Concrete, David W. Jensen and Craig W. Smart, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p398-401.

Three-Dimensional Failure Analysis of Composite Mason-ry Walls, Subhash C. Anand and Kishore K. Yalamanchili, ST Sept. 96, p1031-1039.

Composite materials

3-D Elastodynamic Green's Functions of Laminated Plates, J. Zhu and A. H. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1159-1162.

Acoustic Emission Monitoring of Pultruded Bridge Members, Arup K. Maji, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p963-966.

Advanced Composites Build on Success, Frieder Seible and Vistasp Karbhari, CE Aug. 96, p44-47.

An Alternate Method for Prediction of the Macromechani-cal Properties of Laminated Composites, Joel G. Bennett, Mark A. Kenamond and Keith S. Haberman, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p1014-

Analysis of Deep Excavation with Column Type of Ground Improvement in Soft Clay, Chang-Yu Ou, Tzong-Shiann Wu and Hsii-Sheng Hsieh, GT Sept. 96, p709-716.

Analysis of the Nonlinearity Associated with the Free Vibration of an Orthotropic Shell, Jamal F. Nayfeh and Nicholas J. Rivieccio, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pi115-1121.

p1115-1121.

Assault Bridge Tested, CE Oct. 96, p24,26.
Behavior of Cementitious Composites with Randomly Dispersed Microfibers, D. A. Lange, C. Ouyang and S. P. Shah, *(Materials for the New Millennium*, Ken P. Chong, ed., 1996), p281-287.

Buckling of Composite Panels with Central Holes, David H. Farnham and Walter J. Horn, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p374-377.

Catching Up on Composites, Harry Goldstein, CE Mar. 96, e47, 40

Characterization of a Nonlinear Polymer-Based Composite Material System, R. M. Hackett and P. I. Rodriguez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p771-780.

Comparison of Static and Dynamic Performance of Poly-carbonate Filled and Unfilled Gears, V. P. Gosavi and P. P. Chikate, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p338-347.

Complex Crack Interaction in Composite Plate, Wieslaw K. Binienda, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p408-411.

Composite Applications in the Navy Waterfront Infrastruc-ture, L. J. Malvar, G. E. Warren and C. M. Inaba, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1179-1188. Composite Holds Back Seawater at 13 Fathoms, CE June

96, p87.

Composite Materials Edge into Mainstream Construction,

Composite Materials Edge into Mainstream Construction, CE Mar. 96, p16,19-20.

Composite Materials Reinforcement of Existing Masonry Walls, J. Bradley Christensen, Jeremy Gilstrap and Charles W. Dolan, AE June 96, p63-70.

Composite Materials Sweep CERF Innovation Awards, CE

Composite Materials Sweep CERF Innovation Awards, CE Apr. 96, p14,16.
Composite Repair/Upgrade of Concrete Structures, Orange S. Marshall, Jr. and John P. Busel, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p932-938.
A Computer Controlled Filament Winding Technique for Manufacturing Cement Based Cross-Ply Laminates, B. Mobasher and A. Pivacek, (Materials for the New Millenium, Ken P. Chong, ed., 1996), p1347-1356.
Concrete and Sand Confined with Composite Tubes, Srinivasa L. Iyer, A. Kortikere and A. Khubchnadani, (Materials for the New Millenium, Ken P. Chong, ed.

(Materials for the New Millennium, Ken P. Chong, ed., 1996), p1308-1319.

Constitutive Modeling of Composites in Opto-Mechatronics, Tau C. Fan, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p632-636.

Creep Behavior of FRP-Reinforced Wood Members, Niko-laos Plevris and Thanasis C. Triantafillou, ST Feb. 95, p174-186. Delaware Authority Puts Money on Composite Bridges, CE

Oct. 96, p16-17.

Design Recommendations for Bond of GFRP Rebars to Concrete, M. R. Ehsani, H. Saadatmanesh and S. Tao, ST Mar. 96, p247-254.

St Mar. 90, per 1-23-2.

Durability and Long Term Performance of Cementitious Composites, A. Bentur, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p.1502.

The Effect of the Interfacial Transition Zone on Concrete Properties: The Dilute Limit, E. J. Garboczi and D. P. Bentz, (Materials for the New Millennium, Ken P.

Bentz, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1228-1237.
Effect of Transition Zone on the Pre-Peak Mechanical Behavior of Mortar, G. Ramesh, E. D. Sotelino and W. F. Chen, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1238-1245.
Elastic Stability of Composite Plates with Wavy Fibers, Raouf A. Raouf, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1167-1170.
Electrical Tagging of Fiber Reinforced Comput. Comput.

Electrical Tagging of Fiber Reinforced Cement Composites, Jog Seh Lee and Gordon Batson, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p887-896. Entity-Relationship Modeling of Composite Materials Data, Lisa K. Spainhour and William J. Rasdorf, CP July 96,

Environmentally Acceptable Piling for Use in Navy Pier Fender Systems, David Hoy, George Warren and Duane Davis, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1189-1198.

Evaluation of FRP Composites Bolted and Adhesive Joints, Sotiris Sotiropoulos, Hota V. S. GangaRao and Roberto Lopez-Anido. (Materials for the New Millennium, Ken P. Chong, ed., 1996), p233-242.

An Experimental Investigation of Sandwich Flat Panels Under Low Velocity Impact, Anthony N. Palazotto, Eric

Under Low Velocity Impact, Anthony N. Palazotto, Eric J. Herup and Timberlyn Harrington, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p402-407. Externally Bonded Carbon Fiber for Strengthening Con-crete, Jay Thomas, Thomas Kline, Peter Emmons and Howard Kliger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p924-931.

Failure of Unidirectionally Reinforced Composites with Frictional Matrix, Radoslaw L. Michalowski and Aigen

Zhao, EM Nov. 96, p1086-1092. Field Performance of FRP Composite Prestressing Cables, Richard G. Lampo, David E. Hoy and Robert J. Odello, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p400-408.

Finite Element Analysis of Fracture Behavior of ECC Shear Beams, Petr Kabele and Hideyuki Horii, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p409-418

First Post Tensioned Deck Bridge with Composite Cables, Srinivasa L. Iyer and Gopi Sripathy, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p375-385.
 Free Vibration of Stiffened Composite Laminates, Meiwen

Free Vibration of Stiffened Composite Laminates, Meiwen Guo and Issam E. Harik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1163-1166.
Frequency Distributions and Bayesian Techniques for Estimating Performance in Composite Materials, John Miller and José Gomez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p492-501.
FRP Applications in Geotechnical Engineering, J. A. R. Ortigao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p535-544.
Fundamental Thermal Mechanical Modeling of Gas-Filled Porous Composites, N. J. Salamon and Ranmath Ganesan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p52-55.
Heat and Moisture Absorption Effects in Composites; Theory and Experiments, A. Szekeres and R. A. Heller, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p63-72.

1996), p63-72.

High Performance Fiber-Cement Composites by Extrusion Processing, Yixin Shao and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p251-260.

Hydrothermal Effects on the Bearing Strength of GFRP Composite Joint, Stephanie Hurd and Robert Yuan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p243-250.

1990), p243-220.
Improving Design in Composite Thin-Walled Columns, Luis A. Godoy and Leonel I. Almánzar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1155-1158.
Inelastic Thermal Response of Gr/Cu with Nonuniform Fiber Distribution, Brett A. Bednarcyk and Marek-Jerzy Binden As Cost 06-03-105

Pindera, AS Oct. 96, p93-105.

Pindera, AS Oct. 96, p93-105.
Investigation of the Use of Carpet Waste PP Fibers in Concrete, Antoine E. Naaman, Sandra Garcia, Marwan Korkmaz and Victor C. Li, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p782-791.
Kentucky Researchers Complete Composite Foot Bridge, CE Dec. 96, p14-15.
A Layer-Wise Formulation for Progressive Failure Analysis of Laminated Composite Beams, Julio F. Davalos and Youngchan Kim. (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1150-1159.
Liquefaction Behavior of Sand-Gravel Composites, Mark D. Evans and Shengring Zhou, GT Mar 95, p287-298.

D. Evans and Shengping Zhou, GT Mar. 95, p287-298. Low Temperature Solidification of CaCO₃ Using Hydrothermal Hot-Pressing, Kazuyuki Hosoi, Toshiyuki Hashi-da, Hideaki Takahashi, Nakamichi Yamasaki and Takashi Korenaga, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p694-700. Materials for the New Millennium, 2 vols., Ken P. Chong,

ed., 1996, 0-7844-0210-8, 1776pp.

Matrix First Cracking Strength in Continuous Fiber Cement Composites, Jamil M. Alwan and Antoine E. Naaman, sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p474-483.

Mechanical Response of Woven Graphite/Copper Compos-ites, Brett A. Bednarcyk, Christopher C. Pauly and Marek-Jerzy Pindera, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p628-631.

Micromechanics of Damage in Random Composites, M. Ostoja-Starzewski, A. Al-Ostaz, I. Jasiuk and K. Alzebdeh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p362-363.

Mode-I Fracture Toughness of Composite/Wood Interface Bond, Julio F. Davalos, Prabhu Madabhusi-Raman and Pizhong Qiao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1469-1478.

New Block Copolymers for Membrane Materials, Francis A. DiGiano, Ying Chu, Joseph M. DeSimone, Benny D. Freeman, Camille Kassis and Doug Betz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1638-1644. New Materials and Methods for Insitu Rehabilitation of

Underground Pipe, Richard D. Blackmore, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1298-

1307.

The Next Generation in Composite Rebars for Concrete Reinforcement, Salem S. Faza, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p905-913. Non-Accelerated Creep-Rupture of Fiber-Reinforced-Plastics in a Concrete Environment, Andrew Hundley

and Charles Dolan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p519-526. On New Materials, Thanks All Around, Christopher Y. Tuan and Lawrence C. Muszynski, CE Feb. 96, p31.

On the Use of Fiber Reinforced Composites for Infrastructure Renewal— A Systems Approach, Vistasp M. Kar-bhari, Frieder Seible and Gilbert A. Hegemier, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1091-1100.

Panel on Composites for Infrastructure, Srinivasa Iyer, Charles McClasky, Mark P. Henderson, Hota GangaRao and Peter Head, (Materials for the New Millennium, Ken

P. Chong, ed., 1996), p781.

Property Deterioration of Composites, Charles E. S. Ueng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p416-419.

Pseudo Three-Dimensional Finite Element, Michael H. Triche and James A. Richardson, ST July 96, p832-835. Reactive Powder Concrete (RPC), A New Material for Prestressed Concrete Bridge Girders, Scott K. Gilliland, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p125-132.

Recent Advancements in Smart Tagged Composites for In-frastructure, Robert F. Quattrone and Justin B. Berman, (Materials for the New Millennium, Ken P. Chong, ed.,

1996), p1045-1054.

Rehabilitation of Steel Beams Using Composite Materials, William Edberg, Dennis Mertz and John Gillespie, Jr., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p502-508.

Reinforced Glued Laminated Timber, Bruce D. Pooley, P.E., CE Sept. 96, p50-53.

Representative Volumes of Composite Materials, Yunping Xi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p735-738.

Representative Volumes of Composite Materials, Yunping Xi, EM Dec. 96, p1159-1167.

Response of MMC Tubes with Internal Fiber Cracks, Sarah Response of MMC Tubes with Internal Fiber Cracks, Sarah C. Baxter and Marek-Jerzy Pindera, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p412-415.
Rigidities of One-Dimensional Laminates of Composite

regouttes of One-Dimensional Laminates of Composite Materials, Shuguang Li, EM Apr. 96, p371-374. Sensitivity Studies of the Interfacial Shear Strength in Composite Materials Using the Microbond Test, W. M. Cross, L. Kjerengtroen, R. M. Winter, W. Jiang, W. Fan and J. J. Kellar, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p356-365.

Smart Composite Rebars with Enhanced Ductility, A. Belarbi, K. Chandrashekhara and S. E. Watkins, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p788-791.

Structural Redundancy and Fracture in Composite Lattice/ Skin Structures, A. K. Maji, E. Fosness and D. Satpathi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Structural Sensing with Fiber Optic Systems, Raymond M. Measures, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p224-227.

Transition from Brittle to Quasi-Brittle Behavior in Fiber Reinforced Brittle Matrix Composites, Claudia P. Oster-tag, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1219-1227.

Cu., 1990, p1219-1221.

Ultrasonic Characterization of FRP Composites for Bridge Applications, Jerrol W. Littles, Jr., Laurence J. Jacobs and Abdul-Hamid Zureick, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p959-962.

Uniaxial Cyclic Behavior of Discontinuous Fiber Reinforced Composites, Takashi Matsumoto and Victor C.

Li, (Materials for the New Millennium, Ken P. Chong,

ed., 1996), p426-435.

Cu., 1990), pv.60-433. Vibration Analysis of Special Orthotropic Plate with Variable Cross-Section, and with a Pair of Opposite Edges Simple Supported and the Other Pair of Opposite Edges Free, Duk Hyun Kim, Keyong Jin Kim and Do Sik Sim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1408-1417.

Volume and Stress Heterogeneity Effects in Fiber-Reinforced Composites, François Hild and Pascal Feil-lard, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1026-1029.

Banding Timber Crossties Using Composite Fabrics for Improving Their Performance, S. S. Sonti and H. V. S. GangaRao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1449-1457.

"SIMCON-A Novel High Performance Fiber-Mat Reinforced Cement Composite for Repair, Retrofit and New Construction", Neven Krstulovic-Opara, (Materials for the New Millennium, Ken P. Chong, cd., 1996), p288-297

Composite structures

Active Vibration Control of Double Wall Composite Shells to Random Inputs, Chen-Ying Wang and Rimas Vaicai-tis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p842-845.

Alluring Approach, James D. Lockwood, P.E. and John R. Hillman, P.E., CE Nov. 96, p68-71.

Bending Instability of Composite Tubes, Long-yuan Li, AS Apr. 96, p58-61.

Characterization of Pultruded FRP Wide-Flange Beams, Ju-lio F. Davalos, Pizhong Qiao and Hani A. Salim, (Mate-rials for the New Millennium, Ken P. Chong, ed., 1996), p223-232

Composite Action of Foamed and Lightweight Aggregate Concrete, Yasser M. Hunaiti, MT Aug. 96, p111-113.

Cyclic Analysis of Concrete-Filled Tubes and Design of Composite Frames, Jerome F. Hajjar, Brett C. Gourley and Katherine A. Stillwell, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p43-54.

Delamination Modes in Composite Plates, H. Luo and S. Hanagud, AS Oct. 96, p106-113.

Delaware Authority Puts Money on Composite Bridges, CE Oct. 96, p16-17 Fiber Orientation in Composite Structures for Optimal Re-

ristance to Creep Failure, David N. Robinson and Wei Wei, EM Sept. 96, p855-860.

Finite-Displacement Analysis of Laminated Composite Strips with Extension-Twist Coupling, Erian A. Armanios, Andrew Makeev and David Hooke, AS July 96,

Health Monitoring Studies on Composite Structures for Aerospace Applications, George James, Dennis Roach, Bruce Hansche, Raul Meza and Nikki Robinson, (Engi-neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1127-1133.

High Over Shanghai, Stan Korista, P.E., Mark Sarkisian, P.E. and Ahmad Abdelrazaq, CE Dec. 96, p58-61.

Lateral Strength of Brick Cladded Frames, Stephen P. Schneider and Stephen J. Favieri, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p112-122.

anto S. E. McCace, ed., 1990, p. 112-122.
Optimization of Composite Highway Bridge Systems, M. Z. Cohn and J. J. Werner, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p.135-146.
Proposed Specification and Commentary for Composite Joists and Composite Trusses, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Apr. 96, p350-358.

Recent Advances in Sensitivity Analysis for Thermomechanical Postbuckling of Composite Panels, Ahmed K. Noor, EM Apr. 96, p300-307.

Reliability-Based Optimization of Composite Structures, Xiaoping Liu and Sankaran Mahadevan, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p122-125.

Reliability/Cost of Adaptive Intraply Hybrid Fiber Composite Structures, Christos C. Chamis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p644-647.
Simple Method for Upgrading an Existing Reinforced-Concrete Structure, Hong Sioe Oey and Carlos J. Al-

drete, SC Feb. 96, p47-50.

Terrestrial Applications of a Composite Lattice Space Structure, Arup K. Maji, Keith Donnelly and Michelle Salas, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1122-1126.

Space, Stewart W. Johnson, ed., 1996), p1122-1120. Tracing Initiation and Propagation of Cracks in Composite Slabs, Yiching Lin, J. Y. Richard Yen and Chen-Fung Chen, ST July 96, p756-761.

Curbside Collection of Yard Waste: I. Estimating Route Time, Jess W. Everett and Shiv Shahi, EE Feb. 96,

Curbside Collection of Yard Waste: II. Simulation and Application, Jess W. Everett and Shiv Shahi, EE Feb. 96, p115-121.

Compressibility

Compressibility of Clays: Fundamental and Practical Aspects, S. Leroueil, GT July 96, p534-543.

Constitutive Relations for Compressible Elastic Porous Solids, J. Bluhm, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1090-1093.

Desiccation Theory for Soft Cohesive Soils, A. Naser Abu-Hejleh and Dobroslav Znidarčić, GT June 95.

Determination of Drained Friction Angle of Sands from CPT, J. W. Chen and C. H. Juang, GT May 96, p374-

Determining Relative Density of Sands from CPT Using Fuzzy Sets, C. H. Juang, X. H. Huang, R. D. Holtz and J. W. Chen, GT Jan. 96, p1-6.

The Thermodynamic Structure of a Fluid-Saturated Compressible and Incompressible Elastic Porous Solid, Reint de Boer, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p56-59.

Analysis of Branch Crack in Compression, Chiheb Chaker and Michel Barquins, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p366-374.

Behavior of Marble under Compression, C.-T. Chang, P. Monteiro, K. Nemati and K. Shyu, MT Aug. 96, p157-

Compression Bending of Scale-Model Reinforced-Concrete Walls, James K. Gran and Paul E. Senseny, EM July 96, p660-668.

Compression of Bonded Blocks of Soft Elastic Material: Variational Solution, Katerina-D. Papoulia and James M. Kelly, EM Feb. 96, p163-170.

Compressive Behavior of Concrete: Physical Mechanisms and Modeling, Pierre Rossi, Franz-Josef Ulm and Fatiha Hachi, EM Nov. 96, p1038-1043.

Extension and Compression of Elastomeric Butt Joint Seals, Stephen A. Ketcham, Jan M. Niemiec and Grego-

ry B. McKenna, EM July 96, p669-677.

In-Plane Inelastic Buckling and Strengths of Steel Arches,
Yong-Lin Pi and N. S. Trahair, ST July 96, p734-747.

New Compression Based Design Principals for Reinforced Glulams, Daniel A. Tingley and Stephen Cegelka, (Mate-rials for the New Millennium, Ken P. Chong, ed., 1996), p1479-1491.

onlinear Finite-Element Model of Hollow Masonry, E. Y. Sayed-Ahmed and N. G. Shrive, ST June 96, p683-690. One-Dimensional Compression of Sands at High Pressures

Jerry A. Yamamuro, Paul A. Bopp and Poul V. Lade. GT Feb. 96, p147-154.

Reliability Analysis and Full-Scale Testing of Transmission Tower, M. J. Alam and A. R. Santhakumar, ST Mar. 96,

Restraint Demand Factors and Effective Lengths of Braced Columns, Jostein Hellesland and Reidar Bjorhovde, ST

Oct. 96, p1216-1224

Shock Compression in Granular Media Using DFEM, Abdolreza Joghataie and Jamshid Ghaboussi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p426-429

Stress Limits in Prestressed Concrete Bridge Girders, Has san H., El-Hor and Andrzej S. Nowak, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p460-

Stress-Strain Relationship of High-Strength Concrete in Compression, T. H. Wee, M. S. Chin and M. A. Mansur, MT May 96, p70-76.

Ultimate Strength of Steel Outstands in Compression, Han-bin Ge and Tsutomu Usami, ST May 96, p573-578. Vibrations of Clamped Rectangular Plates on Elastic Foun-

dations Subjected to Uniform Compressive Forces, S. Sacit Tameroğlu, EM Aug. 96, p714-718.

Web Buckle at I-40 Bridge Test, John Minor and Clinton

Woodward, BE Feb. 96, p34-36.

Compression tests

Behavior of a Sand in Frozen and Unfrozen States, Christopher W. Swan, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p483-493. Compression Failure in Reinforced Concrete Columns and

Size Effect, Zdeněk P. Bažant and Yuyin Xiang, (Worldwide Advances in Structural Concrete and Masonry, A.

wide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p443-451.
Compression Strength of Pultruded Flat Sheet Material, J. T. Mottram, MT May 94, p185-200.
Development of Column Curve for Steel Angles, Seshu Madhava Rao Adluri and Murty K. S. Madugula, ST Mar. 96, p318-325.

Drained Sand Behavior in Axisymmetric Tests at High Pressures, Jerry A. Yamamuro and Poul V. Lade, GT Feb. 96, p109-119. Effects of Stress Ratio on Behavior of Quasi-

fects of Stress Ratio on Behavior of Quasi-Preconsolidated Compacted Clay under Plane Strain Compression, Hoe I. Ling and Fumio Tatsuoka, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p151-165.

Mechanical Response of Woven Graphite/Copper Compos ites, Brett A. Bednarcyk, Christopher C. Pauly and Marek-Jerzy Pindera, (Engineering Mechanics, Lin and T. C. Su, 1996), p628-631.

Undrained Sand Behavior in Axisymmetric Tests at High Pressures, Poul V. Lade and Jerry A. Yamamuro, GT

Feb. 96, p120-129.

Uniaxial Compression Behavior of Small Blocks of Welded Tuff, Stephen C. Blair and Patricia A. Berge, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p409-411.

Compression waves

Pulse Transmission System for Measuring Wave Propaga-tion in Soils, Koichi Nakagawa, Kenichi Soga and James K. Mitchell, GT Apr. 96, p302-308.

Compressive strength

AASHTO Layer Coefficients for Cement-Stabilized Soil

Bases, David N. Richardson, MT May 96, p83-87.

ASR Behavior of Class C Fly Ash Modified Cement, Anil Misra, H. P. Niu, Bryan R. Becker and Jinshi Liu, (Materials for the New Millennium, Ken P. Chong, ed., 1996).

Compression Strength of Pultruded Flat Sheet Material, J. T. Mottram, MT May 94, p185-200.

Compressive Behavior of Concrete: Physical Mechanisms and Modeling, Pierre Rossi, Franz-Josef Ulm and Fatiha Hachi, EM Nov. 96, p1038-1043.

The Effect of Saturation on the Mechanical Properties of Tuff at Yucca Mountain, Moses Karakouzian and Nick Hudyma, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p407-408

Flash-Setting Lightweight Material—A First Step to Float-ing Island Construction, Sumio Horiuchi, Noburu Uchiyama, Takuro Odawara and Kazuya Yasuhara, MT Aug.

96, p138-146.

Freeze-Thaw Durability of Concrete Cured Below 0°C Using Antifreeze Admixtures, Michael R. Mason and Herbert P. Schroeder, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Impera-tive for the 21st Century, Robert F. Carlson, ed., 1996), p185-195

Glascrete? - Disposing of Non-Recyclable Glass, Venkata S. Panchakarla and Millard W. Hall, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p509-518.

Influence of Steel Fibers on Design Stress-Strain Curve for High-Strength Concrete, L. Taerwe and A. Van Gysel, EM Aug. 96, p695-704.

Investigation of the Use of Carpet Waste PP Fibers in Concrete, Antoine E. Naaman, Sandra Garcia, Marwan Kork-maz and Victor C. Li, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p782-791.

Maximum Shear Strengths of Reinforced Concrete Structures, Li-Xin "Bob" Zhang and Thomas T. C. Hsu, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996).

Mechanical Behavior of Confined Reactive Powder Con-cretes, Éric Dallaire, Olivier Bonneau, Mohamed Lachemi and Pierre-Claude Aïtein, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p555-563.

Mixing Influences on Cement-Based Waste Forms, James B. Stong, James R. Weber and Kevin J. Hull, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1597-1601.

Permeability of High-Strength Concrete Containing Low Cement Factor, Tarun R. Naik, Shiw S. Singh and Mohammad M. Hossain, EY Apr. 96, p21-39.

Recycling of Spent Abrasive Media in Nonstructural Con-crete, Matthew T. Webster and Raymond C. Loehr, EE

Sept. 96, p840-849. Structural Behaviour of High Strength Concrete Columns, Robert Park, (Worldwide Advances in Structural Con-crete and Masonry, A. E. Schultz, ed. and S. L.

McCabe, ed., 1996), p365-374. Ten Year Performance of a High Performance Concrete Used to Build Two Experimental Columns, Éric Dallaire, Michel Lessard and Pierre-Claude Aïtein, (Worldwide Advances in Structural Concrete and Masonry, A Schultz, ed. and S. L. McCabe, ed., 1996), p375-384.

Ultimate Compressive Strength of Orthogonally Stiffened Steel Plates, Ichizou Mikami and Kazuhisa Niwa, ST June 96, p674-682.

Uniaxial Compression Behavior of Small Blocks of Welded Tuff, Stephen C. Blair and Patricia A. Berge, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p409-411.

Analysis and Computation, Franklin Y. Cheng, ed., 1996, 0-7844-0163-2, 522pp.

Applications of CFD Flow Modelling in Building Design, J. R. Sinclair, P. A. Irwin, K. M. Matsui, M. Vanderheyden and F. Kriksic, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p997-1004.

Bearing Capacity of Shallow Foundations on Noncohesive Soils, Bohdan Zadroga, GT Nov. 94, p1991-2008.

Co-Evolution of Design Specifications and Design Solution, Mary Lou Maher and Josiah Poon, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p77-83.

Comparison of Flow Around Circular Cylinder Using FE and FD Procedures, R. Panneer Selvam, (Building an International Community of Structural Engineers, S ed. and Jamshid Mohammadi, ed., 1996), p1021-1028.

Computation of Shallow Recirculating Flow Dominated by Friction, S. Babarutsi, M. Nassiri and V. H. Chu, HY

July 96, p367-372.

Computation of Structural Flexibility for Bridge Health Monitoring Using Ambient Modal Data, Scott W. Doe-bling and Charles R. Farrar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1114-1117.

Computational Aspects of Dynamic Concrete Viscoplasticity, Olubayo O. R. Famiyesin, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p282-285.

Computational Enclosures of Lyapunov Exponents, A. Ams and W. Wedig, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p820-823.

Computational Support for Distributed and Concurrent Design Team, John L. Wilson and Chenggang Shi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p544-550.

Computer-Developed Structural Calculations, Russell D. Snyder, P.E., SC Nov. 96, p122-125.
Computing Flood Damage Reduction Accomplishment, Jo

Ann Duman and Donna Lydon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2318-2323.

Correction, CE Apr. 96, p.38.

Design Formulas for Block Revetments, Adam Bezuijen and Mark Klein Breteler, WW Nov./Dec. 96, p.281-287.

Design Model Bias Factors for Driven Piles from Experiments at NGES-UH, Gil L. Yoon and Michael O'Neill, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p759-

Editor's Note, David Darwin, ST Dec. 96, p1393. Error Estimates for FORM and SORM Computations of Failure Probability, Jean-Claude Mitteau, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol,

ed. and Mircea D. Grigoriu, ed., 1996), p562-565.
Fire Resistance of Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie and V. K. R. Kodur, ST

Jan. 96, p30-36.

Implicit Scheme for Estuarine Water-Quality Models, Byung-Gi Hwang and Wu-Seng Lung, EE Jan. 96, p63-

Load Space Formulation for Reliability Estimation of Complex Structures, X. L. Guan and R. E. Melchers, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p688-691.

Manning's Roughness Coefficient for Coarse-Bed Chan-nels With High In-Bank Flows, David Froehlich and Craig A. Benson, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p436-441.

Int. (02., 1770), P430-941.
Mechanical Stress in Pediatric Heart Disease: Computational Modeling of Associated Defects in Subaortic Stenosis, Michael D. VanAuker, Pedro del Nido, Theresa A. Tacy, Gunnlaugur Sighusson and Edward G. Cape, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p470.

Moment Equations for Linear Systems Subjected to Polynomials of Filtered Poisson Processes, M. Grigoriu and F. Waisman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p262-265.

Sediment Transport in the Yellow River, Chih Ted Yang, Albert Molinas and Baosheng Wu, HY May 96, p237-

Seismic Hazard Analysis Without the Gutenberg-Richter Relationship, David Speidel, Peter Mattson and Bon Sy, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p129-130.

Seismic Stability Procedures for Solid-Waste Landfills, Jonathan D. Bray, Anthony J. Augello, Gerald A. Leo-nards, Pedro C. Repetto and R. John Byrne, GT Feb. 95, p139-151.

Selection of Sediment Transport Relations: Part I, Review of Sediment Transport Comparisons, Martin J. Teal and David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2831-2836.

ia. (22., 1996), 12.503 (25.03).
Selection of Sediment Transport Relations: Part II, Ranges of Dimensionless Numbers, David S. Smith and David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2837-2842.

Senior Engineers, Defining Their Place in an Electronic Office, James D. Miller, CP Oct. 96, p263.

Some Computational Issues in the Control of Distributed Systems, Weiming Xu, Sami F. Masri and Bingen Yang. (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996). p747-750.

Stochastic Integral/Calculus for Non-Gaussian Delta-Correlated Processes, Sau-Lon James Hu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p246-249.

Structural Malysis with Fuzzy-Based Load Uncertainty, Robert L. Mullen and Rafi L. Muhanna, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p310-313.

Computer aided drafting (CAD)
3-D CAD Links to Project Savings, ME Sept./Oct. 96, p5-6.
3D & 4D CAD Modeling on Commercial Design-Build Projects, Frank Vaugn, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), 200-300.

An Agent-Supported Framework for Collaborative Design, Yan Jin and Hiroshi Ohira, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed.,

1996), p529-535.

CAD and Visualization in Architectural Design Education -A View from Germany, Undine Kunze, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p927-930.

Computer-Aided Design of Braced Excavations, Chandra

S. Brahma and Howard C. Biddlecome, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p838-844.

Data-Centered Thinking, John G. Voeller, CP Jan. 96, p1-2. Decision Support Environment for Structural Steel, Gregory P. Pasley and W. M. Kim Roddis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p371-382.

Pilaton, Plankill T. Cheng, etc., 1990, p.571-582.
Electronic Modeling of Underground Piping Systems, Harold G. Thayne, Jr. and Joseph A. Bohinsky, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p825-831.

Florida Department of Transportation's MastArm Program—Placing the Engineer in Control, Andre V. Pavlov, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p473-479.

GIS and CAD-based Design Software in CE Education, OIS and CAD-based Design Software in CE Education, Randy Dymond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p501-507. Graphical Simulation for Project Planning: 4D-Planner™, Mike Williams, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p404-409.

How to Build a Consortium to Advance Computing and Technology Transfer to the Project, Yvan J. Beliveau, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p793-799.

ICeD: An Interdisciplinary Conceptual Design Environ-ment, Paul S. Chinowsky, (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Integration of CAD Drawings and Construction Robot Mo-tion Controllers, Jaeho Son and Miroslaw J. Skibniewski. (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p71-78.

Setz, ed., 1990, 171-76.
Interactive 4D-CAD, Kathleen McKinney, Jennifer Kim, Martin Fischer and Craig Howard, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p383-389.

An Interactive Planning Environment for Critical Opera-tions, Kuo-Liang Lin and Carl T. Haas, CO Sept. 96,

Intranet Technology to Aid Engineers, CE Dec. 96, p20.

Knowledge-Based Parametric Design using JSpace, Parmanand V. Dharwadkar and Alton B. Cleveland, Jr., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p70-76.
Model-Centered World Wide Web Coach, Renate Fruchter

and Kurt Reiner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1-7.

A New Method for Efficient Reliability-Based Design Optimization, Y.-T. Wu and W. Wang, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p274-277.

The Next Generation of Structural Engineering Automation Systems, Song Fong Jan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

p494-500.

Senior Engineers, Defining Their Place in an Electronic Office, James D. Miller, CP Oct. 96, p263.

Office, James D. Miller, CP Oct. 96, p263.
Status of Electronic Data Interchange for Steel Structures,
D. W. McConnell and J. A. Bohinsky, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p389-396.
Technology Potential and Limitations in a Vitual Design Studio, Mary Lou Maher, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

p8-14.

Uncertainty in Evaluation of Historical Subsidence Measurements, Kevin M. O'Connor, Sean M. Killen, Mark R. Chandler, Jan E. Stache and John A. Siekmeier, (Uncer-Chandler, Jan E. Stache and John A. Siekmeier, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p710-726. Using Computers Effectively in Today's Civil Engineering Office, John P. Menniti, CP Oct. 96, p261-262, ed. Co.

Utilization of 3-D CADD in Analysis, Design and Construction of Mobile Service Tower for Atlas Launch Vehicles, Norm Bobczynski, Matthew Wrona, David Handrey sen and Harold Howell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pi 197-1204.

Visual-Based Scheduling: 4D Modeling on the San Mateo County Health Center, Eric Collier and Martin Fischer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p800-805.

Computer aided instruction

CAD and Visualization in Architectural Design Education -A View from Germany, Undine Kunze, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-

Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p927-930.
Computer-Based Undergraduate Integrated Civil Engineer-ing Curricula at WPI, Guillermo F. Salazar, Leonard D. Albano, Roberto Pietroforte and P. Jayachandran, (Com-puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p140-146.

Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996, 0-7844-0182-9, 1090pp.

Paul Chinowsky, ed., 1996, 0-7844-0182-9, 1090pp.
Design/Construction Integration through Multimedia Animation, Bob McCullouch, Dulcy Abraham and Phillip Knickrehm, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p760-766.
A Distributed Engineering Problem Generator, Martin C. Boyd and Nelson C. Baker, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p466-477

1996), p466-472. GIS and CAD-based Design Software in CE Education, Randy Dymond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p501-507. Harnessing the Internet for Civil Engineering Course Delivery, Rafed G. Onimor, (Computing Civil Civil Civil Civ

ery, Rafael G. Quimpo, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p355-361.

Insect Robots: Case Studies for Teaching Students About Design of Computer-Aided Experimentation, James Moller and Osama Ettouney, (Robotics for Challenging

monter and Osama Educiney, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p310-316. Interactive Lessons for Instrumentation and Control, E. J. Mastascusa and Maurice F. Aburdene, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p303-309.

Just-In-Time Training on E-Mail, John F. Marron, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p931-936. Modeling and Debugging Engineering Decision Procedures with Machine Learning, Yoram Reich, Miguel Medina, Tung-Ying Shieh and Timothy Jacobs, CP Apr. 96, p157-168

Multi-Site Cross-Disciplinary A/E/C Project Based Learn-ing, Renate Fruchter, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

p126-132.

Multimedia-Based Instruction of Building Construction, Diego Echeverry, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), Jorge Va p972-977.

Trial Applications of Multimedia Instructional Aids in a Building Construction Curriculum, David R. Riley and Clark Pace, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p362-368.

Utilizing Information Technologies to Better Educate Engineers of Tomorrow, Abbas Aminmansour, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996, p965-971. WWW and Multimedia in Undergraduate Civil Engineer-

ing. Randy Dymond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Computer aided manufacturing Concurrent Engineering and Electronic Data Interchange Tony Tascione, (Analysis and Computation, Franklin Y.

Cheng, ed., 1996), p397-406.
Fully Automated Rebar CAD/CAM System: Economic Evaluation and Field Implementation, Ronie Navon, Ya'acov Rubinovitz and Mendi Coffler, CO June 96,

p101-108.

eural Network Control for Accurate Rebar Bending, Phillip S. Dunston, S. (Ranji) Ranjithan and Leonhard E. Bernold, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p492-501.

Status of Electronic Data Interchange for Steel Structures, D. W. McConnell and J. A. Bohinsky, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p389-396.

Computer analysis

Comparisons between Laboratory Measured and FWD Backcalculated Resilient Moduli, Anand J. Puppala, Steven L. Curmbaa and William H. Temple, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p347-350.

Computer Applications to Improve Efficiency of Structural Analysis and Design, J. A. Bohinsky and J. P. Lee, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p383-388.

Going Down, CE July 96, p14.

Computer applications
3D Simulation of End-Plate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94, p3122-3136.

Abstracting Lessons Learned from Design Reviews, William East and Michael C. Fu, CP Oct. 96, p267-275. Analysis and Computation, Franklin Y. Cheng, ed., 1996, 0-7844-0163-2, 522pp.

Artificial Intelligence and Intelligent Transportation Sys-tems, Brian L. Smith, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p978-984.

Assessing Opal's Impact, David J. Greenwood and Darryl J. Hatheway, CE Jan. 96, p40-43.

Bar Codes in the Design Office, Richard L. Bland, (Con

Computer Application of CLM Lateral Load Analysis to Piles and Drilled Shafts, Tracy Brettmann and J. Michael Duncan, GT June 96, p496-498.

Computer Application of CLM Lateral Load Analysis to Piles and Drilled Shafts, Tracy Brettmann and J. Michael Duncan, GT June 96, p496-498.

Computer Developed Structural Calculations. Purcell D.

Computer-Developed Structural Calculations, Russell D. Snyder, P.E., SC Nov. 96, p122-125.

Computerized I&M Programs for Oil-Fired Space Heating Boilers, Alexander P. Economopoulos, EY Aug. 96,

pot-14.
Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed. 1996, 6-7844-0182-9, 1090pp.
Consensus Building Model to Select CASIS in Small Communities, Steven W. McCrary, Colin O. Benjamin and Vijay E. Ambavanekar, UP June 96, p46-70.
Data-Centered Thinking, John G. Voeller, CP Jan. 96, p1-2.

Design Heuristic for Globally Minimum Cost Water-Distribution Systems, G. V. Loganathan, J. J. Greene and T. J. Ahn, WR Mar./Apr. 95, p182-192.

Design Rationale for Computer-Supported Conflict Mitigation, Feniosky Peña-Mora, Duvvuru Sriram and Robert Logcher, CP Jan. 95, p57-72.

Efficient Monte Carlo Technique for Locating Critical Slip Surface, Venanzio R. Greco, GT July 96, p517-525.

Engineering Automation Expands, CE Sept. 96, p22 Geographic Database for Traffic Operations Data, Cesar A. Quiroga and Darcy Bullock, TE May/June 96, p226-234.

Inappropriate Parameterization in Biofilm-Process Design urves, C. S. P. Ojha and Rajnish Shrivastava, EE Jan.

96, p67-70.

Integrated Facility Information Systems: Total Information Access, Mike Tidwell and Cal Leckington, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4119-4124.

Maximizing Resources to Produce High Quality Results, Christopher J. Perry, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

p958-964.

Modal Filter Based On-Line Monitoring of Uncertain Structural Systems, E. A. Johnson, L. A. Bergman, P. G. Voulgaris and L. C. Freudinger, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p156-159.

Modeling Water-Resource Systems for Water-Quality Management, R. G. Willey, Donald J. Smith and James H. Duke, Jr., WR May/June 96, p171-179.

9

Models of Construction Process Information, Thomas Froese, CP July 96, p183-193.

Multiple Heavy Lifts Optimization, Kuo-Liang Lin and Carl T. Haas, CO Dec. 96, p354-362.

Neural Net for Determining DEM-Based Model Drainage Pattern, Jehng-Jung Kao, IR Mar./Apr. 96, p112-121.

Numerical Model of Turbulent Flow over Sand Dune, J. Y. Yoon and V. C. Patel, HY Jan. 96, p10-18.

On the Process and Products of Project Space Vision, Pär Edin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p155-161.

Optimal Land Grading Based on Genetic Algorithms, Srinivasa L. Reddy, JR July/Aug. 96, p183-188.

Prediction of Buckling Load of Columns Using Artificial Neural Networks, A. Mukherjee, J. M. Deshpande and J.

Anmala, ST Nov. 96, p1385-1387.

Project Object, Richard M. Shane, Edith A. Zagona, Dave McIntosh, Terrance J. Fulp and H. Morgan Goranflo, CE Jan. 96, p61-63.

Proud to Be a Civil Engineer, G. Andrew Reti Makes Major Gift to ASCE Building Campaign, NE Nov. 96, p2.

Recent Innovations in Undergraduate Civil Engineering Curriculums, Joy M. Pauschke and Anthony R. In-graffea, El July 96, p123-133.

A Robotic Inspector for Low-Level Radioactive Waste, Jo-seph S. Byrd and Robert O. Pettus, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p276-282.

Scheduling with Computer-Interpretable Construction Method Models, Martin A. Fischer and Florian Aalami,

CO Dec. 96, p337-347. Strategies for the Use of IT in the Construction Industry of Singapore, Krishan Mathur, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1065-1071.

Synthesized Images for Pavement Management System Design, H. D. Cheng and Mario Miyojim, CP Jan. 96, p60-

System for Bridge Management in a Rural Environment, Matthew S. Gralund and Jay A. Puckett, CP Apr. 96, p97-105.

Transition from Partial Factors Method to Simulation Based Reliability Assessment in Structural Design, Pavel Marek and Milan Gustar, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p558-561.

Two-Dimensional Parallel Computing Solution of Coupled Heat and Moisture Flow in Unsaturated Soil, Hywel Rhys Thomas and Chi Leung Welkin Li, CP July 96,

p236-247.

Unified Formulation for Analysis of Slopes with General Slip Surface, R. D. Espinoza, P. L. Bourdeau and B. Muhunthan, GT July 94, p1185-1204.

Using Computers Effectively in Today's Civil Engineering Office, John P. Menniti, CP Oct. 96, p261-262.

Utilizing Information Technologies to Better Educate Engineers of Tomorrow, Abbas Aminmansour, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p965-971.

Vision Technique for Platoon Driving, Michel Parent, Pascal Daviet and Sofiane Abdou, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p666-675.

Weighted Factors in Computer-Aided Land Leveling, Thomas S. Zissis, Aristotelis H. Papadopoulos and Ilias S. Teloglou, IR Nov./Dec. 96, p336-338.

Computer graphics

Bechtel Adopts New Network, CE Nov. 96, p27.

Design of Riparian Habitat Replacement in Active Flood-plains, Bruce M. Phillips, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1406-1412.

Frameview: Object-Oriented Visualization System for Frame Analysis, Sheloney Moni and Donald W. White,

CP Oct. 96, p276-285.

Graphic-Based Interactive Path Planning for Large-Scale Bridge Maintenance Cranes, Sungwoo Moon and Leonhard E. Bernold, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p79-85.

A Graphical Environment for Multi-Dimensional Surface Water Modeling, Alan K. Zundel and Norman L. Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Intranet Technology to Aid Engineers, CE Dec. 96, p20. Mapping Software Aids Dayton Peace Accord, CE Apr. 96,

Mapping the Future, CE July 96, p18-19.

Networked Multimedia Tools for Architectural Engineering, Anthony C. Webster, AE Mar. 96, p11-19.

Synthesized Images for Pavement Management System Design, H. D. Cheng and Mario Miyojim, CP Jan. 96, p60-66.

Three Dimensional Design and Construction at the Auburn VPS Recycle Fiber Mill, Ronald J. Zabilski, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p482-

Computer hardware

Cast-in-Place Factory Largest for Industry, CE Nov. 96,

Gator Communicator Design of a Hand Held Digital Data Mapper, John F. Alexander, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1052-1057.

Using Computers Effectively in Today's Civil Engineering Office, John P. Menniti, CP Oct. 96, p261-262.

Vehicle Detection Using Radial Basis Neural Network, Suryanarayana Mantri and Darcy Bullock, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p188-192.

Vision-Based Automated Overtaking Control, Massimo Tistarelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p705-710.

Computer languages

The Standards Processing Framework Communication Language (SPF-CL), Han Kiliccote and James H. Garrett, Jr., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p999-1005.

Computer models

3-D Graphical Simulation for Temporary Facility Planning using Object-Oriented Building Product Model, Kenji Ito, Yuji Kano, Jun Ueda and Shinichi Setoguchi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p49-55. Computational Model for Wind-Induced Pressure Under-

 Computational Model for Wind-Induced Pressure Underneath Paver Roofing Systems, Yawei Sun, Bogusz Bienkiewicz and Sungsu Lee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1013-1020.
 Computational Modeling of Fluid Dynamics in Aortopulmonary Shunts: Comparison to In Vitro Studies, Kevin K. Whitehead, Theresa A. Tacy and Edward G. Cape, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), e324. p334.

Computer Model Aids Everglades Restoration, CE Apr. 96,

Computer Modelling and Simulation for High Speed Rail-way Applications, C. Ianniello, S. Savio and G. Sciutto, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p54-58.

Computer Optimization of a Groundwater Treatment Facili-ty, Denis M. O'Carroll and Thomas L. Theis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2492-2497.

Conceptual Design Optimization of Structural Systems, Donald E. Grierson, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p99-110.

CSO Planning Model Development and Verification Strategy, Edward H. Burgess, Thomas Day, James T. Smullen and Larry A. Roesner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1230-1235.

Data Analysis for Computer Modeling of Thermal Dis-charges, Chun-Hou Orr and Shu-Fang Peng, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3758-3763.

Electronic Modeling of Underground Piping Systems, Har-old G. Thayne, Jr. and Joseph A. Fahlicsky, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p825-831.

Genetic-Algorithm Programming of Road Maintenance and Rehabilitation, T. F. Fwa, W. T. Chan and C. Y. Tan, TE May/June 96, p246-253.

A Hybrid Data Model for Structural Health Monitoring, Sungkon Kim and Stuart S. Chen, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p286-297

Inundation Studies in Case of Failure of King Talal Dam, Ahmed Kassem, M. Hanif Chaudhry and Muhammad R. Shatanawi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1924-1929.

Lesson One for Engineers: Using Judgment, Angelo Polvere, CE Jan. 96, p32.

Method for Estimating Boiling Temperatures of Crude Oils, Robert K. Jones, EE Aug. 96, p761-763.

Model-Centered World Wide Web Coach, Renate Fruchter and Kurt Reiner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1-7. Modeling Contaminated Sediments, Robert K. Simons and

Daryl B. Simons, CE Sept. 96, p73-75.

Modeling Groundwater Response to a Perimeter Flood, Jeff Leighton and Michel Genoud, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p748-752.

Modeling of Flow Through Fractured Tuff at Fran Ridge, Roger R. Eaton, Cifford K. Ho, Robert J. Glass, Michael J. Nicholl and Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p76-78.

Modeling SSO's Resulting from Peak Conditions, Marc P. Walch, Kathleen S. Leo, Stephanie L. Ross and William M. Brant, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1777-1782.

Moving from a Model to a Decision Support System: Salt River Project's Experience with a Reservoir Simulation System, Jon Behrens and Yvonne Reinink, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4113-4118.

Multi-Scale Models of the Diffusivity of Concrete, Dale P. Bentz and Edward J. Garboczi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p574-582.

A New Model of Risk Allocation for Construction Contracts based on Fair Liabilities between Parties, Harkunti P. Rahayu and David G. Carmichael, (Computing in

P. Rahayu and David G. Carmichael, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p35-41.
New Modeling Method Aims to Better Scout Scour, ET Mar/Apr, 96, p6.
Numerical Simulation of Bridge Abutment Scour Develop-ment, Xibing Dou, Yafei Jia and Sum S. Y. Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3716-3721. p3716-3721.

Pipe Network Analysis and Design in Developing Regions.
Case Study: Novokuznetsk, Siberia, Dan Gessler,
Johannes Gessler and Randy Hoffman, (North American Johannes Gessler and Randy Hoffman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1255-1260.

Reducing Model Study Time and Improving Reliability, Ralph Finch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p4341-4346.

Results of a GIS/HEC-1 Interface Module, Paul A. DeBarry, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3194-3199.

p3194-3199.
Risk Model Applied Backwards, Monica Maldonado, ET Oct./Nov. 96, p1,7.
Sanitary Sewer System Modeling Model Comparison Racine, Wisconsin, Robert W. Carr and Thomas J. Bunker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Santa Clara River Fluvial Analysis, Jun Wang, Ruh-Ming

Santa Clara River Fluvial Analysis, Jun Wang, Ruh-Ming Li and Sree Kumar, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p358-363.
A Screening Level Model for Estimation of Vadose Zone Leaching and Saturated Zone Mixing: VLEACHSM, Sang B. Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1736-1741.
Sequence Control for Integrated Structural Design Models

Sequence Control for Integrated Structural Design Models, Chang-Ho Lee and Richard Sause, CP July 96, p213-

225

Source Characterization at Contaminated Sites, Sudhakar R. Kondisetty, Priyantha W. Jayawickrama and Kenneth A. Rainwater, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p927-943.

Start-Ups, CE May 96, p8.

Surface Modifications to Reduce Thaw Degradation of Permafrost, John P. Zarling and Jasper Rajesh, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996, pd-59.

Technology Has Bright Future, Darryl W. Davis, CE May 96, p26-27.

Telerobotic Servicing with Virtual Reality Calibration and Semi-Automatic Intermittent Model Updates, Won S. Kim and Robert Brown, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p43-49.

Three Dimensional Design and Construction at the Auburn VPS Recycle Fiber Mill, Ronald J. Zabilski, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p482-

Timber Trestle Stars at Costner-Owned Resort, CE Mar. 96, p16.

Upper Chehalis River Pollutant Capacity and Load Allocations, Paul J. Pickett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1045-1050.

User Models in Search and Navigation Systems on the In-ternet, Per Christiansson, Robert Lagerstedt and Uno

ternett, Per Christiansson, Robert Lagerstedt and Ob-Engborg, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p21-27. Verification of a 3D Flow Model Using Laboratory Data, Yafei Jia and Sam S. Y. Wang, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3458-3463.

Computer networks A/E Firms See Future in the Web, ME May/June 96, p11. Architectural Anatomy: Interdisciplinary Multimedia Tools for Building Analysis and Design, Anthony Webster, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p753-759.

ASCE Starts Up Its Own Home Page on the World Wide

Web, NE Feb. 96, pl.
ASCE Weaves a Web, CE Jan. 96, p8.
Bechtel Adopts New Network, CE Nov. 96, p27 Bentley's Brave New World, CE Oct. 96, p22,24

Computer Applications to Improve Efficiency of Structural Analysis and Design, J. A. Bohinsky and J. P. Lee, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p383-388.

Computers Aid Federal Contract Awards, CE July 96, p8. Construction Industry Web Site Opens, CE July 96, p24.

Correction, CE July 96, p8.

Corrections, CE Aug. 96, p31.

De Architectura—Hypermedia On-line Architecture, Building & Construction Bookshelf: The First Step Toward an Hypermedial Approach to Computer Aided Architectural Design, Alfredo M. Ronchi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p746-752.

Designing a PC Network to Meet the Specific Needs of Engineers, Shawn A. Dent, Daniel P. Davis and Thomas

gineers, Shawn A. Dent, Daniel P. Davis and Thomas Gdula, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p937-943. A Distributed Engineering Problem Generator, Martin C. Boyd and Nelson C. Baker, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p466-472.

Editor's Letter, Joseph Kaplan, SC Nov. 96, p93-94. Electronic Signatures Are Revolutionizing Highway Programs, Michael J. Vecchietti and Lawrence I. Neff, CP Oct. 96, p264-266.

Engineering Education Goes Digital with World Wide Web Database, CE Jan. 96, p16,18.
Engineers Commune in Virtual Village, CE Jan. 96, p15-

Facilitating Workgroup Activities through the Internet, Randall Guensler, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p459-465.

ps. 3-40.. Guest Editorial, Harlan J. Onsrud, SU Feb. 96, p1-2. Harnessing the Internet for Civil Engineering Course Delivery, Rafael G. Quimpo, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p355-361.

An Implementation of Finite Element Method on Distributed Workstations, Eduardo De Santiago and Kincho H. Law, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p188-199.

Large Latin American Infrastructure Database Formed, CE Dec.

Managing Interdisciplinary Project Teams through the Web, Robin E. Goodman and Paul S. Chinowsky, (Comweb, Robill E. Josephan and Faul 3. Chinowsky, Cd. and Paul Chinowsky, ed., 1996), p452-458. Metacomputing on the Horizon, CE Dec. 96, p20. Model-Centered World Wide Web Coach, Renate Fruchter

and Kurt Reiner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1-7.

Network Expert Geographic Information System for

Landfill Siting, Jehng-Jung Kao, Wei-Yea Chen, Hung-Yue Lin and Show-Jyi Guo, CP Oct. 96, p307-317. Networked Multimedia Tools for Architectural Engineer-

ing, Anthony C. Webster, AE Mar. 96, p11-19.

NEW '96 Gets Message from President; Home Page on Computer Net, CE Feb. 96, p68.

New on the Web, CE Mar. 96, p8. New on the Web, CE Apr. 96, p8. New on the Web, CE May 96, p8. New on the Web, CE June 96, p8.

New on the Web, CE Sept. 96, p11.

On the Process and Products of Project Space Vision, Pär Edin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p155-161.

On the Web, CE Oct. 96, p11. On the Web, CE Nov. 96, p8

On the Web, CE Dec. 96, p20. Quality's Place in Cyberspace, ME Mar./Apr. 96, p8. A Satellite in Your Future?, ME Mar./Apr. 96, p9-10.

Software Piracy is Theft, Abbas Aminmansour, CE June 96, p6.

Sticking with the Web, Peter Salwen, CE June 96, p36-41. Technologies for a Multimedia Based Highway Information Technologies for a Multimedia Based Highway Information System in the Gigabit Networking Environment, Kelvin C. P. Wang, Robert P. Elliott and James P. Turner, (Ap-plications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p490-499.
Technology Potential and Limitations in a Vitual Design Studio, Mary Lou Maher, (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), 83.14.

p8-14.

Testing on the Web, CE Oct. 96, p11.

Jesting on the Web, CE Oct. 96, p. 11.
User Models in Search and Navigation Systems on the Internet, Per Christiansson, Robert Lagerstedt and Uno Engborg, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p21-27.
Web Site Correction, CE Feb. 96, p8.

Web Tour: Antonio Baptista, ET June/July 96, p10-11.
Where the Interstate Meets the Information Highway, John

Lynch, CP Apr. 96, p91-92.

ing, Randy Dymond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p341-347. WWW and Multimedia in Undergraduate Civil Engineer-

Computer programming

BDS Implementation of AASHTO LRFD Design Philoso-phy, Toorak Zokaie, Richard Pickings and Karim Valimohamed, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p453-463.

Computerized Tool for Hierarchical Simulation Modeling, Anil Sawhney and Simaan M. AbouRizk, CP Apr. 96,

p115-124.

Finite-Element Graphic Objects in C++, Jianing Ju and M. U. Hosain, CP July 96, p258-260.

Flora Wang, Noted Hydrologist, Was Louisiana State Pro-fessor, NE Oct. 96, p6.

Formal Specification of Concurrent Finite Element Sys-tems, Harpreet S. Chadha and John W. Baugh, Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1996),

Linked Lists for Transport Simulations Using Lagrangian Parcels, Poojitha D. Yapa, Li Zheng and Tomonao Koba-yashi, CP Jan. 96, p88-90.

Project Object, Richard M. Shane, Edith A. Zagona, Dave McIntosh, Terrance J. Fulp and H. Morgan Goranflo, CE Jan. 96, p61-63.

Reliability-Based STructural Optimization-Software Development, M. Gasser and G. I. Schuëller, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p531-534.

Computer programs

Application of the Newton Method in Valve Discharge Coefficient Relationships, Jorge A. Garcia and Antonia M. Romero, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p946-953.

An Automated Design and Review Assistant: SEDAR, Mi-chael C. Fu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p118-125.

Automated Generation of Productivity Functions, Alan D. Russell and Simaan AbouRizk, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p261-267.

Bechtel Adopts New Network, CE Nov. 96, p27.

Bridge Hydraulic and Scour Analysis Using FESWMS-2DH, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1555-1564. CERF Unveils Interactive Extension Program, CE Jan. 96,

p10,12.

Collecting, Abstracting, and Compiling Review Comments: the Reviewer's Assistant and the Lessons-Learned Gen-erator, Michael C. Fu and E. William East, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p104-111.

Contractor Markets Management Software, CE Dec. 96, p20.

Discharge Measurements and Predictions in Wetlands, Vassilios A. Tsihrintzis, David A. Sikkema, Marcia Levinson and Jose L. Oliveros, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p274-279.

Florida Department of Transportation's MastArm Proordan Department of Transportation's Masterin Fro-gram—Placing the Engineer in Control, Andre V. Pavlov, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p473-479.

Global Project Documentation and Communications Using HTML on the World Wide Web, L. Y. Liu, A. L. Stump and S. Y. Chin, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p15-20.

ICeD: An Interdisciplinary Conceptual Design Environ-ment, Paul S. Chinowsky, (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Implementation of Runtime Visualization for Tough2, H. Xin Yang and Srikanta Mishra, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p308-309.

Integrated Infrastructure Maintenance Management, Carol Subick and Ilker Adiguzel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p207-213.

A Knowledge Based Construction Contractor Proposal Evaluation System, John A. Kuprenas and Farzin Madjidi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p247-253.

Logging into Water, CE July 96, p14,18.

Modeling the Blue Ridge, CE Aug. 96, p20,22

A Multi-Agent Architecture for Foundation Design Environments, M. R. Halfawy, N. A. B. Yehia, A. S. Bazaraa, A. Dessouki, F. C. Hadipriono and J. W. Duane, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p200-206.

Optimal Pipeline Sizing Technique, Helmi M. Hathoot, Ahmed I. Al-Amoud and Fawzi S. Mohammad, TE May/

June 96, p254-257

Parametric Estimating: An Object-Oriented Approach, Ir-tishad U. Ahmad and Praveen K. Ommi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p254-260.

Probabilistic Cervical Spine Injury Analysis Methods, Ben H. Thacker, Y.-T. (Justin) Wu, Daniel P. Nicolella and Ronald C. Anderson, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p270-273.

Reasoning about Cases with Diagrams, Ellen Yi-Luen Do and Mark D. Gross, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

p314-320.

Reliability Analysis for Deep-Seated Stability of Pile-Supported Structures, William M. Isenhower, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p870-873.

SAMS: Software for Simulating Streamflow Series, J. D. Salas, N. Saada, D. Frevert and W. Lane, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3387-3392.

Simulation-Based Reliability Assessment for Structural En-gineers by Pavel Marek, Milan Gustar, and Thalia Anag-no, James T. P. Yao, ST July 96, p841.

Structuring Cases in a Case-Based Design Aid, Craig Zimring, Sonit Bafna and Ellen Do, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p308-313.

Towards Lessons-Learned Systems in the US Army, Corps of Engineers, Donald K. Hicks, Jeffrey G. Kirby and E. William East, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p112-117.

Urban Disaster Vulnerability Assessment & Lessening Is a Key for Safe Development, Mark Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), pi1-12.

Computer software (DM)²: A Modular Mobile Manipulator, Christopher Lee and Yangsheng Xu, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p107-113.

Adaptation of a Layout Design System to a New Domain: Construction Site Layouts, Bongjin Choi and Ulrich Flemming, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p711-717.

Addressing Current Issues in Structural Design Software, Julia D. Biedermann, CP Oct. 96, p286-294.

Advanced Hydrologic Forecasting for Flood and Drought Mitigation, John J. Ingram, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p455.

Advanced Site Design Software for Landfill Closure and Remedial Design, Douglas Cervenak, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-

sky, ed., 1996), p818-824.

The Agent Collaboration Environment, An Assistant for Architects and Engineers, Kirk D. McGraw, Philip W. Lawrence, Jeffrey D. Morton and Jeff Heckel, (Comput ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p739-745.

An Agent-Supported Framework for Collaborative Design, Yan Jin and Hiroshi Ohira, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed.,

1996), p529-535.

The Automated Lift Planning System, Mike Williams and Craig Bennett, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p812-817.

Animation Techniques for Visualizing Coastal Flow Dynamics, Brian King, Patrick Collins, Duncan Galloway and Eric Wolanski, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Application of Expert Systems to Workflow in Construc-tion Management, Raja R. A. Issa and Charles S. Duvel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p781-785. ASCE's Technical Council on Computer Practices, Glenn

S. Orenstein, CP Apr. 96, p93-94.

Automated Code Compliance Checking for Building In-spection, Tang Hung Nguyen, Claude Bédard and Kinh Huy Ha, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p1020-1026.

Automated Optimal Structural Design Synthesis using Machine Generated Rule Base and Artificial Neural Net-works, J. M. Deshpande, M. J. Skibniewski and K. Lucprasert, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p867-873. Bentley's Brave New World, CE Oct. 96, p22,24

Computer Model Aids Seismic Improvements, CE Mar. 96,

p12.

Computer-Aided Design of Braced Excavations, Chandra S. Brahma and Howard C. Biddlecome, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p838-844.

Computer-Developed Structural Calculations, Russell D. Snyder, P.E., SC Nov. 96, p122-125.

A Conceptual Model for Construction Clients' Requirements Processing, Chimay J. Anumba and Nosa F. O. Evbuomwan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p431-437.

Vanegas, ed. and raul Chinowsky, ed., 1997, Percentilutive Driver for Cohesive-Frictional Materials, K. Willam and M.-M. Iordache, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p751-760.

Construction Planning through Multi-Agent Constraint Sat-isfaction, Milorad Sucur and Francois Grobler, (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p240-246.

Contractor Markets Management Software, CE Dec. 96,

Corps Estimates \$4 Billion in Flood Protection Savings, CE Apr. 96, p8.

A Decision Support Tool for the Steel Building Industry, Gregory P. Pasley and W. M. Kim Roddis, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p725-731.

Design Information Evolution in a Collaborative Engineer-ing Software Environment, Beth A. Brucker and Annette ing Software Environment, Beth A. Brucker and Annette
L. Stumpf, (Computing in Civil Engineering, Jorge
Vanegas, ed. and Paul Chinowsky, ed., 1996), p732-738.
Designers Use Analysis Software for Planned Zimbabwe
Dam, CE Feb. 96, p83.
Development of an Interactive Multimedia and Database

Model, Michael H. Woo, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p767-773.

Development of Remediation Technologies Simulators, Mark S. Dortch and Christian J. McGrath, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2583-2588.

A Distributed Engineering Problem Generator, Martin C. Boyd and Nelson C. Baker, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p466-472.

A Domain Specific Equation Solver for Bridge Analysis, Gary Consolazio, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), Jorge Var p321-327.

Earth Spillway Design Using SITES Software, Darrel M. Temple, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1930-1935.

Earthquake-Induced Landsliding Analyzed and Predicted With a Geographic Information System, James P. McCalpin, (Natural Disaster Reduction, George W.

McCalpin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p3-4.
Effect of Sidewalks and Railings on Wheel Load Distribution in Steel Girder Bridges, K. M. Tarhini, M. Mabsout and M. Kobrosly, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p881-886.

Evaluation of Bridge Decks and Pavements at Highway Speed using Ground Penetrating Radar, Kenneth R. Maser, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Moham-

madi, ed., 1996), p820-828.

Finite Element Transient Analysis (FETA) of Solids and Structures Including Soil-Fluid-Structure Interaction, D. C. Rizos, D. L. Karabalis, G. J. Cokkinides, J. L. Tassoulas and J. S. Mulliken, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p480-486. A Flexible Machine-Vision System for Traffic Monitoring

Applications, James F. Alves, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p171-175.

FLODRO 2.0: A User Friendly Personal Computer Pack-age for Flood and Drought Frequency Analyses, Jose A. Raynal-Villasenor, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p304-309.

Frameview: Object-Oriented Visualization System for Frame Analysis, Sheloney Moni and Donald W. White, CP Oct. 96, p276-285.

Getting to Know ArcView by Environmental Systems Re-search Institute, Wayne Sarasua, TE Sept./Oct. 96, p409. GIS and CAD-based Design Software in CE Education, Randy Dymond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p501-507.

Going Down, CE July 96, p14. The HEC NexGen Software Development Project, Darryl W. Davis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3770-3775.

HEC-RAS (River Analysis System), Gary W. Brunner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

How to Build a Consortium to Advance Computing and Technology Transfer to the Project, Yvan J. Beliveau (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p793-799. A Hybrid System for Partial Prestressed Concrete Beam Design, Nicolaas Stuurstraat, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p887-891.

Hydrologic Modeling System, John Peters and Arlen Feldman, (North American Water and Environment Congress Destructive Water, Chenchayya Bathala, ed., 1996),

Implementation and Application of Parallel Processing Computer Methods for Probabilistic Analysis, Harry R. Millwater, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p266-269.

Incorporating Uncertainty, Objective, and Subjective Data in Geologic Site Characterization, Patrick G. Kinnicutt and Herbert H. Einstein, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p104-118.

Rom, ed., 1999, pro-110.
Information Models for Integrated Building Design at the Preliminary Stage, Claude Bédard, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p246-252.

Information Technology for Better Management of Change Cost and Schedule in Construction Projects, Feniosky Peña-Mora and Hong Chen, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p613-619.

Integrated GIS Based Watershed Management Modeling System, L. E. Gomez, C. L. Chen and J. Herr, (Comp ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p508-514.

An Iterative, Probabilistic Environmental Decision Analysis Approach, Erik K. Webb, Stephen H. Conrad and Theresa J. Brown, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p249-264.

Korean Gas Company Digitizes Maps, Records, CE Dec. 96, p20.

Mapping Software Aids Dayton Peace Accord, CE Apr. 96, p8.

Mathematical Techniques & Software for Stochastic De-sign Optimization, Jean M. Parks and Chun Li, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p118-121.

Multimedia Development Software: Object-Oriented Interface-Based Simulation, Hossam El-Bibany, CP Oct. 96, p295-299

A New Method for Solving Large Deformation Problems, Xiangjun Qiu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p242-245.

A New Software Architecture for Finite Element Analysis, A New Software Architecture for Finite Element Analysis, Graham Archer, Christopher Thewalt and Gregory L. Fenves, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p683-689. Next Generation Flood Damage Analysis Program, Michael W. Burnham, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3788-3793.

The Next Generation of Structural Engineering Automation Systems, Song Fong Jan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p494-500.

Object-Oriented Construction Information Framework for Construction Management, Sangyoon Chin, Annette L. Stumpf and Liang Y. Liu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p786-792.

On the Web, CE Oct. 96, p11.

A Practical Approach to Uncertainty Modeling in Geotechnical Engineering, C. Hsein Juang and David J. Elton, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p1269-1283. Probabilistic Simulation of Geologic Waste Disposal Facili-

Signature of the state of the s Roth, ed., 1996), p944-964.

Real Time Planning & Total Risk Management, Ali Jaafari, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p193-199.

Reliability Procedures as a Design Tool for Structures and Mechanical Components, G. I. Schuëller, M. Gasser, J. Hartl and G. Lener, (Probabilistic Mechanics & Stru tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p800-803.

Requirements for Industry Applicability of Knowledge-Based Schedulers, Florian Aalami and Martin A. Fischer, (Computing in Civil Engineering, Jorge Vanegas, ed. and

Paul Chinowsky, ed., 1996), p774-780.

Scientific Visualization Techniques for Wave Transformation Models, David A. Leenknecht and Wayne W. Tanner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p704-710.

A Secondary Flow Correction for Depth-Averaged Flow Calculations, John Finnie, Barbara Donnell, Joe Letter and Robert S. Bernard, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p301-305.

Software Acconts for Productivity Gain, ME Mar./Apr. 96,

A Software Architecture for Concurrent Lifecycle Design and Construction, Nosa F. O. Evbuomwan and Chimay J. Anumba, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p424-430. Software Piracy is Theft, Abbas Aminmansour, CE June

Space Planning Tools for Multi-Story Construction, David R. Riley and Iris D. Tommelein, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p718-724.

STEP and the Building Construction Core Model, Thomas Froese, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p445-451.

System for Bridge Management in a Rural Environment, Matthew S. Gralund and Jay A. Puckett, CP Apr. 96, p97-105.

Terrestrial Applications of a Composite Lattice Space Structure, Arup K. Maji, Keith Donnelly and Michelle Salas, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1122-1126.

Uncertainty in Evaluation of Historical Subsidence Meas urements, Kevin M. O'Connor, Sean M. Killen, Mark R. Chandler, Jan E. Stache and John A. Siekmeier, (Uncer-Chandler, Jan E. Slache and John A. Siekmeier, (Uncer-tainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996, p710-726. Use of a National Loss Estimation Methodology for Riska Management, Thalia Anagnos, Scott Lawson, Jawhes Bouabid and Mourad Bouhafs, (Natural Disaster Reduc-

tion, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p249-250.

The Use of Digital Geographic Information in Transportation Engine reographic information in fransporta-tion Engineering, Patrice Boursier, Bernard Allouche, Laurent Coudercy and Yonnel Gardes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p403-407.

Using Computers Effectively in Today's Civil Engineering Office, John P. Menniti, CP Oct. 96, p261-262.

Using HEC-RAS to Compute Scour at Bridges, Gary W.

Using HEC-RAS to Compute Scour at Bridges, Gary W. Brunner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1565-1574.
Vehicle Detection Using Radial Basis Neural Network, Suryanarayana Mantri and Darcy Bullock, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p188-192.
Vision Based, Automated, Contalling, Control Programment Control Control

Vision-Based Automated Overtaking Control, Massimo Tistarelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996, p705-710. Visualizing Global Force Distributions in Finite Element

Models, Kirk Martini, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p697-703.

Visualizing Global-Force Distributions in Finite-Element Models, Kirk Martini, AE June 96, p71-77.

WOMAP in a Windows Environment, Daniel Mendelsohn, Eoin Howlett and J. Craig Swanson, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p555-569.

Computer storage devices

Metacomputing on the Horizon, CE Dec. 96, p20.

Computer systems programs

Toward a Generic Kernel for Air Traffic Management System, C. Dujardin, G. Joly, D. Hollinger and O. Palmade, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p87-91.

Computer traffic control

Houston Transtar: Total Traffic Control, CE July 96, p12.

Automation-Related Quality Improvements in Power Plant Design and Operation, George V. Jones, Phillip W. Gar-rett, Jones Randall E. and Carl K. Toner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p487-493.

Data Exchange: File Transfer, Transaction Processing and Application Interoperability, James Andrew Arnold and Paul Teicholz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p438-444.

Green Light for Whom? Hermann Zutraun, P.E., CE Sept.

96, p38.

Irving Amron, Civil Engineer Who Was Former ASCE Staff Editor, Dies at 78, NE July 96, p15.

Practical Geoenvironmental Visualization, G. B. Baecher, J. A. Zarge and J. Shapiro, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p56-62.

Computerized control systems

CISC-Computer Integrated Spatial Control for Autonomous Trenching and Pipe-Laying, Xiaodong Huang and Leonhard E. Bernold, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p502-509.

Fuzzy Logic Based Control for Sliding Structures, Andrei M. Reinhorn, Ravi S. Subramaniam and Michael A. Riley, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p298-309.

Interactive Lessons for Instrumentation and Control, E. J. Mastascusa and Maurice F. Aburdene, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p303-309.

Telerobotic Pavement Marker Application, Rami A. Rihani and Leonhard E. Bernold, (Robotics for Challenging En-vironments, Laura A. Demsetz, ed., 1996), p171-177.

Verifying the Timing Requirements of Multiprocessor Control Systems, John W. Baugh, Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p278-285.

Computerized design

Alternative Wastewater Pumping Station Design Considerations, Thomas R. Dion, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p328-334.

Artificial Intelligence (AI) Supported Process Planning System for Construction, Md. Salim, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p510-518.

An Automated Design and Review Assistant: SEDAR, Michael C. Fu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p118-125.

Automated Generation of Productivity Functions, Alan D. Russell and Simaan AbouRizk, (Computing in Civil En-gineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p261-267.

Automated Optimal Structural Design Synthesis using Machine Generated Rule Base and Artificial Neural Net-works, J. M. Deshpande, M. J. Skibniewski and K. Lueprasert, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p867-873.

Co-Evolution of Design Specifications and Design Solu-tion, Mary Lou Maher and Josiah Poon, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p77-83.

Collecting, Abstracting, and Compiling Review Comments: the Reviewer's Assistant and the Lessons-Learned Gen-erator, Michael C. Fu and E. William East, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p104-111.

Computer Applications to Improve Efficiency of Structural Analysis and Design, J. A. Bohinsky and J. P. Lee, (Analysis and Computation, Franklin Y. Cheng, ed.,

1996), p383-388.

Decision Support Environment for Structural Steel, Gregory P. Pasley and W. M. Kim Roddis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p371-382.

Design Case Adaptation Using Genetic Algorithms, Mary Lou Maher and Andrés Gómez de Silva Garza, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p294-300.

Designing a PC Network to Meet the Specific Needs of Engineers, Shawn A. Dent, Daniel P. Davis and Thomas Gdula, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p937-943.

The Electronic Highway System for the Building Industry, Paul Mark Evans, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p262-272.

Evolving Design Genes as well as Design Solutions, John S. Gero, Vladimir A. Kazakov and Thorsten Schnier, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p84-90.

Florida Department of Transportation's MastArm Program-Placing the Engineer in Control, Andre Pavlov, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p473-479.

Fully Automated Rebar CAD/CAM System: Economic Evaluation and Field Implementation, Ronie Navon, Ya'acov Rubinovitz and Mendi Coffler, CO June 96,

Graphic-Based Interactive Path Planning for Large-Scale Bridge Maintenance Cranes, Sungwoo Moon and Leonhard E. Bernold, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p79-85.

Henry's Problem and Its Representation --- Representing an Architect's Reasoning Structure, Quinsan Cao, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul

Crimowsky, ed., 1996), p1058-1064.

ICeD: An Interdisciplinary Conceptual Design Environment, Paul S. Chinowsky, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p133-139.

Information Models for Integrated Building Design at the Preliminary Stage, Claude Bédard, (Analysis and Com-putation, Franklin Y. Cheng, ed., 1996), p246-252.

Integrating Information with 3D Models for Facility Life-Cycle Support, A. B. Cleveland, Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p253-261.

Integration of Generic Knowledge and Cases in DOM, Wolfgang Oertel and Shirin Bakhtari, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p301-307.

Knowledge-Based Parametric Design using JSpace, Par-manand V. Dharwadkar and Alton B. Cleveland, Jr., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p70-76.

Managing Multiple Views of Design Product Models, Maher Hakim, (Analysis and Computation, Franklin Y.

Cheng, ed., 1996), p273-277.

Cheng, ed., 1990, p215-217.
A Multi-Agent Architecture for Foundation Design Environments, M. R. Halfawy, N. A. B. Yehia, A. S. Bazaraa, A. Dessouki, F. C. Hadipriono and J. W. Duane, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p200-206.

A New Method for Efficient Reliability-Based Design Optimization, Y.-T. Wu and W. Wang, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p274-277.

Optimization of Graphical Models, Jeanine Graf, (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p97-103.

Real Time Positioning and Equipment Control for Hostile Environments, Yvan J. Beliveau, (Robotics for Challeng-ing Environments, Laura A. Demsetz, ed., 1996), p64-70.

Single-Criteria Genetic Optimization for Design and Detailing of Concrete Structures, W. M. Kim Roddis, Warren K. Lucas and Vorathum Chunnanond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p91-96.

Status of Electronic Data Interchange for Steel Structures, D. W. McConnell and J. A. Bohinsky, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p389-396.

Strategies for the Use of IT in the Construction Industry of

Singapore, Krishan Mathur, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1065-1071.

Technology Potential and Limitations in a Vitual Design Studio, Mary Lou Maher, (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Towards Lessons-Learned Systems in the US Army, Corps of Engineers, Donald K. Hicks, Jeffrey G. Kirby and E. William East, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p112-117.

Utilization of 3-D CADD in Analysis, Design and Construction of Mobile Service Tower for Atlas Launch Vehicles, Norm Bobczynski, Matthew Wrona, David Hansen and Harold Howell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1197-1204.

Computerized scheduling

Dynamic Programming Approach to Scheduling of Non-serial Linear Project, Ahmed B. Senouci and Neil N. El-

din, CP Apr. 96, p106-114.

Requirements for Industry Applicability of Knowledge-Based Schedulers, Florian Aalami and Martin A. Fischer, Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p774-780.

Scheduling with Computer-Interpretable Construction Method Models, Martin A. Fischer and Florian Aalami, CO Dec. 96, p337-347.

CO Dec. 96, p337-347.
Using CPM-Chart Animation to Illustrate the Evolution of Schedules, Julio C. Martinez and John R. Knoke, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p627-633.
Visual-Based Scheduling: 4D Modeling on the San Mateo County Health Center, Eric Collier and Martin Fischer.

(Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p800-805.

Computerized simulation

Assessing Opal's Impact, David J. Greenwood and Darryl J. Hatheway, CE Jan. 96, p40-43.

Automated Tools for Spatially Distributed Rainfall/Runoff Modeling, E. James Nelson and Norman L. Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2903-2908.

Computer Modelling for a Discrete Particle System, Kofi B. Acheampong, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p731-734.

Control of an Irrigation Canal, Leslie Skertchly Molina and

Control of an Irrigation Canal, Lessie Skertchly Molina and J. P. Miles, HY July 96, p403-410.

Genetic Algorithm Design of Piped Irrigation Systems, Graeme Dandy, Angus Simpson and Laurie Murphy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), 264-266.

Implementation of Runtime Visualization for Tough2, H. Xin Yang and Srikanta Mishra, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p308-309.

Micromechanical Simulation of Geotechnical Problems

Micromechanical Simulation of Geotechnical Problems using Massively Parallel Supercomputers, David W. Washington and Jay N. Meegoda, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p717-721.
Micromechanics of Damage in Random Composites, M. Ostoja-Starzewski, A. Al-Ostaz, I. Jasiuk and K. Alzebedh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), 362-363. 1996), p362-363.

1990), p302-303.

Hodeling of Possible Outflow of Radionuclides from Deep Burials into Biosphere, V. M. Shestopalov, B. D. Stetsenko and A. S. Boguslawski, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p176-177.

Moisture Removal from the Repository by Ventilation and Impacts on Design, Parviz Montazer and Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p423-425.

Ozone Layer Could Regenerate, CE Feb. 96, p8.

Self Deployable Mechanism for Large Disk Antenna Using Centrifugal Force, Takanori Sato, Shinji Matsumoto, Haruyuki Namba, Kenji Takagi, Hisashi Tadokoro, Hiroshi Yamakawa, Takao Oura, Kenji Nozaki and Nobuyuki Kaya, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1155-1161

Traffic Control System for Metropolitan Areas Based on Radio Links between Vehicles and Infrastructure, Andrea Borella and Giovanni Cancellieri, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p398-402.

'New" Method for Seismic Analysis is the Norm, Brian Grant, P.E., CE Sept. 96, p35-36.

Computerized test methods

Analysis of Pavement Structural Responses Using In-Situ Instrumentation, Dar-Hao Chen and Michael Murphy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Modal Filter Based On-Line Monitoring of Uncertain Structural Systems, E. A. Johnson, L. A. Bergman, P. G. Voulgaris and L. C. Freudinger, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p156-159.

Optimum Smoothing Filter for Geophysical Tomography by the Extended Bayesian Method, Yusuke Honjo, Toshiaki Yamaue and Nobuaki Kudo, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p942-945.

ASCE's Technical Council on Computer Practices, Glenn S. Orenstein, CP Apr. 96, p93-94

Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996, 0-7844-0182-9, 1090pp.

The Digital Architect: A Common-Sense Guide to Using Computer Technology in Design Practice by Ken Saunders, Frederick S. Merritt, AE Mar. 96, p42.

Interface Design for Pen-Based Computers in the FIRS Project, Eddy M. Rojas and Anthony D. Songer, (Com puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1027-1033.

Object-Oriented Model for Integrating Construction Product and Process Information, Annette L. Stumpf, Ra-jaram Ganeshan, Sangyoon Chin and Liang Y. Liu, CP July 96, p204-212.

Richard Elstner, 72, Was Failures Expert, CE Nov. 96, p75-76.

Role of Computing: Practitioners' Perspective, Robert J. O'Neill, Robert M. Henry and Thomas A. Lenox, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p670-676.

Concentrated loads

Lateral Distortional Buckling of Monosymmetric Beams under Point Load, Owen Hughes and Ming Ma, EM Oct. 96, p1022-1029.

Concentration

Concentration Effects on Chlorinated Aliphatic Transfor-mation Kinetics, J. B. Hughes and G. F. Parkin, EE Feb. 96, p92-98.

Modeling Concentration-Polarization in Reverse Osmosis Spiral-Wound Elements, Benito J. Mariñas and Richard Urama, EE Apr. 96, p292-298.

Relative Celerities of Mobile Bed Flows with Finite Solids Concentrations, Peter H. Morris and David J. Williams,

HY June 96, p311-315.

Velocity and Concentration Profiles in Sheet-Flow Layer of Movable Bed, B. M. Sumer, A. Kozakiewicz, J. Fredsøe and R. Deigaard, HY Oct. 96, p549-558.

Concentration time

Assessment of Kinematic Wave Time of Concentration, Richard H. McCuen and Jill M. Spiess, HY Mar. 95, Time of Concentration and Peak Discharge Formulas for Planes in Series, Tommy S. W. Wong, IR July/Aug. 96.

Concentrators

Using Ultra High Solar Flux in the Lunar Environment: Production of Cement and Other Applications, Joseph J. O'Gallagher, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p571-577.

Aerated Concrete Finds First U.S. Commercial Application, CE June 96, p14.

Alabama-Huntsville Students Again Crowned as Concrete Canoe Champs, NE Aug. 96, p1,6.

Algebraic Methods For Creep Analysis of Continuous Composite Beams, Luigino Dezi, Graziano Leoni and Angelo Marcello Tarantino, ST Apr. 96, p423-430.

Alkali-Silica Reaction in Concrete with Waste Glass as Aggregate, Christian Meyer, Stephen Baxter and Weihua Jin, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1388-1397.

Alluring Approach, James D. Lockwood, P.E. and John R. Hillman, P.E., CE Nov. 96, p68-71.

Analysis of Crack Propagation in Concrete Structures by Markov Chain Model and R-curve Method, Yunping Xi and Zdenek P. Bažant, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p358-361.

Analysis of Work-of-Fracture Method for Measuring Frac-ture Energy of Concrete, Zdeněk P. Bažant, EM Feb. 96,

p138-144

Asphalt-Concrete Water Barriers for Embankment Dams, Patrick J. Creegan and Carl L. Monismith, 1996, 0-7844-0141-1, 185pp.

Boltzmann-Matano Analysis of Chloride Diffusion into Blended Cement Concrete, P. J. Tumidajski and G. W. Chan, MT Nov. 96, p195-200.

Boston's Third Harbor Tunnel (Available only in Focus on Geo/Environmental Special Issue), Axel J. Pollak and V. Peter Lalas, CE Mar. 96, p3A-6A.

Bridge Monitoring Using An Optical Fibers Sensor System, R. L. Idriss and M. B. Kodindouma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p.238-244

Cast-in-Place Factory Largest for Industry, CE Nov. 96, p13.

Composite Action of Foamed and Lightweight Aggregate Concrete, Yasser M. Hunaiti, MT Aug. 96, p111-113.

Composite Applications in the Navy Waterfront Infrastruc-ture, L. J. Malvar, G. E. Warren and C. M. Inaba, (Materials for the New Millennium, Ken P. Chong, ed., 1996). p!179-1188.

Composite Beam Analogy Fracture Model for Concrete, Mohammed E. Haque and Farhad Ansari, EM Oct. 96, p957-965.

Compressive Behavior of Concrete: Physical Mechanisms and Modeling, Pierre Rossi, Franz-Josef Ulm and Fatiha Hachi, EM Nov. 96, p1038-1043.

Computational Aspects of Dynamic Concrete Viscoplasticity, Olubayo O. R. Famiyesin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p282-285

Computer Vision and Fracture Process in Cement-Based Materials, Sokhwan Choi and Surendra P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p967-970.

Concrete - A Practical Construction Material for Mars, David S. McKay and Carlton C. Allen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p566-570.

Concrete Beams and Slabs Retrofitted with CFRP Lam-inates, M. Arockiasamy, Ahmed Amer and M. Shahawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Concrete/Reinforcing Steel Bond Strength of Low-Temperature Concrete, Herbert P. Schroeder and Thom-as B. Wood, CR June 96, p93-117.

Constitutive Models for Concrete Penetration Analysis, Vladimir M. Gold, George C. Vradis and James C. Pear-son, EM Mar. 96, p230-238. Cyclic Analysis of Concrete-Filled Tubes and Design of

Composite Frames, Jerome F. Hajjar, Brett C. Gourley and Katherine A. Stillwell, (Analysis and Computation,

Franklin Y. Cheng, ed., 1996), p43-54. Cyclic Tests of Concrete-Filled Steel Box Columns, Hanbin Ge and Tsutomu Usami, ST Oct. 96, p1169-1177

Damage Mechanics Model for Evaluation of Bridge Deterioration, Roberto Lopez-Anido, Hota V. S. GangaRao and Raimondo Luciano, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p458-461.
Designing Concrete Culverts to Resist Scour Damage, John

Kurdziel, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3942-3949.

Detection of ASR in PCC Using Ultrasonic Waves, N. M. Al-Akhras, I. L. Al-Qadi and M. R. Hajj, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p897-

Detection of Cracks in Concrete Using the Impact Responses, H. L. (Roger) Chen and Lianfeng Pei, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p620-623.

Development of a CO2-Solidification Method for Recycling Concrete Wastes, Toshiyuki Hashida, Satoshi Teramura, J. C. Ha and Hideaki Takahashi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p674-683.

Development of a Solidification Method for Pulverized Concrete Waste by Hydrothermal Hot-Pressing and Fiber Reinforcement, Kazuhiko Sato, Toshiyuki Hashida, Hideaki Takahashi and Nakamichi Yamasaki, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Effect of Aggregates on Fracture Process Zone of Concrete,

Yunping Xi and Felix E. Amparano, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1185-1188.
The Effect of Moisture on Spalling of Normal and High Strength Concretes, N. Khoylou and G. L. England, (Worldwide Advances in Structural Concrete and Ma-A. E. Schultz, ed. and S. L. McCabe, ed., 1996), sonry, A. p559-570.

Effect of Rest Periods on Fatigue Response of Asphalt Concrete Mixtures, Tung-Wen Hsu and Kuo-Hung Tseng, TE July/Aug. 96, p316-322.

Effectiveness of Blast-Furnace and Gasifier Slags at Reduc-ing Ingress of Chloride Ions into Portland Cement Concretes in Marine Environments, G. J. Osborne, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1503.

Energy Dissipation in Concrete Materials Due to Viscoelas-tic and Damage Mechanisms, Vassilis P. Panoskaltsis, tic and Dahnage Mechanisms, vassins F. randskands, Saurabh Bahuguna and Dimitris Soldatos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p857-860.
Engineers Roll Out Concrete for New Dam, CE Oct. 96,

Environmental Impacts of Autoclaved Cellular Concrete, M. C. Latona, R. D. Neufeld, L. E. Vallejo, W. Hu and C. Kelly, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p57-69. Environmentally Acceptable Piling for Use in Navy Pier

Fender Systems, David Hoy, George Warren and Duane Davis, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1189-1198. Evaluation of Crumb Rubber (CRM) as a Smart Additive in

Asphalt Concrete Mixes, Gary Gowda, Kevin Hall and Robert Elliott, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p612-621. Evaluation of Dynamic Strength of Concrete from Results of Static Tests, Iosif E. Shkolnik, EM Dec. 96, p1133-

Evaluation of Grout Materials for Anchor Embedments in Hardened Concrete, Willie E. McDonald, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p958-967

Evaluation of the Troxler Model 4430 Water-Cement Gauge, CERF Report: HITEC 96-03-F. Highway Innova-tive Technology Evaluation Center, Civil Engineering Research Foundation, 1996, 0-7844-0167-5, 51pp. Experimental Observation of Microstructural Behavior of Concrete, Ahmed M. Farahat, Masashi Kawakami and Tada-aki Tanabe, MT May 95, p87-95.

Fatigue Strength of Externally Reinforced Concrete Beams, L. C. Muszynski and R. L. Sierakowski, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p648-656

Finite Element Analysis of Discontinuities in Concrete, Hong D. Kang and Kaspar J. Willam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1054-1057.

Florida Department of Transportation Aviation Office Statewide Pavement Maintenance Management Program, J. David Scherling, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p263-272

Fracture Mechanics Modeling with Fracture Surface Image Data, Anne B. Abell and David A. Lange, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p741-

Fracture Mechanics of Concrete: Applications of Fracture Mechanics to Concrete, Rock and Other Quasi-Brittle Materials by Surendra P. Shah, Stuart E. Swartz, and Chengsheng Ouyang, Walter H. Gerstle, ST Nov. 96, Ground Improvement Salvation, Peter J. Nicholson, CE

May 96, p6.

May 20, Po.
Hybrid Columns of FRP and Concrete, Mohsen Shahawy,
Amir Mirmiran and Michel Samaan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p73-82.

In-Situ Dynamic Response of Cantilever Walls, Sreenivas Alampalli and Ahmed-W. Elgamal, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p57-76.

Investigation of Lignite-Based Bottom Ash for Structural Concrete, Nader Ghafoori and Jeffrey Bucholc, MT Aug.

96, p128-137

Investigation of the Use of Carpet Waste PP Fibers in Concrete, Antoine E. Naaman, Sandra Garcia, Marwan Korkmaz and Victor C. Li, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p782-791.

The Kobe Earthquake: Performance of Engineered Buildings, David R. Bonneville, (Building an Internation Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p917-925.

Mathematical Modeling of Electrochemical Steel Corrosion in Concrete, G. Balabanić, N. Bićanić and A. Dureković, EM Dec. 96, p1113-1122.

Microplane Model for Concrete: I: Stress-Strain Bounda-ries and Finite Strain, Zdeněk P. Bažant, Yuyin Xiang and Pere C. Prat, EM Mar. 96, p245-254.

Microplane Model for Concrete: II: Data Delocalization and Verification, Zdenek P. Bažant, Yuyin Xiang, Mark D. Adley, Pere C. Prat and Stephen A. Akers, EM Mar. 96, p255-262.

Minimizing Costs of Northern Highways by Using BST, D. R. MacLeod and Robin Walsh, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p935-946.

Model Formulations for Numerical Creep Calculations for Concrete, Akihiko Kawano and Robert F. Warner, ST

Mar. 96, p284-290.

Moisture-Induced Pressures in Concrete Airfield Pave-ments, C. A. Kodres, MT Feb. 96, p41-50.

New Damage Variable in Failure Analysis of Concrete, Woon-Kwong Yip, MT Nov. 96, p184-188.

New High-Performance Concrete in Canadian Foot Bridge, CE July 96, pl 1.

Nonlinear Finite Element Reliability Analysis of Concrete, Dan M. Frangopol, Yong-Hak Lee and Kaspar J. Willam, EM Dec. 96, p1174-1182.

On the Use of Fiber Reinforced Composites for Infrastructure Renewal— A Systems Approach, Vistasp M. Kar-bhari, Frieder Seible and Gilbert A. Hegemier, (Materi-als for the New Millennium, Ken P. Chong, ed., 1996), p1091-1100.

Phosphogypsum Slag Aggregate-Based Asphaltic Concrete Mixes, Paul T. Foxworthy, Raju S. Nadimpalli and Roger K. Seals, TE July/Aug. 96, p300-307.

Physical Tests and Analyses of Composite Steel-Concrete Beam-Columns, S. Ali Mirza, Ville Hyttinen and Esko Hyttinen, ST Nov. 96, p1317-1326.

Plumbing the Quality of a Sewer System, Thomas M. Galeziewski, Samuel A. Edmondson and Robert Webb,

Galeziewski, Samuel A. Edmondson and Robert Webb, CE Jan. 96, p55-57. Prediction of Concrete Cracking Under Coupled Shrinkage and Creep Conditions, Wei Yang, Kejin Wang and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p564-573. Pullout Simulation of Postinstalled Chemically Bonded Anchors, Michael McVay, Ronald A. Cook and Kailash Krishnamurthy, ST Sept. 96, p1016-1024. Rate Dependent Damage Model for Concrete in Dynamics, Jean-François Dubé, Gilles Pijaudier-Cabot and Christian La Borderie, EM Oct. 96, p939-947. Rate-Sensitive Micromechanical Damage Model for Brittle Solid, Dipankar Chandra and Theodor Krauthammer, EM May 96, p412-422. Rehab by Helicopter, Hans H. Torabi, Harold B. Tennat, A. John Burnell and Thomas C. Benson, Jr., CE Jan. 96, p44-47.

Representation of Concrete-Filled Steel Tube Cross-Section Strength, Jerome F. Hajjar and Brett C. Gourley, ST Nov. 96, p1327-1336. Representative Volumes of Composite Materials, Yunping Xi, EM Dec. 96, p1159-1167.

At, EM Dec. 90, p1139-1167.

Riprap and Concrete Armor to Prevent Pier Scour, Lisa M. Fotherby and James F. Ruff, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4178-4187.

Seismic Behavior of Older Steel Structures, Charles W.

Roeder, Brett Knechtel, Eric Thomas, Anne Vaneaton, Roberto T. Leon and F. Robert Preece, ST Apr. 96,

Sorption of Water in Mortars and Concrete, Nicos S. Mar-

sorption of water in Mortian and Conference, Prices S. Malertys and Chiara F. Ferraris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1129-1138.

Standard Specifications for Structural Concrete (ACI 301-96) by ACI Committee 301. AE Sept. 96, p120.

Strength and Ductility of Rectangular Concrete Columns: A Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Mar. 96, p267-274.

Strength Growth as Chemo-Plastic Hardening in Early Age Concrete, Franz-Josef Ulm and Olivier Coussy, EM Dec.

96, p1123-1132

Stress Due to Alkali-Silica Reactions in Mortars, C. F. Ferraris, E. J. Garboczi, F. L. Davis and J. R. Clifton, (Materials of Materials of Mater rials for the New Millennium, Ken P. Chong, ed., 1996), p1379-1387

Structural Design Forum, SC Aug. 96, p62-68. Structural Forum, SC Nov. 96, p95-98.

Study of Parameters Affecting Impulse Response Method, Soheil Nazarian and Srinivasa Reddy, TE July/Aug. 96, p308-315.

The Taller the Deeper (Available only in the Geo/ Environmental Special Issue), Clyde N. Baker, Jr., Elliott E. Drumright, P.E., Leonard M. Joseph and Tarique Azam, CE Nov. 96, p3A-6A.

Telling Florida's Water Story, David W. Landis and Blair K. Hanuschak, CE Feb. 96, p40-43. Time-Dependent Fluid Fracture Interaction in Concrete, Volker Slowik and Victor E. Saouma, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p865-868.

Validation of Rutting in the CAL/APT Program, J. Harvey, S. Shatnawi and S. Weissman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p701-710.

Wastewater System Design and Evaluation, Leonard Bell and Troy Norris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p949-957.

Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996, 0-7844-0164-0, 580pp.

Zero-Brittleness Size-Effect Method for One-Size Fracture Test of Concrete, Zdeněk P. Bažant and Zhengzhi Li, EM May 96, p458-468.

Concrete additives

Glascrete? - Disposing of Non-Recyclable Glass, Venkata S. Panchakarla and Millard W. Hall, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p509-518.

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Wisconsin Fast-Track Paving Experiences, Michael J. Hall, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p456-465.

Concrete aggregates

Effect of Aggregates on Fracture Process Zone of Concrete, Yunping Xi and Felix E. Amparano, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p1185-1188.

Potential of Waste Glass for Concrete Masonry Blocks, Christian Meyer, Stephen Baxter and Weihua Jin, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p666-673.

Rheology of Fresh Concrete, Leslie Struble and Richard Szecsy, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1121-1128.

Use of Lunar Type Soil for Concrete Construction, Jay N. Meegoda, Hsin-Yu Shan, Jing-Fu Huang, Jia-Wen Tseng and Su-Hwa Cheng. (Engineering, Construction, and and Su-Hwa Cheng, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p614-620.

Concrete blocks

Economic Comparison between Drywall and Conventional Partitions, Ronie Navon, David Carmel and Arnon Ben-

tur, AE Dec. 96, p129-134.

Potential of Waste Glass for Concrete Masonry Blocks, Christian Meyer, Stephen Baxter and Weihua Jin, (Mate-rials for the New Millennium, Ken P. Chong, ed., 1996), p666-673

Strengthening Concrete Block Walls Using Carbon Fiber, Dan Engebretson, Rajan Sen, Gray Mullins and Alfred Hartley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1592-1600.

Concrete construction

Concrete Canoe Finals Set for Wisconsin in June, CE May 96, p73.

Concrete Cures Runway Woes by Morning, CE May 96, p16,19.

Concrete Reinforcement with Recycled Fibers from Carpet Industrial Waste, Youjiang Wang, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p792-798.

Concrete Space Station Construction in Lunar Orbit, Don J. Wade, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p578-584.

Decatur Airport Off-Peak Construction Allows Airport to Continue Operations, Charles A. Hagloch, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka

Seneviratne, ed., 1996), p115-127.

Effect of Concrete Workmanship on Strength Reliability of R/C Beams, E. H. Khor, D. V. Rosowsky and M. G. Stewart, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p238-241.

The Effects of Construction Joint in Mass Concrete, Donald D. Liou, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p193-202.

Engineers Roll Out Concrete for New Dam, CE Oct. 96,

Field and Laboratory Measurements of Shoring Loads, Dryver R. Huston, Peter L. Fuhr and Jamie Willsey, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p704-710.

Forecaster Makes Concrete Prognostication, CE Apr. 96, p20,22,24

Heat of Hydration of Pure Cement Compounds with Steam, Wei-Ming Lin, T. D. Lin, Chao-Lung Hwang and Yaw-Nan Peng. (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p585-591.

Northern Climate Weathering Tests on Sealed Concrete Luh-Maan Chang, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p141-

Pavement Design for Rehabilitation and Minimizing Construction Effects on Aircraft Operations, R. Barry Pierce and Lino H. Neri, Jr., (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996). p128-139.

Seismic Analysis and Retrofit Design of the Anheuser-Busch Bevo Building in St. Louis, Missouri, Nathan C. Gould and Christopher I. Deneff, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p381-388.

cu. and Janishiu Prionaminadi, ed., 1979), 3581-356. Seismic Base Isolation Study for a Kentucky Building, John P. Miller and Nathan C. Gould, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p389-

System Risk for Multi-Storey Reinforced Concrete Build-ing Construction, Deepthi Epaarachchi, Mark G. Stewart and David V. Rosowsky, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-

Structurar Keitability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p.230-233.
 Use of Lunar Type Soil for Concrete Construction, Jay N. Meegoda, Hsin-Yu Shan, Jing-Fu Huang, Jia-Wen Tseng and Su-Hwa Cheng. (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996).

p614-620.

Concrete deterioration

Crack Growth in Uniaxially Aligned Fiber Reinforced Mortar, Mohsen A. Issa and A. B. Shafiq, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p624-627.

Observations of Internal Fracture in Mortar using X-Ray Microtomography, Eric N. Landis, Edwin N. Nagy, Denis T. Keane and Nhan Huynh, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p637-640.

A System for the Institution of Effective Repairs to Con-crete Structures, Chimay J. Anumba and John Bowron, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p160-166.

Concrete durability

Freeze-Thaw Durability of Concretes With and Without Class C Fly Ash, C. Ouyang and O. J. Lane, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Laboratory and Field Electrochemical Monitoring Tech-niques of Reinforcement Corrosion, C. Andrade and C. Alonso, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1501.

Embedded Fiber Optic Displacement Sensor for Concrete Elements, Xi Chen, Farhad Ansari and Hong Ding, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p359-365.

Estimating Transverse Strength of Masonry Infills, Richard Angel and Joseph Uzarski, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p101-111.

Masonry Designers' Guide - A Comprehensive Design Tool, John H. Matthys, (Worldwide Advances in Struc-tural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p322-333.

Potential of Waste Glass for Concrete Masonry Blocks, Christian Meyer, Stephen Baxter and Weihua Jin, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p666-673.

Update of Building Code Requirements for Masonry, 1992 to 1995 Editions, J. Gregg Borchelt, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p334-344.

Concrete pavements

Airfield Pavement Reconstruction at DFW International Airport, Dwain K. Brown and Darryl Boyd, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p140-150.

Analysis of Concrete Pavements by Rectangular Thick-Plate Model, T. F. Fwa, X. P. Shi and S. A. Tan, TE Mar/Apr. 96, p146-154.

Application of FWD in Analyzing Finite Width Effect of Pavements, Dar-Hao Chen, Michael Murphy and Mohan Yeggoni, Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1018-1021.

Concrete Pavements in Tunnels, J. S. Berg and P. M. Noss, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p911-922.

Design and Construction of a Bonded Fiber Concrete Overlay of CRCP, Hadi H. Shirazi, Masood Rasoulian and Bill King, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1647-1658.

Detection of Cracks in Concrete Using the Impact Responses, H. L. (Roger) Chen and Lianfeng Pei, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p620-623.

Dynamic Analysis of Concrete Pavements Subjected to Moving Loads, Chih-Ping Wu and Pao-Anne Shen, TE

Sept./Oct. 96, p367-373.

Effect of Maxwell Binder on Two-Phase Materials, Han Zhu, Jeff W. Rish, III and William C. Dass, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p576-579.

Evaluation of Microcrack Damage Growth and Healing of Asphalt Concrete Pavements Using Stress Wave Method, Yongon Kim and Y. Richard Kim, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p612-615.

Extending the Limits—San Jose Runway, Loy Warren, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p151-157.

Fast Track Basics, James D. Grove and Kevin B. Jones, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p466-474.

Fast-Track Concrete Paving—Overview of Key Components, Lawrence W. Cole and Gerald F. Voigt, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Fatigue Model of Asphalt Concrete, Jian Zhou and Robert Y. Liang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p563-567.

Finite-Element Analysis of Temperature Effects on Plain-Jointed Concrete Pavements, Eyad Masad, Ramzi Taha and Balasingam Muhunthan, TE Sept./Oct. 96, p388-398.

Low Temperature Cracking and Rutting in Asphalt Con-crete Pavements. Ted S. Vinson, R. Gary Hicks and Vin-cent C. Janoo, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p203-248.

Mechanistic Design of Asphalt Concrete Pavements in Cold Regions, Ted S. Vinson and James W. Rooney, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed.,

1996), p151-202. Moisture-Induced Pressures in Concrete Airfield Pavements, C. A. Kodres, MT Feb. 96, p41-50.

No-Fines Concrete Pavements, Nader Ghafoori and Shivaji Dutta, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1637-1646.

Pavement Design at Louisville: Optimizing Local Practice, Darren L. Piedmonte, (Meeting the Challenge: Rebuild-ing Inner City Airports, Prianka Seneviratne, ed., 1996), p187-198.

Rehabilitation of Taxiway "NB" at IAH with Concrete Overlay, Adil Godiwalla, Keith E. Chapman, Charles Juhasz, William Stamper and Wayne Overman, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p170-186.

State-of-the-Art of Roller Compacted Concrete Pavement, Kwabena Ofori-Awuah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1439-1448.

Thermo-Micromechanical Damage Modeling of Airfield Concrete Pavement, J. W. Ju and Y. Zhang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p727-730.

Mechanics, Y. K. Lin and T. C. Su, 1990), p721-739. Three-Dimensional Finite-Element Simulation of FWD Loading on Pavement Systems, W. Uddin, R. M. Hackett, P. Noppakumwijai and Z. Pan, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p284-294.

Comania Constitutive Model Accounting for Viscoelasticity and Damage Evolution under Cyclic Loading, Hyun-Jong Lee and Y. Richard Kim, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p693-696.

Use of Pasternak Foundation Model in Concrete Pavement Analysis, T. F. Fwa, X. P. Shi and S. A. Tan, TE July/Aug, 96, p323-328. A Uniaxial Constitutive Model Accounting for Viscoelas-

Use of Recycled Aggregates for Pavement, S. Abdol Chini, Timothy J. Sergenian and Jamshid M. Armaghani, (Ma-terials for the New Millennium, Ken P. Chong, ed., 1996), p154-162.

Using NDT to Fasttrack Pavements, James K. Cable, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p475-481.

Wisconsin Fast-Track Paving Experiences, Michael J. Hall, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p456-465.

Concrete piles

Pile Wall Cuts Off Seepage (Available only in Geo/ Environmental Special Issue), Donald A. Bruce and Giovanni Dugnani, CE July 96, p8A-11A.

Concrete pipes
Acoustic Monitoring to Enhance Pipeline Safety at Crossings, Will Worthington and William J. DiMarco, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p1-13

Canal Road Water Treatment Plant Intake Tunnels, Joel Moskowitz, Robert T. Wisniewski, II, Vincent Tirolo and Peter Evensen, (Pipeline Crossings 1996, Lawrence

F. Catalano, ed., 1996), p322-331.

Retrofit of Black Butte Hydroelectric Project Penstock,
George A. Inverso, John A. Schwartz, Stephen M. Hart, Erik Bodholt and Billy Ferguson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p469-476.

San Diego's Historic Dulzura Conduit: New Solutions, Hans H. Torabi and Harold B. Tennant, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p340-347.

Water Pipeline Crossings of the Pitt and Fraser Rivers, Tim R. Jervis and Jim V. Young, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p202-213.

Concrete properties

Effect of Maxwell Binder on Two-Phase Materials, Han

Zhu, Jeff W. Rish, III and William C. Dass, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p576-579.

The Effect of the Interfacial Transition Zone on Concrete Properties: The Dilute Limit, E. J. Garboczi and D. P. Bentz, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1228-1237.

Effects of an Extended Set-Control Admixture on the Properties of Fresh and Hardened Concrete, Steven A. Ragan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1617-1626.

Elastic Moduli of a Bond Model for Reinforced Concrete, James V. Cox, (Engineering Mechanics, Y. K. Lin and

T. C. Su, 1996), p84-87.
Fatigue Model of Asphalt Concrete, Jian Zhou and Robert Y. Liang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p563-567.

St., 1990, p.030-507.
A Fracture Mechanics Model for Shrinkage Cracking Ring, C. Ouyang, W. Yang and S. P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p861-864.
Freeze-Thaw Durability of Concrete Cured Below 0°C Using Antifreeze Admixtures, Michael R. Mason and

Herbert P. Schroeder, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996). p185-195

High-Performance Pipe Products Fabricated with Reactive Powder Concrete, Edward F. O'Neil and William M. Dowd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1320-1329.

Improving the Ductility of High Performance Concrete Through Mortar-Aggregate Interfaces, Oral Büyüköztürk and Brian Hearing, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1337-1346.

Inhomogeneous Interfacial Transition Zone Model for the Elastic Moduli of Concrete, Melanie P. Lutz, Paulo J. M. Monteiro and Robert W. Zimmerman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1246-1255.

Measuring Dielectric Properties of Concrete over Low RF, Rami H. Haddad and Imad L. Al-Qadi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1139-1149.

Mechanical Properties Characterization of Asphalt Con-crete Barrier for Radioactive Nuclear Waste Vaults, Bernard A. Vallerga, Akhtarhusein A. Tayebali, Shmuel L. Weissman and Carl L. Monismith, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1288-1297.

Use of Fibers to Improve Cracking Characteristics of Concrete, P. Balaguru, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p183-192.

Concrete slabs

Behavior of RC Bridge Decks with Flexible Girders, L. Cao, J. H. Allen, P. B. Shing and D. Woodham, ST Jan. 96, p11-19.

Concrete Beams and Slabs Retrofitted with CFRP Laminates, M. Arockiasamy, Ahmed Amer and M. Shahawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Crossing Fault Lines with Large Diameter Water Pipelines in the Houston Area, John M. Olden, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p155-162.

Design Provisions for Stair Slabs in the Bangladesh Build-ing Code, I. Ahmed, A. Muqtadir and S. Ahmad, ST Mar. 96, p262-266.

Editor's Note, David Darwin, ST Sept. 96, p987-988.

High Performance Highway Bridge Substructures, Robert W. Barnes and John E. Breen, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p176-187.

HMA Overlays to Rehabilitate PCC Pavements, Dale S. Decker and Matthew W. Witczak, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1418-1428.

Moisture Penetration of Concrete Floor Slabs, Basement Walls, and Flat Slab Ceilings, Robert W. Day, SC Nov. 96, p104-107.

Reliability of Post-Tensioned Concrete Slab Bridges, Sami W. Tabsh. (*Probabilistic Mechanics & Structural Relia-*bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p712-715.

Retail-Grocery-Floor Failure, Raymond S. Rollings, CF May 95, p137-145.

Safety Evaluation of Current Concrete Slab Formwork Practices, Saeed Karshenas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p656-659.

Static Behavior of Noncomposite Concrete Bridge Decks under Concentrated Loads, Michael F. Petrou, Philip C. Perdikaris and Mingzhu Duan, BE Nov. 96, p143-154.

Strengthening Steel Composite Beams with CFRP Lam-inates, Rajan Sen, Larry Liby, Gray Mullins and Ken Spillett, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1601-1607.

Concrete structures

Alternative Strategies for Temporary Support during Struc-tural Repair of Reinforced-Concrete Beams, John Cairns, ST Mar. 96, p238-246.

Analysis of Crack Propagation in Concrete Structures by Markov Chain Model and R-curve Method, Yunping Xi and Zdeněk P. Bažant, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p358-361.

Applications of High-Performance Concrete in Columns and Piers, S. K. Ghosh, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p385-395.

Building Code Requirements for Structural Concrete (ACI 318-95) and Commentary (ACI 318R-95) by ACI Committee 318, AE Sept. 96, p120.

Calculations Substitute for Actual Knowledge, Robert E. Bigham, CE Jan. 96, p29.

Composite Repair/Upgrade of Concrete Structures, Orange S. Marshall, Jr. and John P. Busel, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p932-938.

Connection of a Steel Cap Girder to a Concrete Pier, Joseph M. Ales, Jr. and Joseph A. Yura, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p475-482.

Constitutive and Structural Behavior of Siliceous High-Strength Concretes After a Thermal Cycle at High Tem-perature, Roberto Felicetti and Pietro G. Gambarova, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p583-592.

Damage Assessment of Reinforced Concrete Structures through Acoustic Emission Monitoring, Christian C. Steputat and Sashi K. Kunnath, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p837-844. Degradation of Reinforced Concrete Structures Under Ag-gressive Conditions, Michael P. Enright, Dan M. Frangopol and George Hearn, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p978-987.

Design Recommendations for Bond of GFRP Rebars to Concrete, M. R. Ehsani, H. Saadatmanesh and S. Tao,

ST Mar. 96, p247-254.

Development of a CO2-Solidification Method for Recycling Concrete Wastes, Toshiyuki Hashida, Satoshi Teramura, J. C. Ha and Hideaki Takahashi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p674-683.

Editor's Note, David Darwin, ST Jan. 96, pl. Editor's Note, David Darwin, ST Sept. 96, p987-988.

Effect of Sheet Bonding Condition on Concrete Members Having Externally Bonded Carbon Fiber Sheet, Hiroyuki Yoshizawa, Toru Myojo, Masayoshi Okoshi, Mutuki Mizukoshi and Howard S. Kliger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1608-1616.
Effects of Load Path and Load Correlation on the Reliabili-

ty of Concrete Columns, Dan M. Frangopol, Yutaka Ide and Ichiro Iwaki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed. 1996), p206-209.

Embedded Crack Approach to Regularize Finite Element Solutions of Concrete Structures, E. Pramono, J. C. Mould, Jr. and H. S. Levine, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p554-558.

Evaluating Coatings for Concrete Wastewater Facilities, C. Vipulanandan, H. Ponnekanti, Dara N. Umrigar and A. D. Kidder, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p851-862.

Evaluation of Bridge Strengthening Measures Using Forced Vibration Tests, Kosal Krishnan, Frieder Seible and Gerald Pardoen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p845-852.

Evaluation of the Performance of Sprayed Zinc Anodes for Protecting Reinforcing Bars, John S. Tinnea and R. P. Brown, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1531-1539.

Field Performance of FRP Composite Prestressing Cables, Richard G. Lampo, David E. Hoy and Robert J. Odello, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p400-408.

Flexural Characteristics of Two-Dimensional Advanced Composite Grid Reinforced Concrete, David W. Jensen and Craig W. Smart, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p398-401.

FRP Applications in Geotechnical Engineering, J. A. R. Ortigao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p535-544.

Historic Concrete Structures Assessment and Repair, Jerome P. O'Connor, James M. Cutts and Gregory R. Yates, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1055-1062.

Is No-Tension Design of Concrete or Rock Structures Always Safe?-Fracture Analysis, Zdeněk P. Bažant, ST

Jan. 96, p2-10.

Long-Term Leaching of Metals from Concrete Products, Matthew T. Webster and Raymond C. Loehr, EE Aug.

Manufacturers Meet the "Tee" Aim, CE Dec. 96, p89. Masonry Designers' Guide - A Comprehensive Design Tool, John H. Matthys, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p322-333.

Maximum Shear Strengths of Reinforced Concrete Structures, Li-Xin "Bob" Zhang and Thomas T. C. Hsu, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996). p408-419.

Micromechanics Based Design of Optical Fiber Crack Sensor, Christopher K. Y. Leung and Neill Elvin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p236-239.

NDE of Distributed Cracking in Concrete, Scott F. Selleck, Eric N. Landis, Michael L. Peterson and Surendra P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p604-607.

New Sacrificial Anode for Cathodic Protection of Reinforced Concrete Structures, Miki Funahashi and Steven F. Daily, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1256-1265.

Non-Accelerated Creep-Rupture of Fiber-Reinforced-Plastics in a Concrete Environment, Andrew Hundley

and Charles Dolan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p519-526. Notes on ACI 318-95 with Design Applications edited by S.J. Ghosh, David A. Fanella, and Basile G. Rabbat, AE

Sept. 96, p120.

Performance Evaluation of Dual-Level Versus Current Design Using 1994 Northridge Earthquake Records, K. J. Elwood and Y. K. Wen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p796-799

Prefabricated Concrete Walls. Influence of Prestressload on Vertical Joints, J. P. Straman, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed.,

1996), p147-153.

Quake Proofing a Palace, John Casey, CE Aug. 96, p32-35. Reliability Assessment Methodology for Sliding Stability of Gravity Structures, Bilal M. Ayyub and Ru-Jen Chao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p858-861.

Reliability Framework for Managing Risk of Aging Struc-tures, Bruce Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p590-597.

Salt-Saltrated Concrete Strength and Permeability, T. W. Pfeifle, F. D. Hansen and M. K. Knowles, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p173-182.

Sectional Analysis for Nonlinear System Identification of Concrete Structures, Jie Wang, Manoj B. Chopra and Sashi K. Kunnath, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p339-342.

Seismic Rehabilitation of a Non-Ductile Concrete Frame Building Using Shearwalls, Paul A. Murray and James H. Parker, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p373-380.

Single-Criteria Genetic Optimization for Design and Detailing of Concrete Structures, W. M. Kim Roddis, Warren K. Lucas and Vorathum Chunnanond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-

sky, ed., 1996), p91-96.

Stochastic Models for Chloride-Initiated Corrosion in Reinforced Concrete, Svend Engelund and John D. Sørensen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p664-667

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94,

p2437-2450.

A System for the Institution of Effective Repairs to Con-crete Structures, Chimay J. Anumba and John Bowron, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p160-166.

Thermal-Sprayed Zinc Anodes for Cathodic Protection of Reinforced Concrete Structures, B. S. Covino, Jr., S. D. Cramer, G. R. Holcomb, S. J. Bullard, G. E. McGill and C. B. Cryer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1512-1521.

Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996, 0-7844

0164-0, 580pp.

Concrete structures failure

Premature Deterioration of Concrete Structures—Case Study, Ishtiaque Ahmed and M. Zakaria Ahmed, CF Nov. 96, p164-170.

Concrete technology

Electrochemical Treatment of Concrete: A New Approach to Extend the Service Life of Chloride Contaminated, Carbonated, or Alkali Silica Reactive Concrete Structures, David W. Whitmore and Keith Stewart, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1504-1511. Evaluating Innovative Concrete Technologies through the HITEC Process: the JMI Channel Bridge, Kathleen H. Almand, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p161-166.

Calculations Substitute for Actual Knowledge, Robert E.

Bigham, CE Jan. 96, p29.

Fundamental Modeling of Chloride Diffusion in Concrete, Pankaj. Arora, B. N. Popov and R. E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p203-212.

Multi-Scale Models of the Diffusivity of Concrete, Dale P.
Bentz and Edward J. Garboczi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p574-582.

Nondestructive Evaluation of Elastic Constants and Crack Depth in Concrete Using Transient Elastic Woses, T.-T. Wu and J.-S. Fang, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p861-868.

Northern Climate Weathering Tests on Sealed Concrete, Luh-Maan Chang, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p141-

Using NDT to Fasttrack Pavements, James K. Cable, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p475-481.

Concrete, lightweight

Economical Long-Span Spliced Bridges, Leo Spaans, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p147-152.

Concrete, post-tensioned Dynamic Characteristics of Post-Tensioned Girders with Web Openings, Nabil F. Grace and Brian Ross, ST June

Proposed Prestressed Masonry Design Provisions, Matthew J. Scolforo, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p355-364.

Reliability of Post-Tensioned Concrete Slab Bridges, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p712-715.

Swimming in Style, Gary Steficek, P.E., CE Aug. 96, p36-

Concrete, precast

Architect Chooses Slenderwall for Gothic Church, CE July 96, p84.

Architect Gives Precast Care to Nursing Center, CE Sept. 96, p96.

Behavior of Fresh Mortar in a Vacuum and Microstructure of Mortar Hardened in a Vacuum, L. J. Powers-Couche and T. D. Lin, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p608-613.

Bond and Slip of Plain Rebars in Concrete, Y. L. Mo and J. Chan, MT Nov. 96, p208-211.

Concrete Space Station Construction in Lunar Orbit, Don J. Wade, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p578-584.

Ductile Masonry Construction in California, Hanns U. Bau-mann, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p93-100.

Evaluation Findings: the Segmental Concrete Channel Bridge System, CERF Report: HITEC 96-01, Civil Engineering Research Foundation, 1996, 0-7844-0157-8, 33pp.

Fault Crossing Design and Seismic Considerations for the South Bay Ocean Outfall, Jon Y. Kaneshiro, Gregory E. Korbin and James D. Hart, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p477-486.

Finite Element Analysis of Precast Concrete Box Culverts, K. M. Tarhini, G. R. Frederick and M. Mabsout, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p677-682. High Performance Highway Bridge Substructures, Robert W. Barnes and John E. Breen, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p176-187.

Hybrid Moment Resisting Precast Beam-Column Connec-tions, John Stanton, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p266-277.

Lunar Concrete Made with the Dry-Mix/Steam-Injection Method, T. D. Lin, Liang Tseng and Sam Chou, (Engi-neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p592-599.

Performance of Precast Parking Garages in the Northridge Earthquake: Lessons Learned, Sharon L. Wood, John F. Stanton and Neil M. Hawkins, (Building an International Community of Structural Engineers, S. K. Gho and Jamshid Mohammadi, ed., 1996), p1221-1227

Precast Concrete Low-Head Pressure Pipe Significant in Historic Irrigation Canal Rehab, John J. Meyer and Steven K. Wagner, *Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p265-274.

San Angelo High Performance Concrete Bridge in Texas, Mary Lou Ralls, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p164-175.

Seismic Behavior of Precast Parking Structure Diaphragms, R. B. Fleischman, R. Sause, A. B. Rhodes and S. Pessiki, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1139-1146.

Concrete, prestressed

Analysis and Design of the Ponce Coliseum in 1969 and 1996, Alex C. Scordelis, Pere Roca and Antonio R. Mari, (Worldwide Advances in Structural Concrete and Ma-A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

Analytical and Measured Strains in Sunshine Skyway Bridge. II, Mohsen A. Shahawy and M. Arockiasamy,

BE May 96, p87-97.

Behavior of Two Long-Span High Strength Concrete Pre-stressed Bridge Girders, Theresa M. Ahlborn, Carol K. Shield and Catherine W. French, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p141-152.

Canal Road Water Treatment Plant Intake Tunnels, Joel Moskowitz, Robert T. Wisniewski, II, Vincent Tirolo and Peter Evensen, (Pipeline Crossings 1996, Lawrence

F. Catalano, ed., 1996), p322-331.

Comparative Analysis of Bridge Superstructure Deteriora-tion, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136.

Design of Prestressed Concrete Transmission Poles: Opti-mization Approach, Fatma Y. Kocer and Jasbir S. Arora, ST July 96, p804-814.

Dynamic Analysis of Prestressed Concrete Beams with Openings, Hany Abdalla and John B. Kennedy, ST July 95, p1058-1068.

Dynamic Fatigue of High-Rise Natural Draught Cooling Towers, Wilfried B. Krätzig, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p298-309.

FRP Applications in Geotechnical Engineering, J. A. R. Ortigao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p535-544.

High Performance Concrete Applications in Bridge Struc-tures in Virginia, Celik Ozyildirim, Jose Gomez and M. Elnahal, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p153-163.

High Performance Concrete for Giles Road Bridge, Amin Einea, Xiaoming Huo, Mohsen Saleh and Maher K. Tadros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p133-140.

High-Performance Concrete in Bridge Structures in Virgin-Celik Ozyildirim and Jose Gomez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1357-1366. A Hybrid System for Partial Prestressed Concrete Beam Design, Nicolaas Stuurstraat, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p887-891.

Japan Shows the Way with Aramids, CE Mar. 96, p14-15. Japan Shows the Way with Aramids, CE Mar. 96, p14-15. Long-Term Deflection Control in Cantilever Prestressed Concrete Bridges. I: Control Method and Algorithm, Hui-Sheng Chiu, Jenn-Chuan Chern and Kuo-Chun Chang, EM June 96, p489-494. Long-Term Deflection Control in Cantilever Prestressed Concrete Bridges. II: Experimental Verification, Hui-Sheng Chiu, Jenn-Chuan Chern and Kuo-Chun Chang, EM June 96, p495-501.

EM June 96, p495-501.

New Sacrificial Anode for Cathodic Protection of Reinforced Concrete Structures, Miki Funahashi and Steven F. Daily, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1256-1265.

Non Linear Computation of Fiber Reinforced Micro-

Concrete Structures, Mouloud Behloul, Régis Adeline and Gérard Bernier, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p518-529.

A Non-Destructive Method for Prestress Evaluation, Atorod Azizinamini, Armin B. Mehrabi, Bruce Keeler and John Rohde, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p900-907.

Nonstructural Evaluation of Competing Bridge Materials, Robert L. Smith and Robert J. Bush, MT May 96, p88-

Optimal Design of Prestressed Concrete Transmission Poles, Fatma Y. Kocer and Jasbir S. Arora, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p111-122.

Precasting Long Spans for the Northumberland Strait Crossing, Gerard Sauvageot and Joe Showers, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p141-146.

Prestress Force Effect on Vibration Frequency of Concrete Bridges, M. Saiidi, B. Douglas and S. Feng, ST July 94,

p2233-2241.

Proposed Prestressed Masonry Design Provisions, Matthew J. Scolforo, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p355-364.

Reactive Powder Concrete (RPC), A New Material for Prestressed Concrete Bridge Girders, Scott K. Gilliland, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p125-132.

Recent Innovation for Concrete Highway Bridges, S. H. Rizkalla and A. A. Mufti, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1063-1071.

Redundancy of Prestressed Concrete I-Beam Bridges, Michel Ghosn and Fred Moses, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p688-695. Reliability of Post-Tensioned Concrete Slab Bridges, Sami

W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p712-715.

Sectional Depth of Prestressed Concrete Beams with Excess Capacity, Y. H. Chai, ST July 96, p788-793.

Stress Limits in Prestressed Concrete Bridge Girders, Has-

san H., El-Hor and Andrzej S. Nowak, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p460-

Stretching Span Capability of Prestressed Concrete Bridges under AASHTO LRFD, Yohchia Chen and Alex Aswad,

BE Aug. 96, p112-120.

Thermal Cracking in a Cantilever Bridge made of HSC, C. van der Veen, E. A. B. Koenders and N. Kaptijn, (Computing in Civil Engineering, Torge Vanegas, ed. and Paul Chinowsky, ed., 1996), p892-898. Thin-Walled Prestressed Concrete Members under Com-

Thin-Walled Prestressed Concrete Members under Combined Loading, B. M. Luccioni, J. C. Reimundín and R. Danesi, ST Mar. 96, p291-297.
Ultimate Analysis of Monolithic and Segmental Externally Prestressed Concrete Bridges, Gonzalo Ramos and Angel C. Aparicio, BE Feb. 96, p10-17.

Concrete, reinforced

Alternative Strategies for Temporary Support during Struc-tural Repair of Reinforced-Concrete Beams, John Cairns,

ST Mar. 96, p238-246.

Analysis and Design of the Ponce Coliseum in 1969 and 1996, Alex C. Scordelis, Pere Roca and Antonio R. Mari, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

Analysis of Bond Stress Distributions in Pullout Specimens, Homayoun H. Abrishami and Denis Mitchell, ST

Mar. 96, p255-261.

Analysis of Shoring Loads Using Field Data, T. W. Phil-brick, Jr. and D. V. Rosowsky, (Building an Internation-al Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p711-718.

Analysis of the Nonlinear Hysteretic Response of an RC Building, Sarwidi and Apostolos S. Papageorgiou, Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1099-1106.

Analysis Requirements for Performance-Based Design of Analysis Requirements for Performance-sased Design of Beam-Column Joints, John F. Bonacci, (Worldwide Ad-vances in Structural Concrete and Masonry, A. Eschultz, ed. and S. L. McCabe, ed., 1996), p257-265.

Analytical Model for Shear Critical Reinforced-Concrete

Members, W. Chung and S. H. Ahmad, ST June 95, p1023-1029.

Analytical Modeling of Composite Reinforced Concrete-Steel Systems, Joseph M. Bracci, Sashi K. Kunnath and Ali O. Atahan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p379-380.

Artificial Intelligence (AI) Supported Process Planning System for Construction, Md. Salim, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p510-518.

Average Stress-Strain Relationships of Rebars in RC Panels, Abdeldjelil Belarbi and Amlan K. Sengupta, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p743-746

Behavior of Beam-Column Connections Under Axial Col-umn Tension, El Mostafa M. Higazy, Amr S. Elnashai and Mihran S. Agbabian, ST May 96, p501-511.

Behavior of Cementitious Composites with Randomly Dis-persed Microfibers, D. A. Lange, C. Ouyang and S. P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p281-287.

Behavior of Fiber Reinforced Polymer Concrete, C. Vipulanandan and S. K. Mantrala, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1160-1169.

Behavior of Pressure Tunnels and Guidelines for Liner Design, Gabriel Fernández, GT Oct. 94, p1768-1791.

Behavior of Reinforced Concrete Buildings: Deformations & Deformation Compatibility, John W. Wallace, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p245-256.

Biaxial Low-Cycle Fatigue Behavior of Steel Fiber-Reinforced Concrete, Li Fang and Christian Meyer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p436-445.

Building Code Requirements for Structural Concrete (ACI 318-95) and Commentary (ACI 318R-95) by ACI Committee 318, AE Sept. 96, p120.

Cellulose Fiber Reinforced Concrete, Parviz Soroushian, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p809-818.

Classification Methodology for Coupled Shear Walls, O. Chaallal, D. Gauthier and P. Malenfant, ST Dec. 96, p1453-1458.

Compression Bending of Scale-Model Reinforced-Concrete Walls, James K. Gran and Paul E. Senseny, EM July 96, p660-668.

Compression Failure in Reinforced Concrete Columns and Size Effect, Zdeněk P. Bažant and Yuyin Xiang, (World-wide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p443-451.

Concrete and Sand Confined with Composite Tubes, Srinivasa L. Iyer, A. Kortikere and A. Khubchnadani, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1308-1319.

Concrete Penetration by Eroding Projectiles: Experiments and Analysis, Vladimir M. Gold, George C. Vradis and James C. Pearson, EM Feb. 96, p145-152.

Concrete Reinforcement with Recycled Fibers from Carpet Industrial Waste, Youjiang Wang, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p792-798.

Concrete Shear Failure in Reinforced-Concrete Elements, Prodromos D. Zararis, ST Sept. 96, p1006-1015.

Constraint-Based Reasoning for Optimal Concrete Design and Detailing, Warren K. Lucas and W. M. Kim Roddis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p154-165.

Construction Applications of Polyolefin Fiber Reinforced Concrete, D. Strand, C. N. MacDonald, V. Ramakrish-nan and V. N. Rajpathak, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p103-112

Corrosion-Resistant Steel Reinforcing Bars, David Darwin, Carl E. Locke, Jr., Matthew R. Senecal, Shawn M. Schwensen and Jeffrey L. Smith, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p482-491.

Crack Growth in Uniaxially Aligned Fiber Reinforced Mortar, Mohsen A. Issa and A. B. Shafiq, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p624-627.

Crossing Fault Lines with Large Diameter Water Pipelines in the Houston Area, John M. Olden, (Pipeline Crossings) 1996, Lawrence F. Catalano, ed., 1996), p155-162. Damage Assessment of Reinforced Concrete Structures

through Acoustic Emission Monitoring, Christian C. Steputat and Sashi K. Kunnath, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p837-844.

Data and Data Interpretation in Bridge Management Sys-tems, George Hearn, Dan M. Frangopol, Tianna Szanyi and Steven Marshall, (Building an International Com nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p245-252. Deflection Control of Two-Way Reinforced Concrete Slabs, Shyh-Jiann Hwang and Kuan-Yung Chang, ST

Feb. 96, p160-168.

Deformation, Alignment, and Vibration in Large Turbine-Generator Set, W. F. Teskey, J. W. Lovse and N. N. Al-Hanbali, SU May 96, p65-79.

Degradation of Reinforced Concrete Structures Under Aggressive Conditions, Michael P. Enright, Dan M. Frango pol and George Hearn, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p978-987.

Design and Construction of a Bonded Fiber Concrete Overlay of CRCP, Hadi H. Shirazi, Masood Rasoulian at Bill King, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1647-1658.

Design of Round Reinforced-Concrete Columns, A. Tayem and A. Najmi, ST Sept. 96, p1062-1071.

Design of Seismic Resistant Concrete Columns for Confinement, Murat Saatcioglu, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996, p233-244.

Dynamic Fatigue of High-Rise Natural Draught Cooling Towers, Wilfried B. Krätzig, (Worldwide Advances in

Structural Concrete and Masonry, A. E. Schultz, ed. and

S. L. McCabe, ed., 1996), p298-309.

Dynamic Response of Box Tubes to Combined Shear and Torsion, Y. L. Mo and R. Y. Yang, ST Jan. 96, p47-54.

Economic Preliminary Design of Bridges with Prestressed I-Girders, Sami M. Fereig, BE Feb. 96, p18-25.

Effect of Concrete Workmanship on Strength Reliability of R/C Beams, E. H. Khor, D. V. Rosowsky and M. G. Stewart, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p238-241. Effect of Reinforcement Corrosion on Flexural Behavior of

Effect of Rennorcement Corrosion on Flexural Behavior of Concrete Slabs, Abdullah A. Almusallam, Ahmad S. Al-Gahtani, Abdur Rauf Aziz, Fahd H. Dakhil and Rasheeduzzafar, MT Aug. 96, p123-127.

Effect of Sheet Bonding Condition on Concrete Members Having Externally Bonded Carbon Fiber Sheet, Hiroyuki Voshizawa, Toru Muyo, Massayahi Okrabi Mustik

Having External Bondez Carbon Froet Sneet, Firloyard Yoshizawa, Toru Myojo, Masayoshi Okoshi, Mutuki Mizukoshi and Howard S. Kliger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1608-1616. Effective Stiffness Model for Reinforced Concrete Slabs,

Maria Anna Polak, ST Sept. 96, p1025-1030.

Effectiveness Factor of Concrete in Continuous Deep Beams, A. F. Ashour and C. T. Morley, ST Feb. 96,

Effects of Load Path and Load Correlation on the Reliability of Concrete Columns, Dan M. Frangopol, Yutaka Ide and Ichiro Iwaki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p206-209.

Elastic Moduli of a Bond Model for Reinforced Concrete, James V. Cox, (Engineering Mechanics, Y. K. Lin and

T. C. Su, 1996), p84-87.

Electrical Tagging of Fiber Reinforced Cement Compos ites, Jong Seh Lee and Gordon Batson, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p887-896.

Evaluation of Bond Characteristics of Steel and Glass-Fiber Reinforcing Bars, James R. Lundy and Damian I. Ka-chlakev, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p638-647.

Evaluation of Bond Strength with Polypropylene Fiber Re-inforced Concrete, R. C. Zellers, V. Ramakrishnan, V. N. Rajpathak and S. Yu, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p123-132.

Evaluation of Cracking of the Miami Marine Stadium Hy-perbolic Paraboloid Roof Structure, Michael L. Brainerd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1659-1668. Evaluation of the Performance of Sprayed Zinc Anodes for

Protecting Reinforcing Bars, John S. Tinnea and R. P. Brown, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1531-1539.

Experimental Evaluation of Masonry-Infilled RC Frames, Armin B. Mehrabi, P. Benson Shing, Michael P. Schuller and James L. Noland, ST Mar. 96, p228-237.

Experimental Investigation of Cumulative Scismic Damage in Concrete Bridge Piers, Sashi K. Kunnath, Ashraf El-Bahy, William C. Stone and Andrew W. Taylor, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p381-382.

Experimental Study of Reinforced Concrete Beams Using Acoustic Surface Waveguides, Yidong He and Roger H. L. Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Moham-

madi, ed., 1996), p869-875.

Experiments for Ultimate Strength of Reinforced Concrete Cylindrical Panels under Lateral Loading and Comparison with FEM Analysis, Makoto Takayama, Kazuhiko Mashita, Shiro Kato, Yasuhiko Hangai and Haruo Kunieda, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p310-321.

Externally Bonded Carbon Fiber for Strengthening Con-crete, Jay Thomas, Thomas Kline, Peter Emmons and Howard Kliger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p924-931.

Field and Laboratory Measurements of Shoring Loads, Dryver R. Huston, Peter L. Fuhr and Jamie Willsey, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p704-710.

Fire Resistance of Circular Steel Columns Filled with Fiber-Reinforced Concrete, V. K. R. Kodur and T. T.

Lie, ST July 96, p776-782.

Fire Resistance of Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie and V. K. R. Kodur, ST

Jan. 96, p30-36.

Flexural Characteristics of Two-Dimensional Advanced Composite Grid Reinforced Concrete, David W. Jensen and Craig W. Smart, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p398-401.

Flexure for Polymer Concrete Using PET Waste, K. S. Re-beiz and D. W. Fowler, P.E., (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1037-1044.

Forced Vibration of Full-Scale Wall-Backfill System, Ahmed-W. Elgamal, Sreenivas Alampalli and Paul Van Laak, GT Oct. 96, p849-858.

A Fracture Mechanics Based Design Method for SFRC Tunnel Linings, Pruettha Nanakorn and Hideyuki Horii, (Materials for the New Millennium, Ken P. Chong, ed., 1996), 9819-828.

FRP Applications in Geotechnical Engineering, J. A. R. Ortigao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p535-544.

Girder Moments in Continuous Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE Feb. 96, p37-45.

Griffith Energy Balance Model for Crack-Growth Prediction in Reinforced Concrete, Kamel Ben Amara, EM July 96, p683-689.

Grouted Anchors for Carbon FRP Tendon, Antonio Nanni and Jay Thomas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p527-534.

Hysteretic MDOF Model to Quantify Damage for RC Shear Frames Subject to Earthquakes, H. Uğur Köylüoğlu, Søren R. K. Nielsen and Ahmet Ş. Çakmak, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Implications Derived from Recent Research in Mexico on Confined Masonry Structures, Sergio M. Aleocer, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

Improving Development Characteristics of Reinforcing Bars, CERF Report #94-6002, Civil Engineering Re-search Foundation, 1994, 0-7844-0062-8, 45pp.

Improving the Performance of Epoxy-Coated Rebar, Robert D. Lampton, Jr. and Dieter Schemberger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1209-

Incorporating Damage Control in Structural Design, Dan M. Frangopol, Marek Klisinski and Kai-Yung Lin, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p598-605.

Influence of Coatings on Bar-Concrete Bond, Protasio F. Castro, MT Nov. 96, p212-214.

Influence of the Yield Strength of Steel Fibres on the Toughness of Fibre Reinforced High Strength Concrete, Lucie Vandewalle, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p496-505.

Laboratory and Field Electrochemical Monitoring Techaboratory and Field Electrochemical Monitoring Techniques of Reinforcement Corrosion, C. Andrade and C. Alonso, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1501.

Laminate Bonding for Concrete Repair and Retrofit, D. V. Reddy, G. B. Gervois and L. A. Carlsson, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1579-1591

Lateral Load Behavior of High Strength Fiber Reinforced Concrete Columns, Ramesh Nagarajah and David H. Sanders, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p396-407.

Laying Sequence Planning for Continuous Girder Reinforced Concrete Floor System by Genetic Algorithms, Y. Natsuaki, S. Mukandai, K. Yasuda and H. Furuta, (Analysis and Computation, Franklin Y. Cheng, ed., 1996),

Long Term Behavior of Concrete Columns with CFRP, M. Arockiasamy, Ahmed Amer, S. Chidambaram and M Shahawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1050-1053.

Loss of Capacity of Concrete Shear Walls, Hassan Sassi and Richard Ranous, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p80-81.

Maximum Shear Strengtis of Reinforced Concrete Struc-tures, Li-Xin "Bob" Zhang and Thomas T. C. Hsu, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p408-419.

Measuring Absorbed Cyclic Energy in Reinforced Concrete Beams, Ken Gaver and Sophia Hassiotis, ST Sept. 96,

Method for Probabilistic Evaluation of Seismic Structural Damage, Ajay Singhal and Anne S. Kiremidjian, ST Dec. 96, p1459-1467.

Methods and Procedural Considerations in Demolishing Tall Concrete Chimneys, Kenneth K. Walker, Cliff Schexnayder, Richard E. Mayo and Kenneth D. Walsh, CO Sept. 96, p223-230.

New Analysis for Creep Behavior in Concrete Columns, Raed M. Samra, ST Mar. 95, p399-407.

New Sacrificial Anode for Cathodic Protection of Reinforced Concrete Structures, Miki Funahashi and Steven F. Daily, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1256-1265.

Non Linear Computation of Fiber Reinforced Micro-Concrete Structures, Mouloud Behloul, Régis Adeline and Gérard Bernier, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p518-529.

Non-Accelerated Creep-Rupture of Fiber-Reinforced-Plastics in a Concrete Environment, Andrew Hundley and Charles Dolan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p519-526.

Nonlinear Behavior of Composite Columns Under Varying Load Histories, A. Dall'Asta, EM Aug. 96, p743-752

Nonlinear Behavior of RC Cooling Towers and Its Effects on Strains, Stresses, Reinforcement and Cracks, Udo Wittek and Anmin Ji, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p287-297.

Nonlinear Finite Element Analysis of Masonry-Infilled Re-inforced Concrete Frames, Medhat A. Haroun and Essam H. Ghoneam, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p1022-1025.

Nonstructural Evaluation of Competing Bridge Materials, Robert L. Smith and Robert J. Bush, MT May 96, p88-

On Estimating the Effect of Passivating Inhibitors on the Time for Corrosion Initiation of Steel in Concrete, A. A. Sagüés, S. C. Kranc and R. G. Powers, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1522-1530.

Optimization and Sensitivity of Retaining Structures, Aşkin Saribaş and Fuat Erbatur, GT Aug. 96, p649-656.

Performance Characteristics of Polyolefin Fiber Reinforced Concrete, V. Ramakrishnan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p93-102.

Performance Evaluation of Dual-Level Versus Current Design Using 1994 Northridge Earthquake Records, K. J. Elwood and Y. K. Wen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p796-799.

Pitch-Based Carbon Fibre Reinforced Concretes, A. M. Brandt and L. Kucharska, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p271-280.

Polyolefin Fiber Reinforced Concrete, Billy D. Neeley and Edward F. O'Neil, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p113-122.

Practical Estimation of Two-Way Slab Deflections, Kuan-Yung Chang and Shyh-Jiann Hwang, ST Feb. 96, p150-

Prefabricated Epoxy-Coated Rebar for the U.S. Navy, Douglas F. Burke, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1199-1208.

Probabilistic Durability Analysis of Reinforced Concrete Bridge Decks, Paul C. Hoffman and Richard E. Weyers, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p290-293

PsD Test on Four-Story R/C Building Designed According to Eurocodes, P. Negro, A. V. Pinto, G. Verzeletti and G.

E. Magonette, ST Dec. 96, p1409-1417.

Punching Shear Failure in Concrete Decks as Snap-Through Instability, Michael F. Petrou and Philip C. Per-dikaris, ST Sept. 96, p998-1005.

Punching Strength of Deck Slabs in Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE May 96, p59-66.

Radical Rebar Forges Ahead, Eric Rasmussen, ET June/ July 96, p1,8.

Recent Innovation for Concrete Highway Bridges, S. H. Rizkalla and A. A. Mufti, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p1063-1071.

Rehabilitation of a Concrete Bridge Using FRP Laminates, Joseph W. Tedesco, J. Michael Stallings, Mahmoud El-Mihilmy and Michael W. McCauley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p631-637. Reliability Evaluation of Slender HSC Columns, Sofia M. C. Diniz and Dan M. Frangopol, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p242-245. Reliability Framework for Managing Risk of Aging Structures, Bruce Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p590-597. Reliability of a Box Culvert Structure under a Levee during

Reliability of a Box Culvert Structure under a Levee during Project Floods, Robert C. Patev and Mary Ann Leggett, (Risk-Based Decision Making in Water Resources VII. Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p118-133.

Reliability of High-Strength Concrete Columns, Sofia M. C. Diniz and Dan M. Frangopol, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p213-222. Repair and Retrofit of Reinforced Concrete Columns, Riyad S. Aboutaha, (Natural Disaster Reduction, George

W Housner, ed. and Riley M. Chung, ed., 1997), p313-314

Repair of Main Pass 69 Waterflood Platform, G. E. Sgouros, T. E. Webster and N. M. Hennegan, WW July/Aug. 96, p165-171.

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Resistance of Silica-Fume Concrete to Corrosion-Related Damage, Safwan A. Khedr and Ahmed F. Idriss, MT May 95, p102-107.

Safety of Concrete Members Designed by ACI 318 Chapter 9 and Appendix C Load Combinations, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996). p218-221.

Seismic Response of Flexibly Supported Coupled Shear Walls, O. Chaallal and N. Ghlamallah, ST Oct. 96,

p1187-1197.

p1187-1197.
Seismic Retrofitting of Bridge Pier Columns, William L.
Gamble and Neil M. Hawkins, (Building an International
Community of Structural Engineers, S. K. Ghosh, ed.
and Jamshid Mohammadi, ed., 1996), p16-23.
Seismic Shear Strength of Reinforced Concrete Columns,

M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST

Aug. 94, p2310-2329.

Sensitivity Analysis of the Seismic Capacity for a RC Silo Sensitivity Analysis of the Seismic Capacity for a RC Silo Due to Variance of Ilis Material Properties, Takeshi Ki-tahara and Hitoshi Seya, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996, p530-533.
Serviceability Reliability Analysis of Reinforced Concrete

Structures, Mark G. Stewart, ST July 96, p794-803

Simple Method for Upgrading an Existing Reinforced-Concrete Structure, Hong Sioe Oey and Carlos J. Aldrete, SC Feb. 96, p47-50.

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-1849.

Slowing Corrosion Damage in Concrete: The Use of Oranic-Coated, Ceramic-Clad, Metallic-Clad and Solid ganic Coated, Ceranic Clau, Inclaim Bank, Donald, Donald, Donald Metallic Reinforcing Bars, David B. McDonald, Donald W. Pfeifer, Matthew R. Sherman and Gilbert T. Blake, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1266-1275.

Smart Composite Rebars with Enhanced Ductility, A. Be-larbi, K. Chandrashekhara and S. E. Watkins, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p788-791.

Softening-Induced Dynamic Localization Instability: Seismic Damage in Frames, Zdenek P. Bažant and Milan Jirásek, EM Dec. 96, pl 149-1158.

Stochastic Models for Chloride-Initiated Corrosion in Rein-

forced Concrete, Svend Engelund and John D. Sørensen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p664-667.

Strain Localization in Confined High-Strength Concrete Columns, Daniel Cusson, François de Larrard, Claude Boulay and Patrick Paultre, ST Sept. 96, p1055-1061.

Strength and Reliability of Reinforced Concrete Columns with Sustained Loading, Stuart G. Reid, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p234-237.

Strength of Struts and Nodes in Strut-Tie Model, Young Mook Yun and Julio A. Ramirez, ST Jan. 96, p20-29.

Mook Yun and Julio A. Ramirez, S. J. Jan., 30, 202-29.
Structural Strength of Bridge Decks Reinforced with Welded Wire Fabric, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Sept. 96, p989-997.
Studies on Galvanized Carbon Steel in Ca(OH), Solutions, Bala S. Haran, Branko N. Popov and Ralph E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p997-1006.

Tappan Zee Set for Inverset (Available only in Structures special issue), Harry Goldstein, CE Sept. 96, p12A-13A. special issue), Tanty Gonstein, Cl. Sept. 90, 1724-73. Tensile Response of Reinforced High Strength Concrete Members, S. P. Shah and C. Ouyang, (Worldwide Ad-vances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p431-442.

Thermal-Sprayed Zinc Anodes for Cathodic Protection of Reinforced Concrete Structures, B. S. Covino, Jr., S. D. Cramer, G. R. Holcomb, S. J. Bullard, G. E. McGill and C. B. Cryer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1512-1521.

Thin-Walled Prestressed Concrete Members under Combined Loading, B. M. Luccioni, J. C. Reimundín and R. Danesi, ST Mar. 96, p291-297.

Danesi, ST Mar. 96, p.291-297.
Time-Dependent Degradation of Structural Systems During Fire — A Method for Failure Prediction, Jiahong Jane Zuo and Jamshid Mohammadi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1042-1045.

Toward a Unified Nomenclature for Reinforced-Concrete Theory, Thomas T. C. Hsu, ST Mar. 96, p275-283.

A Unified Limit State Approach Using Deformability Fac-tors in Concrete Beams Reinforced with GFRP Bars, P. V. Vijay and H. V. S. GangaRao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p657-665.

Use of Fibers to Improve Cracking Characteristics of Concrete, P. Balaguru, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p183-192.

The Use of Xypex Admixture to Concrete as an Inhibitor to Reinforcement Steel Corrosion, Robert J. Scancella, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1276-1280.

Utilization of Recycled Fibers in Concrete, H. C. Wu, Y. M. Lim, V. C. Li and D. J. Foremsky, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p799-808.

SIMCON-A Novel High Performance Fiber-Mat Reinforced Cement Composite for Repair, Retrofit and New Construction", Neven Krstulovic-Opara, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p288-

Experimental Study of Durability of Reactive Powder Concretes, N. Roux, C. Andrade and M. A. Sanjuan, MT Feb. 96, p1-6.

Conditional probability

Development of an Expert System for Daily Drought Moni-toring, T. J. Chang, H. Zheng, X. A. Kleopa and C. B. Teoh, CP Jan. 96, p20-24.

Equivalence between Kriging and CPDF Methods for Conditional Simulation, Masanobu Shinozuka and Ruichong Zhang, EM June 96, p530-538.

Energy Dissipators edited by D.L. Vischer and Willi Hager, Henry T. Falvey, HY Aug. 96, p478. Rehab by Helicopter, Hans H. Torabi, Harold B. Tennat, A. John Burnell and Thomas C. Benson, Jr., CE Jan. 96, p44-47.

San Diego's Historic Dulzura Conduit: New Solutions, Hans H. Torabi and Harold B. Tennant, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p340-347.

Cone penetration

Analytical Study and Verification of a Coupled Theory of Mixtures for Application in Cone Penetration and Tunnel Boring in Soils, George Z. Voyiadjis, Murad Y. Abu-Farsakh and Mehmet T. Tumay, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p543-546.

Cone penetration tests
Cone Penetration in Very Weakly Cemented Sand, Anand
J. Puppala, Yalcin B. Acar and Mehmet T. Tumay, GT
Aug. 95, p589-600.

Cover-Subsidence Sinkhole Evaluation of State Road 434, Longwood, Florida, Jon Foshee and Brian Bixler, GT Nov. 94, p2026-2040.

CPT in Cold Regions Engineering: A Logging and Design Tool, Richard Fortier, Branko Ladanyi and Michel Allard, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p459-470.

Design Model Bias Factors for Driven Piles from Experiments at NGES-UH, Gil L. Yoon and Michael W. O'Neill, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p759-

Determination of Drained Friction Angle of Sands from CPT, J. W. Chen and C. H. Juang, GT May 96, p374-

Determining Relative Density of Sands from CPT Using Fuzzy Sets, C. H. Juang, X. H. Huang, R. D. Holtz and J.

W. Chen, GT Jan. 96, p1-6.

Estimation of In-Situ Test Uncertainty, Fred H. Kulhawy and Charles H. Trautmann, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p269-286.

Gostatistical Assessment of Spatial Variability in Piezo-cone Tests, Yasser A. Hegazy, Mayne Paul W. and Shahrokh Rouhani, (*Uncertainty in the Geologic Envi-*ronment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed. 1006-0254-268. ed., 1996), p254-268.

Ed., 1990), p.24-208.
Laser Induced Fluorescence and Cone Penetrometer Testing for Delineation of Hydrocarbons, Benjamin J. Timerson and Donald M. Moran, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p.115-126.

Neural-Network Modeling of CPT Seismic Liquefaction Data, Anthony T. C. Goh, GT Jan. 96, p70-73.

The Reliability of Soil Classification Derived from Cone Penetration Test, Zhongjie Zhang and Mehmet T. Tumay, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p383-408

Spatial Variability of Soil Parameters, Derin N. Ural, (Un-certainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p341-352.

Cone penetrometers

Geotextile-Reinforced Surface for Rapid Construction of Low-Volume Pavements, Reed B. Freeman and Randy C. Ahlrich, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p298-307.

ASCE's Technical Council on Computer Practices, Glenn S. Orenstein, CP Apr. 96, p93-94.

Bikers and Walkers Discuss Transit Issues, CE Mar. 96, p8. The Budget-Blame Battle at Superfund Conference, CE Jan. 96, p18,20.

Cold Regions' Icy Reach, Eric G. Johnson, CE Sept. 96, p6. Composite Materials Edge into Mainstream Construction, CE Mar. 96, p16,19-20.

Conference Tracks Progress of Trenchless Technologies, CE June 96, p10,12. Design-Build Continues to Grow in U.S., CE Dec. 96,

Editor's Note, Thomas L. Theis, EE Aug. 96, p675.

Editorial, Bruce Logan, EE Mar. 96, p167.

Editorial, Thomas L. Theis, EE Nov. 96, p955.

EPA in Limelight at WEFTEC Meeting, CE Dec. 96, p10. Minnesota Featured State at Bridge Conference, CE Aug. 96, p16.

No More Bullish Predictions, CE Dec. 96, p13-14.

Offshore Conclave Is Due This Month in Houston, CE May

On the Web, CE Nov. 96, p8.

Research Conclave Takes Aim at Global Sustainable Development, CE Apr. 96, p76.

Student Guide for Space Conference Research Papers, Malva A. Knoll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1319-1326.

Tunnelers Probe Policy Ponder Baseline Reports, CE June 96, p16-18.

U.S. Looks to Mexico for New Infrastructure Projects, CE Oct. 96, p28.

Viewpoint, James T. P. Yao, IS Mar. 96, p1-4.

Wind Engineering Co-operation: A Perspective of Europe and of China, Brian E. Lee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1069-1074.

Bed Configuration and Hydraulic Resistance in Alluvial-Channel Flows, Fazle Karim, HY Jan. 95, p15-25.

Fiber Orientation in Composite Structures for Optimal Resistance to Creep Failure, David N. Robinson and Wei Wei, EM Sept. 96, p855-860.

Johnson Space Center Crew Return Vehicle Activities, Charles H. Campbell, B. Kent Joosten and Robert E. Meyerson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p392-398.

A New Method for Solving Large Deformation Problems, Xiangjun Qiu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p242-245.

Confined environments

Spent Nuclear Fuel Dry Transfer System, Leroy Stewart and Stephen Agace, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p471-473.

Behavior of Beam-Column Connections Under Axial Col-umn Tension, El Mostafa M. Higazy, Amr S. Elnashai and Mihran S. Agbabian, ST May 96, p501-511.

Brittle-Ductile Transition in Porous Rocks by Cap Model, Vlado A. Lubarda, Sreten Mastilovic and Jaroslaw Knap, EM July 96, p633-642.

Collapse of Saturated Soil Due to Reduction in Confinement, Scott A. Anderson and Michael F. Riemer, GT Feb. 95, p216-220.

Design of Seismic Resistant Concrete Columns for Confinement, Murat Saatcioglu, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p233-244.

Drained Sand Behavior in Axisymmetric Tests at High Pressures, Jerry A. Yamamuro and Poul V. Lade, GT Feb. 96, p109-119.

Establishing R_c and C_d Factors for Confined Masonry Buildings, María O. Moroni, Maximiliano Astroza, Juan Gómez and Rafael Guzmán, ST Oct. 96, p1208-1215.

Retrofitting a Nuclear Lab, CE Dec. 96, p12,13. Seismic Performance of Confined Sill Plate Connections, Joseph M. Bracci, Rebecca F. Stromatt and David G. Pollock, ST Nov. 96, p1357-1363.

Simulated Seismic Load Tests on Reinforced Concrete Col-

umns, S. Watson and R. Park, ST June 94, p1825-1849. Strain Localization in Confined High-Strength Concrete Columns, Daniel Cusson, François de Larrard, Claude Boulay and Patrick Paultre, ST Sept. 96, p1055-1061.

Strength and Ductility of Rectangular Concrete Columns: A Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Mar. 96, p267-274.

Undrained Sand Behavior in Axisymmetric Tests at High Pressures, Poul V. Lade and Jerry A. Yamamuro, GT Feb. 96, p120-129.

Vibration Confinement in Trusses, Muhammad A. Hawwa and Reyolando M. Brasil, EM Mar. 96, p286-290.

Design Rationale for Computer-Supported Conflict Mitigation, Feniosky Peña-Mora, Duvvuru Sriram and Robert Logcher, CP Jan. 95, p57-72.

Interface Problems between Building Owners and Design-Abdul-Mohsen Al-Hammad and Ibrahim Al-Hammad, CF Aug. 96, p123-126.

Measuring Mutual Confidence in UK Construction Projects, A. K. Munns, ME Jan./Feb. 96, p26-33.

Survey of University Students' Knowledge and Views on Nuclear Waste Disposal and the Alternative Dispute Resolution Process, Grant Sheng, Lenore Deffner and Sonja Fiorini, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p510-512.

Conformal mapping Incipient Instability Criterion of Two Confined Superposed Fluids, Chin-Hwa Kong and I-Chung Liu, EM Feb. 95,

phys-202. Interaction between the Crack Tips of a Circular Arc Crack, Y. C. Shiah and Y. M. Tsai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p592-595. Optimal Design of Sloping Weir, Prabhata K. Swamee, Govinda C. Mishra and Adel A. S. Salem, IR July/Aug.

96, p248-255

79, p.248-253.
The Reliability of Soil Classification Derived from Cone Penetration Test, Zhongjie Zhang and Mehmet T. Turnay, (*Uncertainty in the Geologic Environment: from Theory to Practice*, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p383-450.

Connecticut

Connecticut

Development and Application of a Dual Drainage Model
for the Wethersfield Area of the City of Hartford, Connecticut, Michael E. Hulley, C. Neil Geldof, William W.
S. Gray and A. Charles Rowney, (North American Water
and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1242-1248.

Behavior of Beam-Column Connections Under Axial Col-umn Tension, El Mostafa M. Higazy, Amr S. Elnashai and Mihran S. Agbabian, ST May 96, p501-511.

Behavior of High-Strength Concrete Beam-Column Joints, Michael E. Kreger and Elias I. Saqan, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p420-430.

Blind Bolts Seek Spotlight, ET Apr./May 96, p8-9. Billid Doils occs spottigm, El Apl Jong 20, por J. Bolted Field Splices for Steel Bridges, Firas Sheikh-lbrahim and Karl H. Frank, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p290-297.

and Jamshid Mohammad, ed., 1736, person for Connection of a Steel Cap Girder to a Concrete Pier, Joseph M. Ales, Jr. and Joseph A. Yura, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p475-482.

ed. and Jamshid Montainman, ed., 17870, 195eph Antebi Connections of Large Steerable Antennas, Joseph Antebi and Mehdi S. Zarghamee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p505-509.

Cyclic Testing of Existing and Retrofitted Riveted Stiffened Seat Angle Connections, Majid Sarraf and Michel Bruneau, ST July 96, p762-775.

Decay of Residual Stress in Stochastic Fatigue, Loren D. Lutes and Shahram Sarkani, ST Jan. 96, p92-98.

The Design of Building Structures by Wolfgang Schueller, Bijan Mohraz, AE June 96, p82-83

The Development of New Structural Systems in the After-math of the Kobe Earthquake, Mark P. Sarkisian, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p934-943

Ductile Steel Beam-to-Column Connections for Seismic Resistance, Sheng-Jin Chen, C. H. Yeh and J. M. Chu, ST Nov. 96, p1292-1299.

Editor's Note, David Darwin, ST Feb. 96, p115. Editor's Note, David Darwin, ST Apr. 96, p349.

Editor's Note, David Darwin, ST July 96, p715.

Editor's Note, David Darwin, ST Aug. 96, p843-844. Editor's Note, David Darwin, ST Nov. 96, p1257.

The Effect of the Lunar Surface Environment upon Ma-chinery, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Failure of a Stiffened Seat Bracket Connection, David L. Weaver, Jason S. Yates and Randall W. Poston, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p468-474.

Fatigue Cracks at Stringer-Floorbeam Connections, Leon L-Y Lai, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p483-490.

Forum, Stan Rolfe and John Barsom, ST Nov. 96, p1258. Full-Scale Fatigue Test of the Williamsburg Bridge Ortho-tropic Deck, Mark R. Kaczinski, Frank E. Stokes, Peter Lugger and John W. Fisher, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p329-336.

Hybrid Moment Resisting Precast Beam-Column Connections, John Stanton, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p266-277.

McCabe, ed., 1996), 2606-27.
Improved Analysis Techniques for the Capacity and Fatigue Assessment of TPG Railway Bridges, Terrence W. Philbrick, Jr. and Scott D. Schiff, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p199-206.

More Research Needed for Steel Moment Frames, Garry D. Myers, CE July 96, p29,31.

Nailed Tubular Connections under Axial Loading, Jeffrey A. Packer, ST Aug. 96, p867-872.

New Guidelines for Fatigue Design of HSS Connections, A. M. van Wingerde, J. A. Packer and J. Wardenier, ST Feb. 96, p125-132.

Nonlinear Analysis and Design Issues for PR Frames, Ar-vind V. Goverdhan, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p55-66.

Parameter Study of an Internal Timber Tension Connection Stephen F. Duff, R. Gary Black, Stephen A. Mahin and Marcial Blondet, ST Apr. 96, p446-452. Probabilistic Modeling of Metal Plate Connections, Robert

N. Emerson and Kenneth J. Fridley, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p330-333.

Refined Three-Dimensional Finite Element Model for End-Plate Connection, Chang-Koon Choi and Gi-Taek Chung, ST Nov. 96, p1307-1316.

Reliability Evaluation Using SFEM, Achintya Haldar and Liwei Gao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p166-169.

Resistance of Wood Members and Connections to Dynamic Loading, Laura Brantley, Robert Emerson and Kenneth Fridley, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p771-777.

Right Questions, Wrong Answers, Eugene H. Harlow, CE

June 96, p26-27.

Seismic Performance of Confined Sill Plate Connections, Joseph M. Bracci, Rebecca F. Stromatt and David G. Pollock, ST Nov. 96, p1357-1363. Seismic Solutions for Steel Frame Buildings, Virginia Fair-

weather, CE Mar. 96, p40-43.

Weather, C.E. Mar. 90, pp.44-35.
Spotlight on Steel Moment Frames, W. F. Chen and E. Yamaguchi, CE Mar. 96, p.44-46.
Steel Moment Frames with Welded Connections, Helmut

Krawinkler, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1115-1122.

Three Year Evaluation of a Metal-Plate Connected Wood Truss Bridge, Michael H. Triche and Michael A. Ritter, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p276-281.

Uniqueness in Analysis of Semirigid Frames, S. T. Ariaratnam and L. Xu, ST Jan. 96, p110-111.

Updates on Steel Moment Frames, David Bonowitz, CE Aug. 96, p30.

Upgrading of Braced Frames for Potential Local Failures, Hae In Kim and Subhash C. Goel, ST May 96, p470-475. Weld Performs Under Earthquake Conditions, CE Aug. 96,

Connections, bolted
Evaluation of FRP Composites Bolted and Adhesive Joints, Sotiris Sotiropoulos, Hota V. S. GangaRao and Roberto Lopez-Andio, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p233-242.

Field Study of Pretension in Large-Diameter A490 Bolts, Charles J. Oswald, Robert J. Dexter and Steven K. Brauer, BE Aug. 96, p121-126.

Hydrothermal Effects on the Bearing Strength of GFRP Composite Joint, Stephanie Hurd and Robert Yuan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p243-250.

Modeling for Moment-Rotation Characteristics for End-Plate Connections, Y. J. Shi, S. L. Chan and Y. L. Wong,

ST Nov. 96, p1300-1306.

M. Bulleit and Dennis B. Decator, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed.

and Mircea D. Grigoriu, ed., 1996), p326-329.
Simple Formula for Eccentric Bolted Connection Design,
Thomas W. Hartmann and Janelle K. Rohrbaugh, SC

Feb. 96, p40-46. Steel Connections Need More Research, A. Plumier, CE

Sept. 96, p35. Structural Behavior of End-Plate Bolted Connections to Stiffened Columns, Mohammed R. Bahaari and Archi-

bald N. Sherbourne, ST Aug. 96, p926-935.

Connections, welded Steel Connections Need More Research, A. Plumier, CE Sepi. 96, p35.

Connectors, mechanical

Mechanical Connections in Wood Structures (M&R No. 84), Task Committee on Fasteners of the Committee on Wood of the Structural Division of the American Society of Civil Engineers, (Lawrence A. Soltis, chmn.), 1996, 0-7844-0110-1, 245pp.

Water Distribution Network Reliability: Connectivity Anal-ysis, Shu-li Yang, Nien-Sheng Hsu, Peter W. F. Louie and William W-G. Yeh, IS June 96, p54-64.

Cellular Confinement System Helps Hold Slope, CE Dec.

Technology Development and Sustainable Construction, Yasuyoshi Miyatake, ME July/Aug. 96, p23-27.

Cancalidation

Adaptive Diffuse Element-Finite Element Technique for Transient Analysis in Porous Media, Hormoz Modaressi and Philippe Aubert, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1082-1085.

Anisotropy Effect on One-Dimensional Consolidation, L. Cui, Y. Abousleiman, A. H-D. Cheng and J.-C. Roegiers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p471-474.

Approximate Theory for Radial Filtration/Consolidation, Frank M. Tiller, J. M. Kirby and H. L. Nguyen, GT Oct. 96, p797-805.

Compressibility of Clays: Fundamental and Practical Aspects, S. Leroueil, GT July 96, p534-543.

Consolidation Characteristics of Phosphatic Clays, Naser Abu-Hejleh, Dobroslav Znidarcic and Bobby L. Barnes, GT Apr. 96, p295-301.

Consolidation of Elastic Porous Media Saturated by Two Immiscible Fluids, Kagan Tuncay and M. Yavuz Corapcioglu, EM Nov. 96, p1077-1085.

Desiccation Theory for Soft Cohesive Soils, A. Naser Abu-Hejleh and Dobroslav Znidarčić, GT June 95, p493-502.

Geotechnical Properties of Oil-Contaminated Kuwaiti Sand, Hasan A. Al-Sanad, Walid K. Eid and Nabil F. Is-mael, GT May 95, p407-412.

Geotechnical Properties of Paper Mill Sludges for Use in Landfill Covers, Horace K. Moo-Young and Thomas F. Zimmie, GT Sept. 96, p768-775.

Pore-Water Pressures in Freezing and Thawing Fine-Grained Soils, K. Dieter Eigenbrod, Sven Knutsson and Daichao Sheng, CR June 96, p77-92.

Pulse Transmission System for Measuring Wave Propaga-tion in Soils, Koichi Nakagawa, Kenichi Soga and James

K. Mitchell, GT Apr. 96, p302-308.

Rate-Dependent Undrained Shear Behavior of Saturated Clay, Thomas C. Sheahan, Charles C. Ladd and John T. Germaine, GT Feb. 96, p99-108.

Variation of Fabric Anisotropy of Kaolinite in Triaxial Loading, A. Anandarajah, N. Kuganenthira and D. Zhao, GT Aug. 96, p633-640.

Constitutive equations

Effect of Maxwell Binder on Two-Phase Materials, Han

Zhu, Jeff W. Rish, III and William C. Dass, (Engineering

Mechanics, Y. K. Lin and T. C. Su, 1996), p576-579.

Equivalent Strength of Porous Fractured Rock, William G. Pariseau, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p216-219.

Su. 1990), pc10-219.
A Finite Element Damage Model for the Evaluation and Rehabilitation of Brick Masonry Shear Walls, Luigi Gambarotta and Sergio Lagomarsino, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p72-81.
New Trends in Biomechanics, Y. C. Fung, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1-15.

Review of Constitutive Equations for Shape Memory Alloys, Victor Birman, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p792-795.

The Viscoelastic-Large Deformation Response of the Tayfor Impact Cylinder, H. L. Schreyer and D. Sulsky, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p250-253.

Constitutive models

Analysis of Masonry Structures with Elastic/Viscoplastic Models, Teymour Manzouri, P. Benson Shing and Bernard Amadei, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p61-71.

Analytical Model for Shear Critical Reinforced-Concrete Members, W. Chung and S. H. Ahmad, ST June 95,

p1023-1029.

Anisotropic Plasticity with Anisotropic Hardening and Rate Dependence, Raymond D. Krieg and Kevin H. Brown, EM Apr. 96, p316-324.

Biaxial Low-Cycle Fatigue Behavior of Steel Fiber-Reinforced Concrete, Li Fang and Christian Meyer, (Ma-terials for the New Millennium, Ken P. Chong, ed., 1996), p436-445.

Constitutive Modeling and Analysis of Creeping Slopes, Chandra S. Desai, Naresh C. Samtani and Laurent Vul-

liet, GT Jan. 95, p43-56.

Constitutive Modeling of Composites in Opto-Mechatronics, Tau C. Fan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p632-636.

Constitutive Models for Concrete Penetration Analysis, Vladimir M. Gold, George C. Vradis and James C. Pear-son, EM Mar. 96, p230-238.

Critical State Model at Finite Strains, Ronaldo I. Borja and Claudio Tamagnini, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p148-151.

Experimental Measurement of Strain Gradient Effects in Granular Materials, Matthew R. Kuhn, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p881-885.

Fabric Anisotropy and Its Relationship to Macroscopic Constitutive Behavior of Clays, A. Anandarajah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p877-880.

Geometric and Material Nonlinearities in Steel Plates, P. Roca, E. Mirambell and J. Costa, ST Dec. 96, p1427-1436

Granular Flow Based on Non-Newtonian Fluid Mechanics, Sergio A. Elaskar, Luis A. Godoy and Alejandro T. Brewer, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p394-397.

Improving Robustness of Algorithms to Implement HiSS models in FEM, G. W. Wathugala and S. Pal, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p144-147.

Inelastic Thermal Response of Gr/Cu with Nonuniform Fiber Distribution, Brett A. Bednarcyk and Marek-Jerzy Pindera, AS Oct. 96, p93-105.

Macroscopic Models with Complex Coefficients and Cau-sality, Nicos Makris, José A. Inaudi and James M. Kelly,

Sality, Nicos Mantis, Jose. I lianua and James Le Manue Sept. EM June 96, p566-573. Measuring and Modeling Time Dependent Soil Behavior, Geotechnical Special Publication No. 61, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996, 0-7844-0205-1, 288рр.

Microplane Model for Concrete: I: Stress-Strain Bounda-ries and Finite Strain, Zdeněk P. Bažant, Yuyin Xiang and Pere C. Prat, EM Mar. 96, p245-254.

Microplane Model for Concrete: II: Data Delocalization and Verification, Zdeněk P. Bažant, Yuyin Xiang, Mark D. Adley, Pere C. Prat and Stephen A. Akers, EM Mar. 96, p255-262.

Modeling Aspects Associated with Time Dependent Be-havior of Soils, Toshihisa Adachi, Fusao Oka and Mamoru Mimura, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p61-95.

Modeling of the Oscillatory Response of Electrorheological Fluids, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, (Engineering Mechanics, Y. K. Lin and T.

C. Su, 1996), p894-897.

Modeling Stress-Strain Response of Clay Using Neural Nets, Yacoub M. Najjar, Imad A. Basheer and Hossam A. Ali, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p697-700.

Neural Network Constitutive Models Determined from Structural Tests, Jamshid Ghaboussi, David A. Pecknold, Ming-Fu Zhang and Rami M. HajAli, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p701-704.

Nonlinear Behavior of RC Cooling Towers and Its Effects on Strains, Stresses, Reinforcement and Cracks, Udo Wittek and Anmin Ji, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p287-297.

Nonlinear Finite Element Reliability Analysis of Concrete, Dan M. Frangopol, Yong-Hak Lee and Kaspar J. Willam, EM Dec. 96, p1174-1182.

Plane Waves and Pore Pressure in a Saturated Sand, R. Flaine waves and ur over ressure in a saturated sand, r. Staroszczyk and L. W. Morland, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p943-946.
Prediction of Observed Response of Base-Isolated Structure, Nicos Makris and Himanshu S. Deoskar, ST May

96, p485-493.

Reduced-Order Sand Model for Ground Response Analysis, X. S. Li, EM Sept. 96, p872-881.

588, A. 3. Li, E.M. Sept. 20, po 12-501.
Thermo-Micromechanical Damage Modeling of Airfield Concrete Pavement, J. W. Ju and Y. Zhang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p727-730.

Mechanics, T. K. Lin and T. C. Su, 1990), p727-730. A Uniaxial Constitutive Model Accounting for Viscoelasticity and Damage Evolution under Cyclic Loading, Hyun-Jong Lee and Y. Richard Kim, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p693-696. A Unified Description of Soil Behavior, Juan M. Pestana, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), e393-324.

p281-284.

A Unified Viscoplastic Model for the Inelastic Behavior of Ice, Jonah H. Lee and Michel Aubertin, (Cold Regions Engineering: The Cold Regions Infrastructure—An In-ternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p828-836.

Constitutive relations

Consolidation of Elastic Porous Media Saturated by Two Immiscible Fluids, Kagan Tuncay and M. Yavuz Corap-cioglu, EM Nov. 96, p1077-1085.

Constitutive Behavior of Granular Media Using a Lattice Type Model, S. Ramakrishnan, Muniram Budhu and George Frantziskonis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p713-716.

Constitutive Driver for Cohesive-Frictional Materials, K. Willam and M.-M. Iordache, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p751-760.
Constitutive Relations for Compressible Elastic Porous Solids, J. Bluhm, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1090-1093.

Constitutive Relations for Partially Saturated Soils Contain-ing Gas Inclusions, S. Pietruszczak and G. N. Pande. GT Jan. 96, p50-59.

Jan. 90, pou-59. Constitutive Relationships of Mortar-Aggregate Interfaces in High Performance Concrete, Oral Büyüköztürk and Brian Hearing. (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p452-461.

Granular-Flow Rheology: Role of Shear-Rate Number in Transition Regime, Cheng-lung Chen and Chi-Hai Ling,

EM May 96, p469-480.

scopic Considerations, A. Anandarajah and J. Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p709-712. Macroscopic Constitutive Behavior of Clays from Micro-

Variation of Fabric Anisotropy of Kaolinite in Triaxial Loading, A. Anandarajah, N. Kuganenthira and D. Zhao, GT Aug. 96, p633-640.

Constraints

Constraint-Based Reasoning for Optimal Concrete Design and Detailing, Warren K. Lucas and W. M. Kim Roddis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p154-165.

Construction Planning through Multi-Agent Constraint Sat-isfaction, Milorad Sucur and Francois Grobler, (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p240-246.

Continuing Data Needs for Lunar Radiation Protection, Richard R. Roll, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p646-652

Convex Models for Impulsive Response of Structures, Shyh-Rong Tzan and Chris P. Pantelides, EM June 96,

Equations of Motion for Mechanical Systems, Firdaus E. Udwadia and Robert E. Kalaba, AS July 96, p64-69.

Extending the Limits-San Jose Runway, Loy Warren, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p151-157.

Fast and Robust Algorithm for General Inequality/Equality Constrained Minimum Time Problems, B. Driessen and N. Sadegh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1215-1224.

Genetic Algorithms for the Design of Groundwater Reme-diation Systems, Daene C. McKinney and Min-Der Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p842-847

Joint Development Planning for Inner City Airport Capital Improvements, Orikaye G. Brown-West, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka

Seneviratne, ed., 1996), p199-211.

Millimetre Radar System for the On-Board Lateral Distance Acquisition: Performances Evaluation and Infrastructure Constraints, Corrado Cugiani and Luigi Giub-bolini, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p656-660.

Minimum Weight of Control Devices with Bounded LQG Control, Alexander A. Bolonkin, Duane E. Veley and Narendra S. Khot, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996),

p1230-1236.

A Multi-Loop Strategy for Performance-Based Optimiza-tion with Probabilistic Constraints, Robert H. Sues, David R. Oakley and Graham S. Rhodes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p126-129.

NPC Integrator and Its Unconditional Stability for Response Analysis of Constrained Structures, David W. Begg and Xiaojian Liu, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1237-1244.

Pavement Design for Rehabilitation and Minimizing Construction Effects on Aircraft Operations, R. Barry Pierce and Lino H. Neri, Jr., (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996). p128-139.

Rehabilitation of Taxiway "NB" at IAH with Concrete Overlay, Adil Godiwalla, Keith E. Chapman, Charles Juhasz, William Stamper and Wayne Overman, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p170-186.

Small-Strain Response of Random Arrays of Spheres Using Discrete Element Method, Tang-Tat Ng and Emmanuel Petrakis, EM Mar. 96, p239-244.

Constriction

Pulsatile Blood Flows in Stenotic Artery, Tin-Kan Hung and Tommy M.-C. Tsai, EM Sept. 96, p890-896.

Constructibility

Automated Constructibility Analysis of Work-Zone Traffic-Control Planning, Deborah J. Fisher and Naveen Rajan, CO Mar. 96, p36-43.

Constructability in Public Sector, G. E. Gibson, Jr., C. I. McGinnis, W. S. Flanigan and J. E. Wood, CO Sept. 96,

p274-280.

Examples and Characteristics of Shared Project Models, Martin Fischer and Thomas Froese, CP July 96, p174-

Making Effective Use of Construction Lessons Learned in Project Life Cycle, Nabil A. Kartam, CO Mar. 96, p14-

Relationship Between Project Interaction and Performance Indicators, James B. Pocock, Chang T. Hyun, Liang Y. Liu and Michael K. Kim, CO June 96, p165-176.

Construction
3-D CAD Links to Project Savings, ME Sept./Oct. 96, p5-6.
Abstracting Lessons Learned from Design Reviews, E.
William East and Michael C. Fu, CP Oct. 96, p267-275.

ADR, 25 Years of Progress, Robert A. Rubin, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed.,

1996), p21-29.

Anaheim State-of-the-Art Water Treatment Plant years from Conception to Completion, Isaac Pai, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2654-2659. Analyses of Lunar Membrane Structures for Potential Fail-

ure Scenarios, James Day and Phil Richter, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1052-1058.

Analytic Approach Helps Firm Expand Business, CE Dec.

96, p22.

Anatomy of a Wetland, Jim Renner, CE Jan. 96, p58-60.

Applications of Soil Nailing in Residual Soil, James W. Sigourney, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p57-65.

Autonomous Mapping System for an Interior Finishing Robot, Abraham Warszawski, Yehiel Rosenfeld and Igal

Shohet, CP Jan. 96, p67-77.

Benchmarking: Performance-Improvement Towards Competitive Advantage, N. M. Lema and A. D. F. Price, ME Jan./Feb. 95, p28-37.

The Best Partnering Books for Your Design Firm, Ned Godfrey, ME Sept./Oct. 96, p7-9.

Building an International Community of Structural Engineers, 2 vols., S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, 0-7844-0158-6, 1320pp.

Building Code Requirements for Masonry Structures (ACI 530-95/ASCE 5-95/TMS 402-95); Specification for Masonry Structures (ACI 530.1-95/ASCE 6-95/TMS 602-95); Commentary on Building Code Requirements for Masonry Structures (ACI 530-95/ASCE 5-95/TMS 402-95); Commentary on Specification for Masonry Struc-tures (ACI 530.1-95/ASCE 6-95/TMS 602-95) (St No. 95-005, 95-006), Masonry Standards Joint Committee, (James Colville, chmn.), 1996, 0-7844-0115-2, 97pp.

Building Large Space Bases in Low Earth Orbit, J. Michael Snead, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p367-377.

Building the Infrastructure of the New Federal City: 1793-1800, Robert J. Kapsch, (Civil Engineering History: En-gineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p74-85.

Cannot Indemnify for Own Negligence, CE Oct. 96, p.30.
Central Artery Utility Crossings, Brian Brenner, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996). p130-138.

Certificate Program in Construction Engineering and Management, Amarjit Singh and Harold S. Hamada, El July 96, p114-122.

Coal Pipelines Crossing Railroads: Legal Issues, Peter N. Davis and Henry Liu, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p254-264.

COFPAES Supports House Bill on Design-Build Fee Re-

imbursement, CE June 96, p73.

Company-Level Cash-Flow Management, R. Navon, CO Mar. 96, p22-29.

Conceptual Design of a Crater Lunar Base, Alice Eichold, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p920-927.

Considerations for Realistic Lunar Excavation, Michael J. Lally, Scott P. Mackey and Laurie R. Gaskins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p896-902.

Constructed Wetlands for Metals Removal, Charles R. Williams. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1184-1189.

Construction Automation and Robotics in Civil Engineering Education Programs, Walter W. Boles and Jing Wang, El Jan. 96, p12-16.

Construction Automation: Demands and Satisfiers in the United States and Japan, John G. Everett and Hiroshi Saito, CO June 96, p147-151.

Construction for Tomorrow and the Day After, William R. Nash, SC May 96, p67.

Construction Resource Scheduling with Genetic Alog-rithms, Weng-Tat Chan, David K. H. Chua and Govindan Kannan, CO June 96, p125-132.

Construction Safety: A Vision for the Future, Stewart Young, ME July/Aug. 96, p33-36.

Construction Through Crude Oil, Kyle R. Ott, Richard J. Switalski and Dale J. Sadowski, CE Feb. 96, p56-59.

Construction Waste: Quantification and Source Evaluation, B. A. G. Bossink and H. J. H. Brouwers, CO Mar. 96, p55-60.

Control of Construction Robots using Camera-Space Ma-nipulation, Emilio Gonzalez-Galvan, Michael Seelinger. John-David Yoder, Eric Baumgartner and Steven B. Skaar, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p57-63.

Controlling the Impacts of Development on Storm Water Quality through Proper Site Planning and Design, Jill C. Bicknell and Lisa Horowitz McCann, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3097-3102.

Crossing Bridges with Ductile Iron Pipe—Update 1995, Michael S. Tucker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p120-129.

Crude Oil Pipe Line Crossing Western Panama, Hugh Lacy and Brant Brown, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p356-364.

Culture of Using Mobile Cranes for Building Construction, Aviad Shapira and Jay D. Glascock, CO Dec. 96, p298-

Dealing with Uncertain and Highly Variable Geotechnical Conditions Beneath the Inco Smelter in Copper Cliff, Karlis J. Jansons, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1383-1401.

A Decision Support System for Minimizing the Distur-bance of Airfield Construction (SFIA Case Study), Adib Kanafani and Manar Shami, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p234-245.

Delay Estimation and Optimal Length for Four-Lane Divided Freeway Workzones, David R. Martineli and Danquing Xu, TE Mar./Apr. 96, p114-122.

Design and Construction Criteria for Hurricanes - Preventing Your Pre-Engineered Building from Becoming a Scrap Metal Heap, Michael K. H. Yee, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p269-271.

Design and Construction of Large Diameter High Pressure Gas Transmission River Crossing for San Diego Gas and Electric Using Directional Boring, Jey K. Jeyapalan and Robert Dalby, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p379-386.

Design and Construction of the Santa Ana River Wash Crossing of the Inland Feeder, Burt Yu, Jay Arabshahi, Birger Schmidt and Roy Cook, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1789-1795.

Design and Construction of Zero-Gravity Gymnasium, Patrick Collins, Sunao Kuwahara, Tsuyoshi Nishimura and Takashi Fukuoka, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p.200-

Design of the Inlet/Outlet Tower for the Eastside Reservoir Project, Robert P. McBean and Clifford D. Dillon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1783-1788.

Design with Residual Materials: Geotechnical and Construction Considerations, Geotechnical Special Publica tion No. 63, Gordon Matheson, ed., 1996, 0-7844-0207-

8, 88pp.

Design-Build Limitations of Liability Are Successful, Michael C. Loulakis and William L. Cregger, CE Jan. 96, p35.

Design-Build Origins in Question, Dean E. Stephan, Jeffrey L. Beard and Michael Charles, CE Aug. 96, p26,28.

Design/Construction Integration through Multimedia Animation, Bob McCullouch, Dulcy Abraham and Phillip Knickrehm, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p760-766. Ed Groff: A "Muddy Boots" President, Virginia Fairweath-

er, CE Dec. 96, p66-68.

er, CE Dec. 96, p66-68.
Editor's Letter, Tom Williamson, SC Aug. 96, p59.
Effects of Faulty Design and Construction on Building
Maintenance, Sadi Assaf, Abdul-Mohsen Al-Hammad
and Mansoor Al-Shihah, CF Nov. 96, p171-174.
Engineering Judgment in the Evolution from Deterministic
to Reliability-Based Foundation Design, Fred H.
Kulhawy and Kok Kwang Phoon, (Uncertainty in the
Geologic Environment: from Theory to Practice, Charles
D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J.
S. Peth. ed. 1966, 320-48 S. Roth, ed., 1996), p29-48. Environmental Assessment of a Site for Civil Construction,

S. M. Govorushko, UP Mar. 96, p18-31. Environmental Permitting for the Canal Electric Project, Gene F. Crouch, (Pipeline Crossings 1996, Lawrence F.

Catalano, ed., 1996), p237-244.
Estimating and Project Management for Building Contractors, Michael Kitchens, 1996, 0-7844-0148-9, 242pp. Estimating Loss of Productivity Claims, Gasan G. Kallo,

ME Nov./Dec. 96, p13-15. Estimating Settlement of Sand Caused by Construction Vi-bration, S. Drabkin, H. Lacy and D. S. Kim, GT Nov. 96,

p920-928. An Experimental Study on the Use of Constructed Wetlands for Stormwater Management, Shih-long Liao, Shaw L. Yu and Stephen J. Long, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2462-2467.

Firehouse Becomes Building-Trade Classroom for Women, CE June 96, p10.

First Mars Outpost Architectural Study, Jun Okushi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p928-934.

For Design/Construct Engineers, A Practice-Oriented Pub-lication About Real-World Experiences, CE Apr. 96,

Foundation Design Considerations for Construction on Marshlands, A. Rhett Whitlock and Shahzad S. Moosa, CF Feb. 96, p15-22.

Geotechnical Instrumentation for Boston's Central Artery/ Geotechnical Instrumentation for Boston's Central Artery/ Tunnel Project: An Overview, John Dunniciff, Charles Daugherty and Thom Neff. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p727-733.
Geotextile-Reinforced Surface for Rapid Construction of Low-Volume Pavements, Reed B. Freeman and Randy C. Ahlrich, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p298-307.
Late License Acceptable, CE Sept. 96, p28-29.

Load Combinations and Load Factors for Construction,

David V. Rosowsky, CF Nov. 96, p175-181.

Local Sponsorship and Floodplain Management, Herb Nakasone, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2350-2351.

Management of the Hanford Engineer Works in World War II, Harry Thayer, 1996, 0-7844-0160-8, 225pp.

Managing Construction Risks, Ossama A. Abdou, AE Mar.

Measuring Mutual Confidence in UK Construction Projects, A. K. Munns, ME Jan./Feb. 96, p26-33.

Mobile Robots for Security, Anatoly Osipov, Vladimir Kemurdjian and Boris Safonov, (Robotics for Challeng-ing Environments, Laura A. Demsetz, ed., 1996), p290-

Models of Construction Process Information, Thomas

Froese, CP July 96, p183-193.

A Monitoring System for High-Clearance Scaffold Systems during Construction, Y. L. Huang, T. Yen and W. F. Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p719-726.

Montgomery C. Meigs: The Eclectic Engineer, Dean A.

berrin, (Civil Engineering History: Engineers, Dean A. Herrin, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p66-

Multi-Site Cross-Disciplinary A/E/C Project Based Learning, Renate Fruchter, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Multimedia-Based Instruction of Building Construction, Diego Echeverry, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), Jorge Va p972-977

p912-917.
A National Standard for Flood-Resistant Design and Construction, Christopher P. Jones, Vernon K. Hagen, Christopher S. Hanson, Thomas C. MacAllen, David Greenwood and Clifford E. Oliver, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p339-340.

Natural Disaster Losses to Conventional Construction and their Mitigation (An Insurance Company Response to Catastrophic Losses Since Hurricane Hugo), Edward M. Laatsch, Rose Geier Grant and Laird Macdonald, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p778-785.

New Metric Guide Stresses "Preferred Numbers" to Aid in

Building Construction, NE June 96, p10.

A New, Low-Cost Ice Control Structure. Part 2: Construc-tion and Performance. J. H. Lever, G. Gooch and C. Clark, (Cold Regions Engineering: The Cold Regions In-frastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p629-639.

Notes on ACI 318-95 with Design Applications edited by S.J. Ghosh, David A. Fanella, and Basile G. Rabbat, AE

Sept. 96, p120.

Optimal Structures for Decentralized Provision of Roads, Frannie Humplick and Azadeh Moini-Araghi, IS Sept. 96, p127-138.

po, pt.27-138.
 Organizing and Managing a Finance-Design-Build Project in Turkey: Fourth R-ebling Lecture, 1995, Donald K. Stager, CO Sept. 96, p199-204.
 Overcoming Soil Uncertainty in Prediction of Construction and Industrial Vibrations, Mark R. Svinkin, (Uncertainty in the Geologic Environment, Four Theory to Practice

in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1178-1194.

Pay-When-Paid Risks are Limited, CE Aug. 96, p24. Probability Based Estimation of Expected Annual Benefits, Eric D. Loucks, (North American Water and Environ ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p298-303.

Problem and Technical Solutions: The Seven Oaks Dam, Physical Elements of the Seven Oaks Dam Feature, Robert E. Koplin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2177-2184.

Proof Loads, Construction Error and the Reliability of Service Proven Structures, Mark G. Stewart, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p226-229.

Protection of and from the Lunar Environment, Anthony M. Wachinski, Tony Rachwal and Colin Waters, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p668-672. Quality Control in Seismic Design and Construction, G. G.

Schierle, CF Aug. 96, p90-95.

Record Breaking Bundled Pipeline Crossings, Gerald Donnelly and Mark W. Struss, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996), p37-47.

Rita Robison, An Engineering Writer for CE, Dies at 70, CE Oct. 96, p76,78

Selecting Design-Build: Public and Private Sector Owner Attitudes, Anthony D. Songer and Keith R. Molenaar, ME Nov./Dec. 96, p47-53.

Soft-Ground Subway Construction, Mohammad Irshad, P.E. and John R. V. Dickson, P.E., CE Nov. 96, p54-57. Statistical Sample Size for Construction of Soil Liners, Craig H. Benson, Huaming Zhai and Salwa M. Rashad, GT Oct. 94, p1704-1724.

Structural Forum, SC Nov. 96, p95-98.

Suggested Name Change for ASCE, Carl H. Carpenter, P.E., CE Oct. 96, p31.

Swimming in Style, Gary Steficek, P.E., CE Aug. 96, p36-

Systematizing Construction Project Evaluations, Mohan M. Kumaraswamy and Antony Thorpe, ME Jan./Feb. 96, p34-39

Tappan Zee Set for Inverset (Available only in Structures special issue), Harry Goldstein, CE Sept. 96, p12A-13A.

Technological Advances in the Design and Construction of Water Mains for Crossing Under Rivers and Other Barriers, Donald E. Eckmann and William F. Nabak, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p403-408

Tensioned Fabric Structures: A Practical Introduction, Task Committee on Tensioned Fabric Structures of the Technical Committee on Special Structures of the Technical Administrative Committee on Metals of the Structural Division of the A.S.C.E., (R.E. Shaeffer, chmn.), 1996, 0-7844-0156-X, 80pp.

Tensioned Fabric Structures—A Practical Introduction edit-ed by R. E. Schaeffer, Frederick S. Merritt, AE Sept. 96,

p121

Title: "Self-Constructing Space Systems", Daniele Bedini, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1032-1037.

Training Dropouts to Build Houses, CE Feb. 96, p20,22 Training Dropouts to Build Houses, CE Feb. 96, p20,22.
Trial Applications of Multimedia Instructional Aids in a Building Construction Curriculum, David R. Riley and Clark Pace. (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p362-368.
Using Process Modeling to Gain ISO 9000 Certification in Construction, Raja R. A. Issa and Robert F. Cox. (Computing Conference of Civil Engineering Conference of Conference of

puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1013-1019. Utilization of 3-D CADD in Analysis, Design and Con-

struction of Mobile Service Tower for Atlas Launch Vehicles, Norm Bobczynski, Matthew Wrona, David Hansen and Harold Howell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl197-1204.

Virtual Reality Modeling for Bridge Construction, Tsung-chieh Tsay, Fabian C. Hadipriono and Richard E. Larew, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p63-69. Warren Bellows, ASCE Life Member, Headed Houston

Construction Company, NE July 96, p15. Washington Buildup, John Casey, CE Oct. 96, p64-67.

White House Proposes Design-Build Regulation, Michael

Charles, CE Oct. 96, pl 16.

'Meigs Among the Ruins': Montgomery C. Meigs and the Construction of the United States Capitol Extension' Dean A. Herrin, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p96-97.

Construction companies CERF Unveils Interactive Extension Program, CE Jan. 96,

Construction Industry Web Site Opens, CE July 96, p24. In Defense of Design Engineers, Burton A. Lewis, CE Sept.

96, p32. Management Buys Back HDR From French Parent, CE Nov. 96, p27.

On the Web, CE Oct. 96, p11.

Strategic Planning in Construction Companies, Abraham Warszawski, CO June 96, p133-140.

Construction costs

Boston Blockbuster, Virginia Fairweather, CE Dec. 96, p40-43

Costs of Accidents and Injuries to the Construction Indus-try, John G. Everett and Peter B. Frank, Jr., CO June 96, p158-164

Dispersive-Flow Energy Dissipator, Shou Long Yang, HY Dec. 94, p1401-1408.

Exterior Cladding Methods: A Technoeconomic Analysis, Igal M. Shohet and Alexander Laufer, CO Sept. 96, p242-247

Information Technology for Better Management of Change, Cost and Schedule in Construction Projects, Feniosky Peña-Mora and Hong Chen, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p613-619.

McAlpine Intake Model Study for Innovative Lock Design. John E. Hite, Jr. and Larry Dalton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3135-3140. Neural Networks for the Identification and Control of

Quantity Variance in Construction Projects, Hashem Al-Tabtabai, Nabil Kartam and Alex P. Alex, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinew-sky, ed., 1996), p.227-232. New Modeling Method Aims to Better Scout Scour, ET Mar/Apr. 96, pb.

Parametric Estimating: An Object-Oriented Approach, Irtishad U. Ahmad and Praveen K. Ommi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p254-260.

Seismic Strengthening of Low Rise Buildings, Theodore A. Pruess and John C. Theiss, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p397-404. Singapore Showcase, T. Y. Lin and Tan See Chee, P.E., CE

Nov. 96, p61-63. Slope Stabilization Using Old Rubber Tires and Geotex tiles, Paul S. H. Poh and Bengt B. Broms, CF Feb. 95, p76-79.

Traffic Congestion Leads to Innovative Funding, CE Sept. 96, p14.

Construction equipment Culture of Using Mobile Cranes for Building Construction, Aviad Shapira and Jay D. Glascock, CO Dec. 96, p298-

Evaluating the Performance of Construction Equipment Operators in Egypt, Ashraf M. Elazouni and Ismail M. Basha, CO June 96, p109-114.

Integration of CAD Drawings and Construction Robot Mo-tion Controllers, Jacho Son and Miroslaw J. Skibniewski, (Robotics for Challenging Environments, Laura A. Dem-setz, ed., 1996), p71-78.

An Interactive Planning Environment for Critical Opera-tions, Kuo-Liang Lin and Carl T. Haas, CO Sept. 96,

Optimizing Haul Unit Size and Number Based on Loading Facility Characteristics, Douglas D. Gransberg, CO Sept.

The Pre-Planning Phase and the Use of Multipurpose Construction Equipment in Pipeline Crossings, V. L. Khazanet, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p494-501.

Construction industry

Accelerating Innovation: New Style of Leadership Needed, Les McCraw, ME Sept./Oct. 96, p3-5.

Action Plans: An Enhanced Building Technology Evalua-tion Process, CERF Report #96-5021-02, Civil Engineering Research Foundation, 1996, 0-7844-0198-5, 42pp.

Analysis of Client-Satisfaction Factors in Construction In dustry, Syed M. Ahmed and Roozbeh Kangari, ME Mar./Apr. 95, p36-44.

ASCE's Role in the Work of the National Construction Dispute Resolution Committee of the American Arbitration Association, Robert F. Borg, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p1-9. Benchmarking Preproject-Planning Effort, M. R. Hamilton and G. E. Gibson, Jr., ME Mar/Apr. 96, p25-33.

Can A/E Grads Do Facility Design and Construction?, ME Sept/Oct. 96, p10-11.
CERF Aids NSF in Revising Program That Reflects Needs of Construction Industry, NE July 96, p15.
Characteristics of the Craft Workforce, James E. Rowings,

Mark O. Federle and Sara A. Birkland, CO Mar. 96, p83-90.

Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996, 0-7844-0204-3, 144pp.
Claims Analysis from Risk-Retention Professional Liability

Group, Jack R. Janney, C. Roy Vince and Jack D. Mad-sen, CF Aug. 96, p115-122. Commentary on MBE and FBE Participation in the Con-struction Industry, Amir Tavakoli, ME July/Aug. 96, p6-

A Concept in Networking, Kevin A. Taylor, ME Nov./Dec. 96, p9-10.

Construction Dispute Resolution Endorsed, CE June 96, p8.

Construction Execs Expect Growth, CE June 96, p8 Construction Industry Research Prospectuses for the 21st Century, CERF Report # 96-5016.T, Civil Engineering Research Foundation, 1996, 0-7844-0186-1, 130pp.

Construction Industry Web Site Opens, CE July 96, p24. Construction Megatrends, ME July/Aug. 96, p13.

The Construction Safety Record Since 1971, Jimmie Hinze, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p113-120.

Cooperation Can End Bid Evils, David R. Chapman, P.E., CE July 96, p32.

Costs of Accidents and Injuries to the Construction Industry, John G. Everett and Peter B. Frank, Jr., CO June 96, p158-164.

Creating the 21st Century through Innovation, CERF Report # 96-5016.E, Civil Engineering Research Foundation, 1996, 0-7844-0185-3, 60pp.

Dangerous Digging Requires New Excavation Methods, CE May 96, p22-23. Design Quality Management Activities, Abdulaziz A. Bubshait and Abmad Al-Abdulrazzak, El July 96, p104-

The Electronic Highway System for the Building Industry, Paul Mark Evans, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p262-272.

Engineering and Construction for Sustainable Development in the 21st Century: Assessing Global Research Needs, CERF Report #96-5016A, Civil Engineering Research Foundation, 1995, 0-7844-0142-X, 145pp.

Engineers Seek Better Way to Market New Building Technology, CE Sept. 96, p26-27.
Federal Legislation Will Increase Design-Build Opportunities, Michael C. Loulakis and William L. Cregger, CE July 96, p35.

Forecaster Makes Concrete Prognostication, CE Apr. 96, p20,22,24.

Future Changes/Improvements in Construction Safety, Enno "Ed" Koehn and Mahendar R. Surabhi, (Civil Engi-neers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p121-128.

1990), p121-126.
Guiding Principles, Narbey Khachaturian and John P. Gnaedinger, ME Nov/Dec. 96, p30-33.
Holistic Appraisal of Value Engineering in Construction in United States, Angela Palmer, John Kelly and Steven Male, CO Dec. 96, p324-328.
Leastforing OSHA Prographs of Particular Interest. Jimmie

Identifying OSHA Paragraphs of Particular Interest, Jimmie Hinze and Katherine Bren, CO Mar. 96, p98-100.

Industry-University Partnerships for Construction Engineering Education, Robert K. Tener, El Oct. 96, p156-162

International Sourcebook for Construction Industry Product Assessment, CERF Report #95-5021, July 1996, Civil Engineering Research Foundation, 1996, 0-7844-0173-X,

Join the EMPN, Gary D. Bates, ME July/Aug. 96, p4-5. Learning on the Jagged Edge, Bill Hayden, Jr., ME Jan./ Feb. 96, p23-25.

A Little Common Sense for the New Boss, David Purdy, SC Aug. 96, p91-92.

Major Changes to the AAA's Construction Arbitration Rules, George H. Friedman, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p10-20. Marketing is Top Priority for Construction Firms, ME Mar/Apr. 96, p9.

More-Stable Owner-Contractor Relationships, Peter Dozzi, Francis Hartman, Neil Tidsbury and Rafi Ashrafi, CO Mar. 96, p30-35.

Partnering Manual for Design and Construction by William C. Ronco and Jean S. Ronco, Frederick S. Merritt, AE Sept. 96, p122.

Progress in Chemical Admixtures: Where Are We? Mosongo Moukwa, CE Mar. 96, p6.

Redesign of Vendor-Data Processes for Industrial Projects, H. Y. Goucha and J. T. O'Connor, ME Sept/Oct. 96,

Redirecting ASCE Focus and Programs toward Greater Emphasis on Small Business, Joe Kaplan, SC May 96,

Small Business in the Construction Industry, Howard H. Bashford, SC Aug. 96, p71-73. Solving the Innovation Puzzle, Harvey M. Bernstein and Andrew C. Lemer, 1996, 0-7844-0023-7, 130pp.

Some Thoughts from the Editor, Robert B. Harris, CO Dec. 96, p297

Strategies for Achieving Excellence in Construction Safety Performance, Edward J. Jaselskis, Stuart D. Anderson and Jeffrey S. Russell, CO Mar. 96, p61-70. Subcontractor Beware, CE July 96, p27.

Successful Partnering: Fundamentals for Project Owners and Contractors by H. J. Schultzel and V. P. Unruh, Frederick S. Merritt, AE June 96, p82.

Technology Development and Sustainable Construction, Yasuyoshi Miyatake, ME July/Aug. 96, p23-27.

Viewpoint, George Seaden, IS Sept. 96, p103-107.
What Is the Standard of Care? Eugene A. Miller, ME Nov./Dec. 96, p40-46.
Winners Named in CERF Awards for Innovation, CE Mar.

96, p72 Working Hard, But Happily, ME July/Aug. 96, p12.

Construction inspection

Construction Representative: Scheduling and Cost Management, Allan F. Samuels and Michael J. Bruder, CO

Sept. 96, p281-290.

Interface Design for Pen-Based Computers in the FIRS Project, Eddy M. Rojas and Anthony D. Songer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1027-1033.

Construction management

3-D CAD Links to Project Savings, ME Sept./Oct. 96, p5-6. 3-D Graphical Simulation for Temporary Facility Planning using Object-Oriented Building Product Model, Kenji Ito, Yuji Kano, Jun Ueda and Shinichi Setoguchi, (Com-Tuji Kano, Jun Ueda and Shinichi Setoguchi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p49-55.
 & 4D CAD Modeling on Commercial Design-Build Projects, Frank Vaugn, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p390-396.

ACPSS—Animated Construction Process Simulation Sys-tem, Liang Y. Liu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p.397-403.

Adaptation of a Layout Design System to a New Domain: Construction Site Layouts, Bongjin Choi and Ulrich Flemming, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p711-717.

Adaptation of Barcode Technology for Construction Project Control, Diego Echeverry, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1034-1040.

Advanced Site Design Software for Landfill Closure and Remedial Design, Douglas Cervenak, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p818-824.

Animation of Complex Construction Simulation Models, Photios G. Ioannou and Julio Martinez. (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p620-626.

Application of Expert Systems to Workflow in Construction Management, Raja R. A. Issa and Charles S. Duvel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p781-785.

Paul Chinowsky, ed., 1996. Applications of Case-Based Reasoning in Construction Engineering and Management. Jyh-Bin Yang and Nie-Jia Yau, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p663-669.

Augmented Reality in Architectural Construction, Inspection, and Renovation, Anthony Webster, Steven Feiner, Blair MacIntyre, William Massie and Theodore Krueger, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p913-919.

Automated Generation of Productivity Functions, Alan D. Russell and Simaan AbouRizk, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p261-267.

Bridge Over the River Karnali, George Gesner and Selva

Selvaratnam, CE Apr. 96, p48-51.

Capital Facelift Takes Flight, Richard Cullerton and Albert J. Gravallese, CE Apr. 96, p40-43.

Certificate Program in Construction Engineering and Man-agement, Amarjit Singh and Harold S. Hamada, El July 96, p114-122.

The Changing Role of Construction Mitigation, Sallye E. Perrin and Kristin C. Lewis, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p63-69.

Computerized Tool for Hierarchical Simulation Modelin Anil Sawhney and Simaan M. AbouRizk, CP Apr. 96, pl 15-124.

A Conceptual Model for Construction Clients' Require-ments Processing, Chimay J. Anumba and Nosa F. O. Evbuomwan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p431-437.

Considering Constructor Prequalification, Gary D. Bates, P.E., ME Nov./Dec. 96, p10.

Construction Claims and Disputes: Causes and Cost/Time Overruns, Cheryl Semple, Francis T. Hartman and George Jergeas, CO Dec. 94, p785-795.

The Construction Manager as Project Integrator, Charles H. Kluenker, ME Mar./Apr. 96, p17-20.

Construction Project Control through Risk Management, E. N. Wirba, J. H. M. Tah and R. Howes, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p28-34.

Construction Regulated by Performance Information, Dean T. Kashiwagi and Chad T. Halmrast, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p551-558.

Contractor Markets Management Software, CE Dec. 96, p20. Data Exchange: File Transfer, Transaction Processing and

Application Interoperability, James Andrew Arnold and Paul Teicholz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p438-444

De Architectura—Hypermedia On-line Architecture, Build-ing & Construction Bookshelf: The First Step Toward an Hypermedial Approach to Computer Aided Architectural Design, Alfredo M. Ronchi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p746-752.

A Decision Support Tool for the Steel Building Industry, Gregory P. Pasley and W. M. Kim Roddis, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p725-731.

Development of a Knowledge-Driven Interactive Contractual Agreement Preparation Program using Multimedia, Thomas F. Harrington, Cheryl L. Ruf and Guillermo F. Salazar, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p649-655.

Developmental Approach for the Use of Expert Systems in Preparing Bidding Documents, Michael Bowen and Guillermo F. Salazar, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p656-662.

Electrical Construction Foreman Task Scheduling, Bolivar A. Senior, CO Dec. 96, p363-369.

Green Light, John Casey, CE May 96, p56-59.

Henry's Problem and Its Representation --- Representing an

A Hybrid Approach to Integration in Construction, E. T. Thompson, J. H. M. Tah and R. Howes, (Computing in

Thompson, J. H. M. Ian and R. Howes, Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p417-423. Information Technology for Better Management of Change, Cost and Schedule in Construction Projects, Feniosky Peña-Mora and Hong Chen, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p613-619.

Innovative Building Construction Technique: Modified Up/Down Method, Joon H. Paek and Jong H. Ock, CO

June 96, p141-146.

June 96, p141-146.

An Integrated Intelligent Planning Approach for Modular Construction, Nashwan Dawood, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p410-416.

Interactive 4D-CAD, Kathleen McKinney, Jennifer Kim, Martin Fischer and Craig Howard, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p383-389.

ed., 1996), p383-389.
Interface Design for Pen-Based Computers in the FIRS Project, Eddy M. Rojas and Anthony D. Songer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1027-1033.
A Knowledge Based Construction Contractor Proposal Evaluation System, John A. Kuprenas and Farzin Madiation of the Contraction of Contractor Proposal Evaluation System, John A. Kuprenas and Farzin Madiation of Contractor in Contractor Inc. (In Engineering Lorge Vaness ed.)

Evaluation System, John A. Kuprenas and Farzin Mad-jidi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p247-253. LAN Based Tools for a Project Environment, Edward Han-inger, Ludi Billings and Kate Oertel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p944-950.

Managing Interdisciplinary Project Teams through the Web, Robin E. Goodman and Paul S. Chinowsky, (Com-

puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p452-458. Merit Shop Recruitment and Selection Practices in Ala-bama, Roger S. Wolters and Rebecca C. Burleson, CO

June 96, p152-157.

Mobile Field Data Acquisition for Construction Quality
Control and ISO 9000 Certification, Robert F. Cox and Raja R. A. Issa, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1041-1046

A Multi-Media Information System for Construction Delay Management, Osama Abudayyeh, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p593-599.

A Multimedia Expert System for Slurry Wall Construction, Nie-Jia Yau and Chien-Hong Lu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p600-606.

ed., 1996), p600-606.

Neural Networks for the Identification and Control of Quantity Variance in Construction Projects, Hashem Al-Tabtabai, Nabil Kartam and Alex P. Alex, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p227-232.

A New Model of Risk Allocation for Construction Contracts based on Fair Liabilities between Parties, Harkunti P. Rahavu and Payid G. Carmichae (Computing in

P. Rahayu and David G. Carmichael, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-

Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p35-41. Object-Oriented Construction Information Framework for Construction Management, Sangyoon Chin, Annette L. Stumpf and Liang Y. Liu, (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), 236-267.

Object-Oriented Model for Integrating Construction Product and Process Information, Annette L. Stumpf, Ra-jaram Ganeshan, Sangyoon Chin and Liang Y. Liu, CP July 96, p204-212.

Parametric Estimating: An Object-Oriented Approach, Irtishad U. Ahmad and Praveen K. Ommi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p254-260. Process Modeling for Design-Build Project Management, Process Modeling for Design-Build Project Management, Yan Jin, Tore Christiansen, Raymond E. Levitt and Paul Teicholz, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), 6942-648. Project Modeling in Construction Applications, Thomas Froese, Kevin Yu and Syed Shahid, (Computing in Civil

Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p572-578.

Requirements for Industry Applicability of Knowledge-Based Schedulers, Florian Aalami and Martin A. Fischer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p774-780.

A Software Architecture for Concurrent Lifecycle Design and Construction, Nosa F. O. Evbuomwan and Chimay J. Anumba, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p424-430.

Some Thoughts from the Editor, Robert B. Harris, CO Dec.

96, p297.

Space Planning Tools for Multi-Story Construction, David R. Riley and Iris D. Tommelein, (Computing in Civil En-gineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p718-724.

STEP and the Building Construction Core Model, Thomas Froese, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p445-451.

Strategies for the Use of IT in the Construction Industry of Singapore, Krishan Mathur, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1065-1071.

pervise, Inspect, or Observe? The Structural Engineer's Role in Construction, Otto Avvakumovits, SC Aug. 96,

Systematizing Construction Project Evaluations, Mohan M. Kumaraswamy and Antony Thorpe, ME Jan./Feb. 96,

Theoretical Foundations for Computer-Supported Negotia-tion, Feniosky Peña-Mora and James Kennedy. (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p186-192.

Twinning Time and Cost in Incentive-Based Contracts, A. Jaafari, ME July/Aug. 96, p62-72.

Using CPM-Chart Animation to Illustrate the Evolution of Schedules, Julio C. Martinez and John R. Knoke, (Com puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p627-633.

Using Process Modeling to Gain ISO 9000 Certification in Construction, Raja R. A. Issa and Robert F. Cox, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1013-1019.

Visualization of Spatial and Geometric Databases for Construction Projects, M. R. Halfawy, F. C. Hadipriono, J. W. Duane and R. E. Larew, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p920-926.

What Is the Standard of Care? Eugene A. Miller, ME Nov./Dec. 96, p40-46.

Construction materials

Advanced Composites Build on Success, Frieder Seible and Vistasp Karbhari, CE Aug. 96, p44-47.

vistasp Karohari, C.E. Aug. 96, p44-47.
Aggregates for Construction from Vitrified Chromium
Contaminated Soils, Jay N. Meegoda, W. Kamolpormwijit, David A. Vaccari, A. S. Ezeldin, L. Walden,
W. A. Ward, B. A. Noval, R. T. Mueller and S. Santora,
(Engineered Contaminated Soils and Interaction of Soil
Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo,
ed. and L. N. Reddi, ed., 1996), p31-46.
Alabama-Huntsville Syndeuts, Again Crounand as Concepts

Alabama-Huntsville Students Again Crowned as Concrete

Canoe Champs, NE Aug. 96, pl.6.
Behavior of Fresh Mortar in a Vacuum and Microstructure of Mortar Hardened in a Vacuum, L. J. Powers-Couche and T. D. Lin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p608-613.

Catching Up on Composites, Harry Goldstein, CE Mar. 96, p47-49

Challenges in the Construction of a Lunar Base, Roy Sargent and Keith Hampson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p881-888.

oncrete -- A Practical Construction Material for Mars, David S. McKay and Carlton C. Allen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p566-570.

Concrete Space Station Construction in Lunar Orbit, Don J. Wade, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p578-584.

Construction Applications of Polyolefin Fiber Reinforced Concrete, D. Strand, C. N. MacDonald, V. Ramakrish-nan and V. N. Rajpathak, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p103-112.

Continuing Data Needs for Lunar Radiation Protection, Richard R. Roll, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p646-

Cool Roofs and Pavements to Help Hot Smoggy Cities, Ar-thur H. Rosenfeld, Hashem Akbari, Haider Taha and Melvin Pomerantz, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1-13.

County Responsible for Bond, CE June 96, p24.

The Effect of the Lunar Surface Environment upon Ma-chinery, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Engineering Aspects of Wetland Mitigation, A. Mahendra Rodrigo, Kenneth P. Dunne, Lewis O. Morgan and Rao Nivargikar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2027-2032.

Environmental Impacts of Autoclaved Cellular Concrete, M. C. Latona, R. D. Neufeld, L. E. Vallejo, W. Hu and C. Kelly, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p57-69.

Fly Ash and Tire Chips for Highway Embankments, M. Basheer, C. Vipulanandan and M. W. O'Neill, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p593-602.

Glascrete? - Disposing of Non-Recyclable Glass, Venkata S. Panchakarla and Millard W. Hall, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p509-518.

High-Performance Pipe Products Fabricated with Reactive Powder Concrete, Edward F. O'Neil and William M. Dowd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1320-1329.

In Situ Measurement of Rockfill Properties, Anne Eckert Clift, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p37-48.

An Innovative Plastic Housing System, E. Burnett, A. Arenja and L. Holroyd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p545-554.

Liability to Asset: Beneficial Reuse of Stabilized Contami-nated Soils, Michael F. Conway, (Engineered Contami-nated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p47-56.

Lunar Regolith, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p630-638.

Materials for Tomorrow's Infrastructure: A Ten Year Plan for Deploying High Performance Construction Materials and Systems, CERF Report #94-5011E, Civil Engineering Research Foundation, 1994, 0-7844-0066-0, 55pp.

Materials for Tomorrow's Infrastructure: A Ten Year Pla for Deploying High Performance Construction Materials and Systems, CERF Report #94-5011E, Civil Engineering Research Foundation, 1994, 0-7844-0059-8, 150pp.

Mechanical Properties of Vitrified Soils, Christopher Y. Tuan and William C. Dass, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p731-740.

New Materials for the 21st Century, Edward E. DiTomas, (Materials for the New Millennium, Ken P. Chong, ed., , 1996), p14-22.

Predicting the Service Lives of Materials of Construction, Geoffrey Frohnsdorff, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p38-53.

Seismic Education Needs of the Building Trades and Code Enforcement Personnel, Cynthia Hoover, Marjoric Greene and James Russell, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p101-102.

Study on Lunar Cement Production Using Hokkaido Anorthite and Hokkaido Space Development Activities, T. Horiguchi, N. Saeki, T. Yoneda, T. Hoshi and T. D. Lin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p621-629.

Technology for Mining of Building Materials at First Stages of Moon Development, Oleg V. Nagovicin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p830-839.

Use of Lunar Type Soil for Concrete Construction, Jay N. Meegoda, Hsin-Yu Shan, Jing-Fu Huang, Jia-Wen Tseng and Su-Hwa Cheng, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p614-620.

Use of Remediated Petroleum Contaminated Soils in Highway Construction, Jay N. Meegoda, Robert T. Mueller and Frank Palise, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p1-16.

A User's Experience in Design and Field Quality Control With the Superpave System. Gerald Huber. Xishun Zhang and Robin Fontaine, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p711-720.

Using NDT to Fasttrack Pavements, James K. Cable, (Materials for the New Millennium, Ken P. Chong, ed.,

1996), p475-481.

"SIMCON—A Novel High Performance Fiber-Mat Reinforced Cement Composite for Repair, Retrofit and New Construction", Neven Krstulovic-Opara, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p288-

Construction methods

30-Inch Gas Pipeline Crossing of the San Juan River: Open Cut Excavation in Quality Water Area, James D. Evanoff and Neil P. Stockholm. (*Pipeline Crossings 1996*, Law-rence F. Catalano, ed., 1996), p186-193. Architect Gives Precast Care to Nursing Center, CE Sept.

96, p96.

Assurance of Structural Safety-Priority Issue for Structur-al Engineers, Frank J. Heger, SC Nov. 96, p113-118.

Balancing on the Tides, Boris Levintov, P.E. and Joseph Klein, P.E., CE Oct. 96, p48-51. Cellular Rigid Pavement, John K. Bright and John R. Mays,

TE Sept /Oct. 96, p381-387.

Challenges in the Construction of a Lunar Base, Roy Sargent and Keith Hampson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p881-888.

Comparison of Construction Alternatives Using Matched Simulation Experiments, Photios G. Ioannou and Julio C. Martinez, CO Sept. 96, p231-241.

Construction System for Lunar Base, Shinji Matsumoto, Nobuo Isome, Koji Oishi, Hiroshi Kanamori, Kenji Takagi, Yoshiro Kai, Michiya Suzuki and Satoru Suzuki, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p140-144.

Crossing of MacDonald Ranch Wash in Southern Nevada, Roger Beieler, Alvin R. Anderson, Russ Snow and Carol Tate, (Pipeline Crossings 1996, Lawrence F. Catalano,

ed., 1996), p282-289.

Decatur Airport Off-Peak Construction Allows Airport to Continue Operations, Charles A. Hagloch, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p115-127.

Design-Build Continues to Grow in U.S., CE Dec. 96,

Economic Comparison between Drywall and Conventional Partitions, Ronie Navon, David Carmel and Arnon Bentur, AE Dec. 96, p129-134.

Factors Affecting the Selection of a Crossing Method, David E. Hairston, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p214-221.

If I Had Not Seen It, I Would Not Have Believed It! John E. Meeks, P.E., SC Nov. 96, p119-121.

Innovative Building Construction Technique: Modified Up/Down Method, Joon H. Paek and Jong H. Ock, CO June 96, p141-146.

Microtunneling Database for the USA and Canada From 1984 to 1995, Alan Atalah and Paul Hadala, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996),

p332-399.
Pipeline Crossings (M&R No. 89), Task Committee on Pipeline Crossings of the Technical Committee on Pipeline Crossings of the Pipeline Division of the American Society of Civil Engineers, (Randy Robertson, chmn.), 1996, 0-7844-0183-7, 140pp.
Real-Time Construction Staking, Don K. Nasland and David Paul Johnson, CE June 96, p46-49.
Road and Artifield Development in the Subarctic and Arctic.

David Paul Jonnson, C.E. June 95, 190-97.
Road and Airfield Development in the Subarctic and Arctic,
Alaska and Northwest Canada, James W. Rooney and
Ted S. Vinson, (Roads and Airfields in Cold Regions,
Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p1-22.

Scheduling with Computer-Interpretable Construction Method Models, Martin A. Fischer and Florian Aalami,

CO Dec. 96, p337-347.

Smithfield Interceptor Force Main River Crossings, Fredrick M. Muncy, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p173-179.

Telesleeve Crossing, David E. Comfort and Paul F. Lucas, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p139-146.

To Know or Not to Know: The Site Characterization Process and Its' Role in Horizontal Directionally Drilled Pipeline River Crossings, Charles W. Hair, III, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p56-

Utilizing Directional Drilling Techniques to Install Underwater Watermain, Timothy M. Stinson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p180-185.

Construction planning

Construction of a Layout Design System to a New Domain: Construction Site Layouts, Bongjin Choi and Ulrich Flemming, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p711-717.

LPS: The Automated Lift Planning System, Mike Williams and Craig Bennett, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed.,

1996), p812-817.

ArcSite: Enhanced GIS for Construction Site Layout, M. Y. Cheng and J. T. O'Connor, CO Dec. 96, p329-336.

Artificial Intelligence (AI) Supported Process Planning System for Construction, Md. Salim, (Analysis and Com-putation, Franklin Y. Cheng, ed., 1996), p510-518.

The Changing Role of Construction Mitigation, Sallye E. Perrin and Kristin C. Lewis, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p63-69.

Computer-Aided Design of Braced Excavations, Chandra S. Brahma and Howard C. Biddiecome, Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p.838-844.

Construction Planning through Multi-Agent Constraint Sat-isfaction, Milorad Sucur and Francois Grobler, (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p240-246.

Construction Waste: Quantification and Source Evaluation, B. A. G. Bossink and H. J. H. Brouwers, CO Mar. 96,

p55-60. Electrical Construction Foreman Task Scheduling, Bolivar

A. Senior, CO Dec. 96, p363-369. Estimating and Project Management for Building Contrac-tors, Michael Kitchens, 1996, 0-7844-0148-9, 242pp. Guiding Principles, Narbey Khachaturian and John P. Gnaedinger, ME Nov/Dec. 96, p30-33.

An Integrated Intelligent Planning Approach for Modular Construction, Nashwan Dawood, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p410-416.

An Interactive Planning Environment for Critical Opera-tions, Kuo-Liang Lin and Carl T. Haas, CO Sept. 96, p212-222.

Multiple Heavy Lifts Optimization, Kuo-Liang Lin and Carl T. Haas, CO Dec. 96, p354-362.

Project-Network Analysis Using Fuzzy Sets Theory, Pasit Lorterapong and Osama Moselhi, CO Dec. 96, p308-318. Requirements for Industry Applicability of Knowledge-Based Schedulers, Florian Aalami and Martin A. Fischer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p774-780.

Railey and Iris D. Tommelein, (Computing in Civil Engineering, Jorge Vangas, ed., and Paul Chinowsky, ed., 1996), p718-724.

State is Project Owner, CE Apr. 96, p28. Structural Design Forum, Carl J. Lehman, SC May 96.

Proceedings of the Auburn VPS Recycle Fiber Mill, Ronald J. Zabilski, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p482-

Construction practices

Residential Construction Failures Caused by Hurricane Andrew, Wimal Suaris and Mohammed S. Khan, CF Feb. 95, p24-33.

Construction site accidents

CISC-Computer Integrated Spatial Control for Autonomous Trenching and Pipe-Laying, Xiaodong Huang and Leonhard E. Bernold, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p502-509.

Construction Forum, SC Nov. 96, p99-103.
The Construction Safety Record Since 1971, Jimmie Hinze, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p113-120.

Contractor Responsible for Own Negligence, CE Jan. 96, p26.

Costs of Accidents and Injuries to the Construction Industry, John G. Everett and Peter B. Frank, Jr., CO June 96, p158-164. Hard Cases Make Bad Law, Carol J. Patterson, ME May/

June 96, p25-28.

If I Had Not Seen It, I Would Not Have Believed It! John E. Meeks, P.E., SC Nov. 96, p119-121.

Watch Your Step, CE May 96, p24.

Indemnity Not Valid, CE Jan. 96, p26.
Larew, Richard E. Ashraf S. Barsoum and Fabian C. Hadipriono, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p906-912. OSHA Safety Regulations, CE Nov. 96, p28. Reasonable Care Must Be Taken, CE Dec. 96, p24.

Subcontractor's Employee Is Subcontractor's Problem, CE Feb. 96, p24.

Using Virtual Reality to Avoid Construction Falls, Diah R. Soedarmono, Fabian C. Hadipriono and Richard E. Larew, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p899-905.

Construction sites

Adaptation of a Layout Design System to a New Domain: Construction Site Layouts, Bongjin Choi and Ulrich Flemming, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p711-717.

Advanced Site Design Software for Landfill Closure and Remedial Design, Douglas Cervenak, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p818-824.

asy, ca., 1990, polosozi.
Application of Ground-Penetrating Radar to a Site Investigation Involving Shallow Faults, Christopher L. Liner and Jeffrey L. Liner, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p101-111.

Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Geotechnical Special Publication No. 62, Paul Michaels, ed. and Richard Woods, ed., 1996, 0-7844-0208-6, 128pp.

High-Octane Safety on a Low-Octane Budget, Paul J. Rich, ME Sept./Oct. 96, p9-10.

How Crane Safety on Construction Sites Has Changed in 25 Years, Harlan W. Fair, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p84-92. OSHA Safety Regulations, CE Nov. 96, p28.

Consultants

The Importance of Invoicing, Sri Krishnamachari, CE Jan. 96, p28.

Consulting engineers

Big Business, Paul J. Zofnass, CE May 96, p52-55.

Consulting Engineering: A Guide for the Engagement of Engineering Services, rev. ed. (M&R No. 45), Task Committee on Revision of Manual No. 45 of the Committee on Standards of Practice of the American Society of Civil Engineers, (David F. Garber, chmn.), 1996, 0-7844-0152-7, 50pp.

Controlling Overhead Costs, Kirti Gandhi, ME July/Aug. 96, p18-22.

Delivering the Project in Technical Consulting, James L Hawley and John Frauenhoffer, AE June 96, p55-62.

Design Quality Management Activities, Abdulaziz A. Bubshait and Ahmad Al-Abdulrazzak, El July 96, p104-

Editors' Letters, Joe Kaplan, P.E., SC Feb. 96, pl.

Emanuel Pisetzner Dies at 69; Top Engineer with New York City Firm, NE Apr. 96, p7.

Human Resources Strategies for Successful Consulting Engineering Firms, Patricia A. Hecker, ME Sept/Oct. 96, p32-36

Industry Leaders Meet the Press, CE Apr. 96, p8.

It's Project Management, Stupid! Stuart G. Walesh, ME Jan./Feb. 96, p14-17.

Partnering: Building a Stronger Design Team, Richard G. Weingardt, AE June 96, p49-54.

Consulting services

Analytic Approach Helps Firm Expand Business, CE Dec. 96, p22

Changing Times for Engineers Is Focus of Triennial Con-clave between U.S., Britain, Virginia Fairweather, NE Dec. 96, p1,10.

Environmental Firms Merge, CE Dec. 96, p22.

New on the Web, CE Mar. 96, p8.

Reader Urges Peers to Accept Challenge, John Dunnicliff and Robert Hickman, CE Feb. 96, p26,28.

Interference Assemblies, R. R. Little, G. R. Frederick and B. K. Park, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p240-241.

Photoelastic Determination of Contact Stresses of Founda-

tions, G. U. Müller, GT Aug. 96, p692-696. Semicontinuous Mathematical Model for Bending of Multi-layered Wire Strands, Claude Jolicoeur and Alain Cardou, EM July 96, p643-650.

Interparticle Contact Behavior and Wave Propagation, Giovanni Cascante and J. Carlos Santamarina, GT Oct. 96, p831-839.

Refined Three-Dimensional Finite Element Model for End-Plate Connection, Chang-Koon Choi and Gi-Taek Chung, ST Nov. 96, p1307-1316.

Containers

Benefits/Impacts of Utilizing Depleted Uranium Silicate Glass as Backfill for Spent Fuel Waste Packages, R. B. Pope, C. W. Forsberg, R. C. Ashline, M. D. DeHart, K. W. Childs and J. S. Tang, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Bounding Axial Profile Analysis for the Topical Report Database, Chien-Hsiang Chen and Theodore A. Parish, (High Level Radioactive Waste Management, Technical

Program Committee, 1996), p336-339

Corrosion Test on Candidate Waste Package Basket Materials for the Yucca Mountain Project, Richard A. Van Konynenburg and Paul G. Curtis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p464-467.

Dense Organic Liquids Reduce GA-4 Reactivity Margin, B. Snyder, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p333-335.

Depleted-Uranium-Silicate Backfill of Spent-Fuel Waste Packages for Repository Containment and Criticality Control, Charles W. Forsberg, Ron B. Pope, Ron C. Ashline, Mark D. DeHart, Kenneth W. Childs and Jabo S. Tang, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p366-368.

Drift Apex Temperature Distributions due to Cylindrical Heat Sources, W. G. Culbreth and J. J. Ventresca, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p435-437.

gram Committee, 1990, p433-437.
Dynamic Response of Rectangular Flexible Fluid Containers, Jae Kwan Kim, Hyun Moo Koh and Im Jong Kwahk, EM Sept. 96, p807-817.

Evaluation of a Bi-Directional Aluminum Honeycomb Impact Limiter Design, Marvin J. Doman, (High Level Ra-dioactive Waste Management, Technical Program Com-mittee, 1996), p357-359.

Fuel and Cladding Oxidation under Expected Repository Conditions, J. Kevin McCoy, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p396-398.

Impacts of Cathodic Protection on Waste Package Performance, Joel E. Atkins, Joon H. Lee and Robert W. Andrews, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p459-461.

Impacts of SNF Burnup Credit on the Shipment Capability of the GA-4 Cask, Amir S. Mobasheran, William Lake and John Richardson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p330-332

Isotopic Systematics of Saline Waters at Aspo and Laxe-mar, Sweden, Bill Wallin and Zell Peterman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p41-42.

Legal Weight Truck Cask Response to Regulatory Format Thermal Events, Part I: Fuel Cladding, M. Greiner, R. J. Faulkner and Y. Jin, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p351-353.

Legal Weight Truck Cask Response to Regulatory Format hermal Events, Part 2: Containment Seal, M. Greiner, Management, Technical Program Committee, 1996), p354-356.

Measurement of the DWPF Canistered Wasteform Weight and Free Volume, D. T. Herman, J. R. Harbour, M. K. Andrews and C. A. Cicero, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p402-403 Microbiological Influenced Corrosion (MIC) of Carbon Steel Utilized in the Construction of Nuclear Waste Canisters, Dave Bergman, Pati Castro, Beth Pitonzo, Penny Amy and Denny Jones, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Mixed Convection Heat Transfer Coefficients for Horizon-tally Emplaced Waste Packages, J. J. Ventresca, W. G. Culbreth and C. Lawson, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

p451-453.

Parametric Thermal Evaluations of Waste Package Emplacement, Robert H. Bahney, III and Thomas W. Doering, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p445-447.

Pitting Corrosion of Container Materials in Anticipated Repository Environments, Ajit K. Roy and R. Daniel McCright, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p454-456.

Probabilistic Evaluation of Postclosure Criticality Events Internal to the Waste Package, Peter Gottlieb and John R. Massari, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p345-347

Reducing Environmental Impacts through Non-Uniform Loading of Casks, N. Barrie McLeod, (High Level Radioactive Waste Management, Technical Program Commit-tee, 1996), p372-373.

Relative Humidity in the Near-Field Environment, Wunan Lin, Jeffery J. Roberts and David Ruddle, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p128-129.

Continues, 1990, p120-129.

Three-Dimensional Nonlinear Transient Dynamic Accident Analyses of Waste Packages, Scott M. Bennett, Zekai Ceylan and Thomas W. Doering, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p382-384.

Total System Performance Predictions (TSPA-1995) for the Potential High-Level Waste Repository at Yucca Mountain, S. David Sevougian, Robert W. Andrews and Jerry A. McNeish, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p295-297.

Transportation Shortcuts Exist, J. F. Koenen, P.E., CE Oct. 96, p37-38.

"Dry Canal" to Link Atlantic and Pacific, CE Dec. 96, p18.

Autotrophic and Heterotrophic Bacterial Diversity from Yucca Mountain, M. Khalil, D. L. Haldeman, A. Igbinovia, P. Castro, L. Ragatz and P. Amy, (High Level Radioactive Waste Management, Technical Program Commit-

tee, 1996), p9-11.

100. 1970), pp-11.
Comparison of Stochastic Programming and Robust Optimization Models for Groundwater Plume Containment, David W. Watkins, Jr. and Dene C. McKinney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p612-617.

Electrode Placement for Subsurface Electric Field Genera-tion, William O. Rasmussen and Muniram Budhu, EE Aug. 96, p764-768.

Hydraulic Conductivity of Frozen Granular Soils, Orlando B. Andersland, David C. Wiggert and Simon H. Davies,

EE Mar. 96, p212-216.

Initial Studies to Assess Microbial Impacts on Nuclear Waste Disposal, J. M. Horn, Annemarie Meike, R. D. McCright and B. Economides, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p7-8.

Key Risk Attributes in the Perception of Engineering De-sign Options, P. Grindrod, D. J. Waters, H. Takase and F. A. Yousaf, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p499-501.

Microbial Studies in the Canadian Nuclear Fuel Waste Management Program, Simcha Stroes-Gascoyne, (High Level Radioactive Waste Management, Technical Pro-gram Committee, 1996), p4-6.

A Program to Assess Microbial Impacts on Nuclear Waste Containment, Joanne Horn and Annemarie Meike, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p1-3.

Protecting Dredged Material Containment Levees Along the Houston Ship Channel, Deron N. Austin and Marc S. Theisen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3121-3128.

Secondary Containment Design Practices, Charles R. Tay-lor, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p547-552.

Strategy for Rapid Evaluation of Waste Containment and Isolation at the Yucca Mountain Site, Larry D. Rickert-sen, Edward C. Taylor, Janet A. Docka and Jean L. Younker, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p303-304.

An Adaptive Finite Element Model for Saturated and Un-saturated Porous Media, D. W. Pepper, M. L. Lytle and D. B. Carrington, (*High Level Radioactive Waste Man-*agement, Technical Program Committee, 1996), p105-

Advective-Diffusive Contaminant Migration in Unsaturated Sand and Gravel, R. Kerry Rowe and K. Badv, GT Dec.

Analytical Solutions for Two-Dimensional Transport Equa-tion with Time-Dependent Dispersion Coefficients, Mus-tafa M. Aral and Boshu Liao, HE Jan. 96, p20-32.

Aquifer Transmissivity Computations Based on Data from Pump-and-Treat Facilities, Walter Z. Tang, Dean F. Ra-deloff and Vassilios A. Tsihrintzis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1273-1278.

Bayesian Decision Analysis for Contaminant Travel Time, Marian W. Kemblowski and Hewa A. Wijedasa, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p207-218.

Bayesian Model for Fate and Transport of Polychlorinated Biphenyl in Upper Hudson River, Laura J. Steinberg, Kenneth H. Reckhow and Robert L. Wolpert, EE May 96, p341-349.

30, post-3-9.

Biodegradation Modeling of a Closed Landfill Site, Sai K. R. Edavally, Lawrence H. Woodbury and G. Padmanabhan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

Congress & Destructive Mater, Chemonayja 2016, 1996), p2510-2515.
Calibration of XRF and Laboratory Analyses of Soil, Blair J. McDonald, Janice J. Trautner, Alan G. Seelos and Richard K. Glanzman, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth. ed., 1996), p287-296.

Comparison of Stochastic Programming and Robust Opti-mization Models for Groundwater Plume Containment, David W. Watkins, Jr. and Daene C. McKinney, (North American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996), p612-617.
Comparisons of Site Characterization Methods Using Mixed Data, Donna M. Rizzo, Theodore P. Lillys and David E. Dougherty, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p167-179. Contaminant Transport in Nonisothermal Fractured Porous

Media, Mao Bai, Jean-Claude Roegiers and Hilary I. Inyang, EE May 96, p416-423.

Critical Concepts for Column Testing, Charles D. Shackel-

ford, GT Oct. 94, p1804-1828. Critical Issues in the Monitoring and Control of Toxic Air Contaminants at POTWs, Federico G. A. Vagliasindi and Vincenzo Belgiorno, (North American Water and Envi-

ronment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p81-86.

Bathala, ed., 1990), p81-86.
Desorption of Soil Contaminants Due to Rainwater Infiltration, Anand Prakash, HY Sept. 96, p523-525.
The Dielectric Constant of Soil-NAPL Mixtures at Low Frequencies (100 Hz—10 kHz), Victor A. Rinaldi and Emilio R. Redolfi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p163-174.

Dimensional Analysis of Colloid-Facilitated Ground-Water Contaminant Transport, M. Yavuz Corapcioglu and Shi-yan Jiang, HE Oct. 96, p139-143.

Discussions of a 3D Numerical Simulation of Transient Regional Groundwater Flow and Transport, Bernard B. Hsieh, Mansour Zakikhani and William D. Martin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Editor's Note, Thomas L. Theis, EE May 96, p340. Editor's Note, Thomas L. Theis, EE June 96, p452. Editor's Note, Thomas L. Theis, EE Aug. 96, p675. Editor's Note, Thomas L. Theis, EE Sept. 96, p778.

Effect of Divergent Flow on Mass Conservation in Euleri-an-Lagrangian Transport Schemes, Ling Tang and E. Eric Adams, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p106-115.

Effects of Vapor Extraction on Contaminant Flux to A

mosphere and Ground Water, Tajfe G. Poulsen, Joel W. Massmann and Per Moldrup, EE Aug. 96, p700-706. Engineered Contaminated Soils and Interaction of Soil Geomembranes, Geotechnical Special Publication No. 59, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996, 0-7844-0213-2, 144pp.

EPA Requires Cryptosporidium Watch, CE July 96, p20.
Factors Limiting Microbial Activity in Volcanic Tuff at Yucca Mountain, Thomas L. Kieft, William P. Kovacik and Jennifer Taylor, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Gas-Phase Removal of H₂S and NH₃ with Dielectric Barrier Discharges, Moo Been Chang and Tian Deng Tseng, EE

Jan. 96, p41-46.

Geosynthetic Tubes for Confining Pressurized Slurry: Some Design Aspects, Dov Leshchinsky, Ora Leshchin-sky, Hoe I. Ling and Paul A. Gilbert, GT Aug. 96, p682-

146

Hydrodynamic Simulations in Sediment-Carried Contaminant Modeling for the Buffalo River, New York, Ruochuan Gu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1039-1044.

Iron Filing Installation Cleans Contaminants, CE Nov. 96,

An Iterative, Probabilistic Environmental Decision Analysis Approach, Erik K. Webb, Stephen H. Conrad and Theresa J. Brown, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p249-264.

Liability to Asset: Beneficial Reuse of Stabilized Contaminated Soils, Michael F. Conway, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p47-56.

Loss of Contaminants from Soil During Runoff Events, A. Parr, S. Zou and B. McEnroe, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), 970-81.

Management of Contaminated Groundwater Using Natural Attenuation, David F. Laney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2011-2020.

Model for Efficiency of Soil Flushing Using PVD-Enhanced System, M. A. Gabr, J. Wang and J. J. Bowders, GT Nov. 96, p914-919.

Modeling Contaminated Sediments, Robert K. Simons and Daryl B. Simons, CE Sept. 96, p73-75.

Modeling Groundwater Contaminant by Unstructured FVM, Jinglian J. Liu, Bharat K. Soni and Victor L. Zitta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2212-2217.

Modeling of Contaminant Transport in Groundwater in Areas of Discontinuous Permafrost, Ron Johnson, Doug Kane, Larry Hinzman, Greg Light and Ann Farris, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p82-93.

Nearshore Hydrodynamic and Water Quality Modeling for Water Intake Evaluation and Design, Kwang K. Lee, Bing Shen and Chung Shyan Wu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2456-2461.

A Network Transfer Function Model with a Markovian Prior for Tracer Tests Evaluation, Nela Zavaljevski and Alvin Shapiro, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p70-72.

Optimization of a Ground-Water Injection/Extraction System, Anand Prakash, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1167-1172.

Overview of DoD Research in Groundwater Modeling, J. P. Holland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2565-2570.

PCE in Dewatering Flows - A Case Study Risk-Based Clean-Up Action Levels, Shala L. Craig and Sri Krishnamachari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2242-2247.

Permeability of Clay Liners with Contaminants, Puvvadi V. Sivapullaiah and Asuri Sridharan. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p506-511.

A Pilot-Scale Study of In Situ Hydrocarbon Remediation of Contamination in Soil and Groundwater at Fort Wainwright, Alaska, Timothy F. Gould and Mark Wallace, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p106-115. Pollutant Transport Across Porous Stream Beds, C. Mendoza and D. Zhou, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1581-1586.

A Practical Approach to Watershed Sanitary Surveys, Sachiko Itagaki and Elizabeth Teien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2964-2969.

Predicting Transport of Organics through Soil Columns using Distributed Mass-Transfer Rates, Teresa B. Culver and Stephen P. Hallisey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2005-2010.

Prediction of Storm Induced Flows in Great Lakes Estuarine Inlets, James H. Riley and William L. Wood, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p583-595.

Regeneration of Adsorbents Using Heterogeneous Photocatalytic Oxidation, Junbiao Liu, John C. Crittenden, David W. Hand and David L. Perram, EE Aug. 96, p707-713.

Regional Groundwater Management with Health Risk Assessment, Susan D. Pelmulder and Yung-Hsin Sun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1291-1296.

Removal of Arsenic From Ground Water Using Granular Activated Carbon, Brock D. Buche and Lawrence P. Owens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1173-1177.

Research to Application: Network Models to Simulate Flow and Transport in Heterogeneous Media, John F. Peters and Stacy E. Howington, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2571-2576.

Retention of Multiple Heavy Metal Ions by Fly Ash, A. Sridharan, N. S. Pandian and C. Rajasekhar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1608-1613.

Retention-Tank Systems: A Unique Operating Practice for Managing Complex Waste Streams at Research and Development Facilities, Shari Brigdon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1771-1776.

Screening-Level Approach for Estimating Contaminant Export from Tributaries, Mark Velleux, Joseph Gailani and Doug Endicott, EE June 96, p503-514.

Secondary Containment Design Practices, Charles R. Taylor, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p547-552.

Sediment and Contaminant Transport in Green Bay, Zenitha Chroneer, Mary Cardenas, James Lick and Wilbert Lick, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p313-324.

Sediment Transport in a Thermally Stratified Bay, Kai-Ping Wang, Zenitha Chroneer and Wilbert Lick, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p466-477.

Significance of Geologic Features on the Contaminant Migration from Landfill Sites, Rao Nivargikar and Thomas Voss, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), 988-993.

SoilRisk: Risk Assessment Model for Organic Contaminants in Soil, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE May 96, p388-398.

Solute Breakthrough Curves for Processed Kaolin at Low Flow Rates, Charles D. Shackelford and Patrick L. Redmond, GT Jan. 95, p17-32.

Space Habitat Environmental Health Risk Assessment and Management, Gerald J. Smith and George W. Morgenthaler, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1008-1019.

Spray Freezing to Treat Oil Sands Tailings Pond Water, W. Gao, D. C. Sego and D. W. Smith, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p60-70.

Threshold Precipitation Events and Potential Ground-Water Recharge, Richard H. French, Roger L. Jacobson and Brad F. Lyles, HY Oct. 96, p573-578.

Uncertainty in the Geologic Setting and Its Impact on Site Characterization, Richard C. Benson, Lynn Yuhr and Devraj Sharma, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p91-103.

Unsteady Finite-Analytic Method for Solute Transport in Ground-Water Flow, Whey-Fone Tsai and Ching-Jen Chen, EM Feb. 95, p230-243.

Use of SID Method for Site Characterization, P. W. Jayawickrama, K. G. K. Jayakody and K. A. Rainwater, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p897-911.

Vapor Phase Biofiltration for Removal of VOCs, Malcolm K. Man, Badri N. Badriyha, Walter Den and Massoud Pirbazari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1209-1214.

Vertical Migration of Diesel into Silty Sand Subject to Cy clic Freeze-Thaw, K. W. Biggar and J. C. R. Neufeld, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p116-127.

'Cold Fire' Degrades Organic Contaminants, CE Mar. 96, p15.

Contamination

Aggregates for Construction from Vitrified Chromium Contaminated Soils, Jay N. Meegoda, W. Kamol-pornwijit, David A. Vaccari, A. S. Ezeldin, L. Walden, W. A. Ward, B. A. Noval, R. T. Mueller and S. Santora, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p31-46.

Back to Bacteria: A More Natural Filtration, Bruce E. Rittmann, CE July 96, p50-52.

Controlled Field Experiments for Assessment of Subsurface NAPL Behaviour and Remediation, J. A. Cherry and D. J. A. Smyth, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p3-24.

Delineating Subsurface Contamination Using Geostatistical and Non-Intrusive Geophysical Methodologies, Sandra Bowling, Wayne Woldt and Dennis Schulte, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2230-2235.

Design and Implementation of a Multi-Faceted Site Remediation, Stephen A. Kessel and Arnold S. Vernick, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p541-546.

Dissolution of Lead Paint in Aqueous Solutions, Gregory L. Barnes and Allen P. Davis, EE July 96, p663-666.

The Effect of Measurement Scale on the Worth of Hydraulic Conductivity Data: Slug Tests and Pumping Tests, Willy Zawadzki and Roger Beckie, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1034-1051.

Effect of Temperature and Salt Contamination on Carbonation of Cements, Mohammed Maslehuddin, C. L. Page and Rasheeduzzafar, MT May 96, p63-69.

Flushing of a Pb(II) Contaminated Soil Using HCl, EDTA, and CaCl₂, Brian E. Reed, Patrick C. Carriere and Roder-ic Moore, EE Jan. 96, p48-50.

Geotechnical Properties of Oil-Contaminated Kuwaiti Sand, Hasan A. Al-Sanad, Walid K. Eid and Nabil F. Ismael, GT May 95, p407-412.

Hydraulic Conductivity of Frozen Granular Soils, Orlando B. Andersland, David C. Wiggert and Simon H. Davies, EE Mar. 96, p212-216.

Impact of System Chemistry on Electroosmosis in Contam-inated Soil, Gerald R. Eykholk and David E. Daniel, GT May 94, p797-815.

Innovative Bioventing System Construction/Operation in Cold Regions, Kimberly K. Stricklan and Randall L. Mattzela, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p351-359.

Century, Robert F. Carlson, ed., 1990), p351-359.
Interference of Avian Guano in Analyses of FuelContaminated Soils, David E. James, Tod E. Johnson and
David K. Kreamer, EE Jan. 96, p74-76.
Measurement of Indoor Bioaerosol Levels by a Direct
Counting Method, Demetrios J. Moschandreas, Daniel
K. Cha and Jon Qian, EE May 96, p374-378.
Optimal Dispersed Ground-Water Contaminant Management: MODCON Method, R. C. Peralta, J. Solaimanian
and G. P. Musharrafieh WR Nov. / Dec. 95, p490-498.

and G. R. Musharrafieh, WR Nov./Dec. 95, p490-498.
Polyethylene Piping Eases Drought, CE Nov. 96, p94.
Predicting Dynamic Response of Adsorption Columns with
Neural Nets, Imad A. Basheer and Yacoub M. Najjar, CP

Jan. 96, p31-39.

Protecting Drinking Water: Rapid Detection of Human Fecal Contamination, Injured, and Non-Culturable Pathrecai Comanination, injured, and Non-Cuntrative Fara-ogenic Microbes in Water Systems, D. C. White, D. E. Nivens, A. A. Arrage, B. M. Appelgate, S. R. Reardon and G. S. Sayler, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1645-1650.

Simulation of Bioventing for Soil and Ground-Water Re-mediation, Paul D. McClure and Brent E. Sleep, EE Nov.

96, p1003-1012.

te Vulnerability Assessment for Wellhead Protection Planning, Wade E. Hathhorn and Tyler Wubbena, HE

Oct. 96, p152-160.

Source Characterization at Contaminated Sites, Sudhakar R. Kondisetty, Priyantha W. Jayawickrama and Kenneth A. Rainwater, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p927-943.

Specification of Cu, Pb and Cr in Contaminated Sediment Effected by pH, Chin-Yuan Chen, Jih-Gaw Lin and Cheng-Nan Chang, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p1453-1458.

Standardizing Environmental Assessments: A Practical Per-spective, J. R. Marsh, K. W. Green and T. Dong, EE Mar. 96, p222-226.

The Standley Lake Protection Project, Joseph Green-Heffern and David J. Kaunisto, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2820-2825.

Survival of Coliform Microorganisms in Sediments from a Treated Water Reservoir, Heesong Yoon and Joseph S. Devinny, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1626-1631.

Take-Home Toxin Pathway, John Zirschky, EE May 96, p430-436.

Under Way: Decontamination Pilots for Dredged Material, CE Nov. 96, p10,12.

Use of Remediated Petroleum Contaminated Soils in High-way Construction, Jay N. Meegoda, Robert T. Mueller way Construction, Jay N. Meegoda, Robert 1. Mueller and Frank Palise, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), pl-16. Washing of Zinc (II) from Contaminated Soil Column, Allen P. Davis and Inderbir Singh, EE Feb. 95, p174-

Wettability of NAPL-Contaminated Sands, Susan E. Powers, William H. Anckner and Thomas F. Seacord, EE Oct. 96, p889-896.

Contingency
Inundation Studies in Case of Failure of King Talal Dam,
Ahmed Kassem, M. Hanif Chaudhry and Muhammad R.
Shatanawi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1924-1929.

Worth the Risk? Charles W. Lockhart and William J. Roberds, CE Apr. 96, p62-64.

Continuing education

Are There Benefits to Continuing Professional Develop-ment? Russell J. Kehl, CE Oct. 96, p52-53.

Does ASCE Have a Responsibility to Mandate Continuing Education? Tony Huff, P.E., CE Nov. 96, p72-73.

An Empirical Assessment of Continuing-Education Needs, S. Dowlatshahi, ME Sept./Oct. 96, p37-44.

Part-Time Graduate Education: Obstacles, Conflicts, and Suggestions, Allen P. Davis and Richard H. McCuen, El Apr. 95, p108-113.

Practitioners' Forum, Frederick S. Merritt, AE Dec. 96,

Training as a Potential Profit Center, Matt O'Connell, ME Sept./Oct. 96, p25-27.

Continuity equation

A Comparison of Sediment Routing Models, A. R. Ghum-man, P. R. Wormleaton, H. N. Hashmi and G. H. Akbari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3794-3799.

Continuous b

Continuum Model for Analysis of Multiply Connected Per-forated Cores, Domenico Capuani, Marco Savoia and Ferdinando Laudiero, EM Aug. 94, p1641-1660.

Effectiveness Factor of Concrete in Continuous Deep Beams, A. F. Ashour and C. T. Morley, ST Feb. 96,

Lateral-Torsional Buckling of Nonprismatic I-Beams, Pra-tyoosh Gupta, S. T. Wang and G. E. Blandford, ST July 96, p748-755.

Continuous structures

Jointless Steel Bridges Design and Retrofit, Robert L. Nickerson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p313-320.

Laying Sequence Planning for Continuous Girder Reinforced Concrete Floor System by Genetic Algorithms, Y. Natsuaki, S. Mukandai, K. Yasuda and H. Furuta, (Analysis and Computation, Franklin Y. Cheng, ed., 1996),

Shear and Reaction Distributions in Continuous Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE Nov. 96, p155-165.

Continuum hypothesis

Dynamic Analysis of Tall Building Using Reduced-Order Continuum Model, Michael J. Chajes, Liyang Zhang and James T. Kirby, ST Nov. 96, p1284-1291.

A CDM-Based Approach to Stochastic Damage Growth, Baidurya Bhattacharya and Bruce Ellingwood, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p772-775.

Coupled Processes of Gas Hydrates Dissociation and Fluid Filtration in Saturated Porous Media, Alexey Maksimov, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

A Damage Mechanics-Based Approach to Structural Deterioration, Baidurya Bhattacharya and Bruce Ellingwood, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996).

Dynamic Brittle Material Response Based on a Nonlocal Damage Model, E. P. Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p580-583.

Effect of Internal Length on the Vibration of Granular Solids, Ching S. Chang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p873-876.

Embedded Localization Band Elements for Mode-I and Mode-II Failure, L. J. Sluys and A. H. Berends, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), p1181-1184.

Modeling Rotation of Principal Load Axes in Brittle Solids with Damage, S. Karnawat and S. Yazdani, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p596-599.

Numerical Analysis of Damage in Lattices and Consequences on Continuum Modelling, Gilles Pijaudier-Cabot, A. Delaplace and S. Roux, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), pl034-1037.

Structural Dynamic and Viscoelastic Analysis via Electric Analogy, Roberto Scotta and Renato Vitaliani, ST Sept. 96, p1118-1121.

Contour furrows

Are Erosion Control Programs Reducing Sedimentation? D. P. Roseboom, R. Sinclair, Gary Eicken and Pat Woods, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Contours

A Finite Element Based Probability Contouring Method for Structural Analysis, David S. Riha, Harry R. Millwater, George Vellathottam and P. R. Perumalswami, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p922-925.

Magnitude-Distance Contours for Probabilistic Seismic Hazard Analysis, P. Bazzurro, S. R. Winterstein, T. C. Ude and C. A. Cornell, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p202-205.

Ocean Environment Contours for Structural Response Analysis and Experiment Design, Steven R. Winterstein, Todd C. Ude, Paolo Bazzurro and C. Allin Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p592-595.

Construction Claims and Disputes: Causes and Cost/Time Overruns, Cheryl Semple, Francis T. Hartman and George Jergeas, CO Dec. 94, p785-795.

Risk Allocation in Lump-Sum Contracts—Concept of La-tent Dispute, Francis Hartman and Patrick Snelgrove, CO

Sept. 96, p291-296.

Theoretical Foundations for Computer-Supported Negotia-tion, Feniosky Peña-Mora and James Kennedy, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p186-192.

Contract terms

The Changing Role of Construction Mitigation, Sallye E. Perrin and Kristin C. Lewis, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p63-69. Clause in Contract Does Not Preclude Other Damages, CE

Aug. 96, p24.

Construction Claims and Disputes: Causes and Cost/Time Overruns, Cheryl Semple, Francis T. Hartman and George Jergeas, CO Dec. 94, p785-795.

Contract Waived Rights to Recovery of Loss, CE Aug. 96, p24.

Differing Site Conditionsiffering Site Conditions—Industry Consensus Opposes Ruling, S. Scot Litke, ME July/Aug. 96, p14-15.

The Enforceability of "Pay When Paid" Clauses, Michael C. Loulakis and William L. Cregger, CE Sept. 96, p40. Geotech Design Reports Get a Litmus Test, Brenda Myers Bohlke, CE Dec. 96, p47-49.

Guarding Against Litigation, Andrew Frano, ME July/Aug. 96, p28-32.

The Importance of Contract Clarity Clarified, Michael C. Loulakis and William L. Cregger, CE Mar. 96, p32.

A New Model of Risk Allocation for Construction Con-tracts based on Fair Liabilities between Parties, Harkunti P. Rahayu and David G. Carmichael, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p35-41.

New Version of Manual 45 Ready, CE Dec. 96, p70. Paid-When-Paid Clauses, Kenneth H. Lazaruk, Esq., ME May/June 96, p12-14.

Pay-When-Paid Risks are Limited, CE Aug. 96, p24.

Real Time Planning & Total Risk Management, Ali Jaafari, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p193-199.

Risk Allocation in Lump-Sum Contracts—Concept of La-tent Dispute, Francis Hartman and Patrick Snelgrove, CO Sept. 96, p291-296.

Twinning Time and Cost in Incentive-Based Contracts, A. Jaafari, ME July/Aug. 96, p62-72.

Underground Contracts for the 21st Century, Robert A. Pond, CE Dec. 96, p54-57.

Contracting

A 21st Century Dam, CE Nov. 96, p22-23.

Construction Regulated by Performance Information, Dean T. Kashiwagi and Chad T. Halmrast, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p551-558.

Design-Build Origins in Question, Dean E. Stephan, Jeffrey L. Beard and Michael Charles, CE Aug. 96, p26,28.

Development of a Knowledge-Driven Interactive Contractual Agreement Preparation Program using Multimedia, Thomas F. Harrington, Cheryl L. Ruf and Guillermo F. Salazar, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p649-655.

Go-Cart Proposal Won't Produce a Ferrari, Sam Bandi-mere, CE Mar. 96, p26,28.

Marketing Engineering Services: Partnering Pales by Com-parison, Oscar C. Boldt, ME Jan./Feb. 96, p3-5.

More-Stable Owner-Contractor Relationships, Peter Dozzi, Francis Hartman, Neil Tidsbury and Rafi Ashrafi, CO Mar. 96, p30-35.

Privatization: A Cure for Our Ailing Infrastructure? Charles R. Rendall, CE Dec. 96, p6.

Procurement Issues, Delon Hampton, ME Nov./Dec. 94,

p45-49. Selecting Design-Build: Public and Private Sector Owner Attitudes, Anthony D. Songer and Keith R. Molenaar, ME Nov./Dec. 96, p47-53.

Upheavals in Soil Firms, CE Sept. 96, p11.

White House Proposes Design-Build Regulation, Michael Charles, CE Oct. 96, pl 16.

Contraction

Contraction Scour at Bridges Founded on Clay Soils, W. R. Ivarson, F. Qadir and M. Phelps, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1358-1366.

Contractors

Contractors
1994 Alaska Flood Recovery Project Management of a Disaster Recovery by a General Contractor, David S. Westhaver and Alison H. Boyce, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p111-112.
3D & 4D CAD Modeling on Commercial Design-Build Projects, Frank Vaugn, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), n300-396.

p390-396.

Analytic Approach Helps Firm Expand Business, CE Dec. 96, p22.

Architectural Office Standards and Practices: A Practical Users Guide by Larry D. Jenkins et al. Frederick S. Mer-ritt, AE Mar. 96, p41. Assessment of Work Performance of Maintenance Contrac-

tors in Saudi Arabia, Abdul-Mohsen Al-Hammad and Sadi Assaf, ME Mar./Apr. 96, p44-49.

Cannot Indemnify for Own Negligence, CE Oct. 96, p30. Claim Review Process, CE May 96, p24.

Clause in Contract Does Not Preclude Other Damages, CE Aug. 96, p24.

Commentary on MBE and FBE Participation in the Con-struction Industry, Amir Tavakoli, ME July/Aug. 96, p6-

Computers Aid Federal Contract Awards, CE July 96, p8. Considering Constructor Prequalification, Gary D. Bates, P.E., ME Nov./Dec. 96, p10.

Constructor Prequalification: Choosing the Best Construc-tor and Avoiding Constructor Failure, Jeffrey S. Russell, 1996, 0-7844-0052-0, 200pp. Contract Waived Rights to Recovery of Loss, CE Aug. 96,

p24.

Contractor is Due Payment, CE Feb. 96, p24.

Contractor Markets Management Software, CE Dec. 96, p20.

Contractor Prequalification in Saudi Arabia, Abdulaziz A. Bubshait and Kamal H. Al-Gobali, ME Mar./Apr. 96, p50-54.

Contractor Responsible for Own Negligence, CE Jan. 96, p26.

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The Enforceability of "Pay When Paid" Clauses, Michael C. Loulakis and William L. Cregger, CE Sept. 96, p40.

Estimating and Project Management for Building Contrac-tors, Michael Kitchens, 1996, 0-7844-0148-9, 242pp.

Estimating Loss of Productivity Claims, Gasan G. Kallo, ME Nov/Dec. 96, p13-15. Frequent "Failure Modes" an A/E/C Might Expect in Their Business, William M. Hayden, Jr., ME Sept/Oct. 96, p11.

Golden Rule of Contractor-Subcontractor Relations, Joseph R. Proctor, Jr., SC Feb. 96, p12-14. Indemnity Not Valid, CE Jan. 96, p26.

Insolvency Does Not Excuse From Payment, CE June 96, p24.

Knowledge Based Construction Contractor Proposal Evaluation System, John A. Kuprenas and Farzin Mad-

Evaluation System, John A. Ruprensa and Farzin Mad-jidi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p247-253. Late License Acceptable, CE Sept. 96, p28-29. Malpractice Suit Against Engineer, CE May 96, p24. Marketing is Top Priority for Construction Firms, ME

Mar./Apr. 96, p9. Measuring Mutual Confidence in UK Construction Proj-

ects, A. K. Munns, ME Jan./Feb. 96, p26-33.

Mediation Does Not Abrogate Arbitration, CE Oct. 96, p30. Merit Shop Recruitment and Selection Practices in Alabama, Roger S. Wolters and Rebecca C. Burleson, CO June 96, p152-157.

Minority Set-Aside Unconstitutional, CE Oct. 96, p30. More-Stable Owner-Contractor Relationships, Peter Dozzi, Francis Hartman, Neil Tidsbury and Rafi Ashrafi, CO Mar. 96, p30-35.

No Subcontractor Indemnity for Contractor's Negligence, CE Sept. 96, p28.

OSHA Safety Regulations, CE Nov. 96, p28. Paid-When-Paid Clauses, Kenneth H. Lazaruk, Esq., ME

Paid-When-Paid Clauses, Kenneth H. Lazaruk, Esq., ME-May/June 96, p12-14.
Pay-When-Paid Risks are Limited, CE Aug. 96, p24.
Positive Outlook in Construction Industry, CE May 96, p8.
Predicting Contractor Failure Using Stochastic Dynamics of Economic and Financial Variables, Jeffrey S. Russell and Huaming Zhai, CO June 96, p183-191.

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Representing the City, CE Dec. 96, p24.

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Statute of Limitations on Negligence, CE Nov. 96, p28.
Subcontractor Beware, CE July 96, p27.
Subcontractor Gives His Side of Story, Charles J. Berkel,

CE May 96, p29-30.

Subcontractor Indemnifies Contractor, CE Feb. 96, p24. Subcontractor Not Responsible, CE Mar. 96, p24.

Subcontractor's Employee Is Subcontractor's Problem, CE Feb. 96, p24.

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The Tracks of a Contractor's Tiers, CE Nov. 96, p.95.

Update on Scour Prediction, Robert B. Nairn, P.E., CE

Sept. 96, p36. Worth the Risk? Charles W. Lockhart and William J. Roberds, CE Apr. 96, p62-64.

ADR, 25 Years of Progress, Robert A. Rubin, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p21-29. ASCE Publishes Guide to Federal A/E Contracts. CE May

96, p72-73.

50, p12-13.
Cannot Indemnify for Own Negligence, CE Oct. 96, p30.
Challenges of an Advance Utility Contract for a Major Highway Widening Project in Norfolk, Virginia, Gary M. Hart, Peter S. Fortin and Gary L. Heisler, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p348-355

City Rejects Bid, CE Jan. 96, p26.

Claim Review Process, CE May 96, p24.

Comparing Contracts: Which Type is Best?, ME May/June 96, p10-11.

Computers Aid Federal Contract Awards, CE July 96, p8 Design-Build Limitations of Liability Are Successful, Mi-chael C. Loulakis and William L. Cregger, CE Jan. 96,

Estimating Loss of Productivity Claims, Gasan G. Kallo,

ME Nov./Dec. 96, p13-15.

ME NOV.DEC. 90, p13-13.
Geophysical Characterization of Florida Limestone—An Investigative Case History, D. S. Saxena, R. M. Dickinson and A. Saxena, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p73-85.

Guarding Against Litigation, Andrew Frano, ME July/Aug. 96, p28-32.

Innovative Design/Build Approach: Ambassador Bridge Project, Jay B. Shah, ME July/Aug. 96, p58-61. Insolvency Does Not Excuse From Payment, CE June 96.

pers.
Interface Problems between Building Owners and Designers, Abdul-Mohsen Al-Hammad and Ibrahim Al-Hammad, CF Aug. 96, p123-126.
Lessons Learned from Multiphase Reconstruction Project, Raymond J. Krizek, Wei Lo and Ahmad Hadavi, CO Mar. 96, p44-54.

Malpractice Suit Against Engineer, CE May 96, p24. Managing Construction Risks, Ossama A. Abdou, AE Mar.

96, p3-10.

Minority Set-Aside Unconstitutional, CE Oct. 96, p30. No Subcontractor Indemnity for Contractor's Negligence, CE Sept. 96, p28.

Owner-Contractor Relationships on Contaminated Site Remediation Projects, Cynthia M. Ruff, David A. Dzombak and Chris T. Hendrickson, CO Dec. 96, p348-353.

Paid-When-Paid Clauses, Kenneth H. Lazaruk, Esq., ME May/June 96, p12-14. Pay When Paid, CE Mar. 96, p24.

Representing the City, CE Dec. 96, p24.

Risk Allocation in Lump-Sum Contracts—Concept of Latent Dispute, Francis Hartman and Patrick Snelgrove, CO

Sept. 96, p291-296.

Sept. 90, p291-290.
Sisk in Geotechnical Engineering for Embankment Dams, Gil M. Lawton and Michael P. Forrest, Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p550-562.
Service Rendath Pares D. C. C. Service Rendath Proceedings of the Proceedings of t

Services Rendered, Payment Due, CE Sept. 96, p29.

Start-Ups, CE Mar. 96, p8. State is Project Owner, CE Apr. 96, p28.

Subcontractor Beware, CE July 96, p27.

Subcontractor's Pass-Through Claim Forfeited Due to Fraudulent Conduct of Prime Contractor, Michael C. Loulakis and William L. Cregger, CE Nov. 96, p29.

Survey of Change Order Markups, Herbert Saunders, SC Feb. 96, p15-19. Thinking Ahead with Forward Pricing, Brian E. Kasen and Victor C. Oblas, ME Mar./Apr. 96, p12-16.

Underground Contracts for the 21st Century, Robert A. Pond, CE Dec. 96, p54-57.

A User's Guide to Federal Architect - Engineer Contracts, 2nd edition, James B. Goodowens, 1996, 0-7844-0145-4,

Anaerobic Removal of Pentachlorophenol in Presence of Zinc, Peikang Jin and Sanjoy K. Bhattacharya, EE July 96, p590-598.

Characterization of Canal Operations under Ideal Anticipa-tory Control, E. Bautista, A. J. Clemmens and T. S. Strel-koff, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1887-1892.

p186/-1892.
Comparative Assessment of Prediction Strategies for Adaptive Control, R. Ghanem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p134-137.
Concentration Effects on Chlorinated Aliphatic Transformation Kinetics, J. B. Hughes and G. F. Parkin, EE Feb. 66, 602-98.

96, p92-98.

Control of Construction Robots using Camera-Space Manipulation, Emilio Gonzalez-Galvan, Michael Seelinger, John-David Yoder, Eric Baumgartner and Steven B. Skaar, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p57-63. Control of Legged Robots, S. T. Venkataraman, (Robotics for Challenging Environments, Laura A. Demsetz, ed.,

1996), p100-106.

Controlled Excavation Along a Prescribed Path, Eugeniusz Budny and Witold Gutkowski, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p227-234.

Controlling Chaos to Prevent Ship Capsizing, Mingzhou Ding, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996). 1996), p434-437

Dynamic Analysis of Multi-Pool Irrigation Canal, V. M. Ruiz-C., Jorge Castillo and B. de León-M., (North American Water and Environment Congress & Destructive

ican Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p818-823.
Finite Actuator VGT Manipulator Shape Control Paradigm, William C. Farrow, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p86-92.
Graphic-Based Interactive Path Planning for Large-Scale Bridge Maintenance Cranes, Sungwoo Moon and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p79-85.
Hysteretic Systems: Chaotic Region and Control, M. Bathaini E. Caecinti and I. Faranelli, Engineering Mechanic

taini, F. Casciati and L. Faravelli, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p499-502.

Individual Biotransformation Rates in Chlorinated Aliphat-ic Mixtures, J. B. Hughes and G. F. Parkin, EE Feb. 96,

Integration of CAD Drawings and Construction Robot Mo-tion Controllers, Jaeho Son and Miroslaw J. Skibniewski, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p71-78.

Linear Optimal Structural Control Including the External Excitation, G. F. Panariello, R. Betti and R. W. Longman, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p760-763.

Long-Term Deflection Control in Cantilever Prestressed Concrete Bridges. I: Control Method and Algorithm, Hui-Sheng Chiu, Jenn-Chuan Chern and Kuo-Chun Chang, EM June 96, p489-494. Long-Term Deflection Control in Cantilever Prestressed

Concrete Bridges. II: Experimental Verification, Hui-Sheng Chiu, Jenn-Chuan Chern and Kuo-Chun Chang. EM June 96, p495-501.

Moisture Conditions and Control in Buildings in Fairbanks, Alaska, Ross Adkins, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p372-383. A Neural Network Impedance Learning Control Model for

a Robotic Excavator, Xiaodong Huang, Leonhard Bernold and Gordon Lee, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p213-219.

A New Semi-Active Control Device for Seismic Response Reduction, S. J. Dyke, B. F. Spencer, Jr., M. K. Sain and J. D. Carlson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p886-889.

Optimal Polynomial Control of a Duffing System, Anil K. Agrawal and Jann N. Yang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p890-893.

Probabilistic Stability Robustness of Structural Systems, R. V. Field, Jr., P. G. Voulgaris and L. A. Bergman, EM Oct. 96, p1012-1021.

Real Time Positioning and Equipment Control for Hostile Environments, Yvan J. Beliveau, (Robotics for Challeng-ing Environments, Laura A. Demsetz, ed., 1996), p64-70.

ing Environments, Laura A. Demsetz, ed., 1996), p64-70. The Resonance Drives with Adaptive Control, Teodor S. Akinfiev, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p947-950. Robust Stabilization of Systems with Time Delays, Mohammad Hosseini and Firdaus Udwadia, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), 9438-441. Stability of Actively Controlled Civil Engineering Structures with Actuator Saturation, Anil K. Agrawal, Ashish Das and Jann N. Yang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p756-759.

- Stochastic Prediction and Control of Uncertain Nonlinear Dynamical Systems, R. Ghanem and M. Grigoriu, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996).
- A Strategy for Active Control of Tall Civil Structures Using Regenerative Electric Actuators, A. C. Nerves and R. Krishnan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p503-506.
- System Design for Safe Robotic Handling of Nuclear Mate-rials, William Drotning, Walter Wapman, Jill Fahrenholtz, Howard Kimberly and Joel Kuhlmann, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p241-247.
- System Identification Study of a 1:10 Scale Steel Model using Earthquake Simulator, Satish Nagarajaiah and Xiaojiang Ma, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p764-767.
- Time Delayed Control of Classically Damped Structures, . Kumar and F. E. Udwadia, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p751-755.
- To Blast or Not to Blast? G. F. Revey, SC Aug. 96, p81-82. Vibration Control of Cable-Stayed Bridges: Analytical Development, Armin G. Schemmann and H. Allison Smith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p898-901.
- Vibration Control of Cable-Stayed Bridges: Control System Development and Experimental Results, Rahmat A. Shoureshi and Mark J. Bell, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p902-905
- Vision-Based Automated Overtaking Control, Massimo Tistarelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p705-710.
- World-Wide Command and Control: Operating the International Space Station, Michael J. See, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p458-466.

Control equipment

- Adaptive Self-Tuning Control of Excavators, A. J. Koivo and Allen D. Nease, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p220-226.
- Nonlinear Identification of Semi-Active Control Devices, B. F. Spencer, Jr., S. J. Dyke, M. K. Sain and J. D. Carl-son, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p164-167

Control structures

- Canal Control and Automation for the Central District System, Michael A. Drain and Eric R. Hixson, (North Amer ican Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2384-2389.
- Evaluation of System Downstream Control, Zihui Lin and David H. Manz, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1893-1898.
- Learning and Shaping in Emergent Hierarchical Control Systems, Bruce L. Digney, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p114-121.
- A New, Low-Cost Ice Control Structure. Part 1: Concept Development, J. H. Lever, G. Gooch and A. Tuthill, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p617-628.
- A New, Low-Cost Ice Control Structure. Part 2: Construc-tion and Performance, J. H. Lever, G. Gooch and C. Clark, (Cold Regions Engineering: The Cold Regions In-frastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p629-639.
- System Downstream Control for On-Demand Irrigation Canals, Zihui Lin and David H. Manz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p824-829.
- Water Control Structure Choice for Wetland Restoration/ Creation, Roger C. Smith, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p268-273.

Control systems

Advanced Control Systems for Integrated Transportation by LIM Devices, R. Di Stefano, G. Gentile, S. Meo, N. Ro-tondale and M. Scarano, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p49-

Automatic Control of Flocculation Processes, Anders O. Wistrom and Jay A. Farrell, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p997-1002.

Autonomous Intelligent Cruise Control Using the Fuzzy Logic, Kwang Soo Chang and Jae Sung Choi, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p644-655.

BALANCE - A Method for Traffic Adaptive Signal Control Field Trial and Simulation Studies, Bernhard Friedrich and Hartmut Keller, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

p615-619. Control of an Irrigation Canal, Leslie Skertchly Molina and J. P. Miles, HY July 96, p403-410. Control of Sliding-Isolated Buildings Using Sliding-Mode Control, J. N. Yang, J. C. Wu, A. M. Reinhorn and M. Riley, ST Feb. 96, p179-186. Control Systems Governing Gravity-Dependent Plant Growth, C. Duran, D. Flores, J. D. Smith and G. W. Morgenthaler, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1095-1101.

Controlled Semiactive Hydraulic Vibration Absorber for Bridges, William N. Patten, Ronald L. Sack and Qiwei He, ST Feb. 96, p187-192.

Design of a Freeway Control System Based on Artificial Intelligence Methods for Travel Time Detection, Reinhart D. Kühne, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p439-443.

Design of Supplemental Dampers for Control of Structures, N. Gluck, A. M. Reinhorn, J. Gluck and R. Levy, ST

Dec. 96, p1394-1399.

Development of a Decentralized Traffic Control System Based on Logic Programming, Giovanni Felici, Giovanni Rinaldi and Klaus Truemper, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p573-577

Distributed Control for Serial Assembly in Space, Frank McQuade and Colin R. McInnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1169-1175.

Equilibrium Network Traffic Signal Setting under Conditions of Queuing and Congestion, Hai Yang, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p578-582.

Evaluation of System Downstream Control, Zihui Lin and David H. Manz, (North American Water and Environ ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p1893-1898.

Experimental Study of Seismic Response of Structures with Semi-Active Damping Control Systems, M. D. Symans and M. C. Constantinou, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p350-360.

Experimental Verifications of H_m and Sliding Mode Control for Seismically Excited Buildings, J. N. Yang, J. C. Wu, A. M. Reinhorn, M. Riley, W. E. Schmitendorf and F. Jabbari, ST Jan. 96, p69-75.

Fuzzy Logic Process Control of HPO-AS Process, Mark T. Yin and Michael K. Stenstrom, EE June 96, p484-492.

Gain-Scheduled Adaptive Control of a Hybrid Structure, Moises A. Abraham, James R. Morgan and Alexander G.

Moises A. Abraham, James R. Morgan and Alexander U. Parlos, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p260-261.

In Integrated Lunar/Martian-Engineered Closed/Controlled Ecosystem, Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1083-1089.

Interactive Lessons for Instrumentation and Control, E. J. Mastascusa and Maurice F. Aburdene, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p303-309.

Learning and Shaping in Emergent Hierarchical Control Systems, Bruce L. Digney, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p114-121.

Environments, Laura A. Demsetz, ed., 1996), p114-121. The Limitations of Independent Controller Design for a Multiple-link Flexible Macro-manipulator Carrying a Rigid Mini-manipulator, H. D. Stevens and Jonathan How, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p33-99. Melnikov Processes and Noise-Induced Exits from a Well, Emil Simiu and Michael R. Frey, EM Mar. 96, p263-270. Millimetre Radar System for the On-Board Lateral Distance Acquisition: Performances Evaluation and Infrastructure Constraints, Corrado Cugiani and Luigi Giubbolini, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p656-660.

A Minimum Risk Evaluation Methodology for Fault Tolerant Automotive Control Systems, P. Borodani, L. Gortan.

ant Automotive Control Systems, P. Borodani, L. Gortan, R. Librino and M. Osella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

p552-557

Minimum Weight of Control Devices with Bounded LQG Control, Alexander A. Bolonkin, Duane E. Veley and Narendra S. Khot, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996). p1230-1236.

p1230-1236. Modeling and Control of Excavator Dynamics during Digging Operation, A. J. Koivo, M. Thoma, E. Kocaoglan and J. Andrade-Cetto, AS Jan. 96, p10-18. Multicriteria Traffic Control with Video Feedback, Andrzej Adamski, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p620-627. Nonlinear Control Strategies for Limiting Dynamic Response Extremes, D. P. Tomasula, B. F. Spencer, Jr. and M. K. Sain, EM Mar. 96, p218-229.
On the Almost-Surely Lyanunov Exponent of a Duffine-

on the Almost-Surely Lyapunov Exponent of a Duffing-van der Pol Delay Oscillator, M. S. Fofana, (*Probabilis-*tic Mechanics & Structural Reliability, Dan M. Frango-pol, ed. and Mircea D. Grigoriu, ed., 1996), p550-553.

Optimum Simulation and Control of Fixed-Speed Pumping Stations, Mark T. Yin, John F. Andrews and Michael K.

Stenstrom, EE Mar. 96, p205-211.

Public Transport Priority in Real-Time Traffic Control Sys-tems, N. B. Hounsell and J. P. Wu, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p71-75.

Pump and Treat and Wait (Available only in the Geo/ Environmental Special Issue), Richard A. Sullivan, P.E.,

CE Nov. 96, p8A-12A.

CE NOV. 90, p8A-12A.

Radiation Hardening of Robotic Control Components
Against Terrestrial Radiation, G. U. Youk, J. S. Tulenko,
H. Liu and H. Zhou, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p248-254.
Seismic Active Control by a Heuristic-Based Algorithm,
Yu Tang, (Engineering Mechanics, Y. K. Lin and T. C.
Su, 1996), p232-235.

A Two-Level Annroach for the Control of Forested

50. 1990), p.23-233.
A Two-Level Approach for the Control of Freeways, A. Alessandri, A. Di Febbraro and A. Ferrara, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p.429-433.

Ed., 1990), p-63-433.
Using Fuzzy Logic in Aircraft Navigation Systems, A. Lopes Pereira, A. K. Achaibou and F. Mora-Camino, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p99-103.

Modified Bang-Bang Control Law for Structural Control Implementation, Z. Wu and T. T. Soong, EM Aug. 96,

Ordinary Operating Conditions of Large Channels of Mos-cow's Sewerage Network, Yuri A. Ermolin, IR May/ June 96, p145-148.

Convection

Air Convection Embankments for Roadway Construction in Permafrost Zones, Douglas J. Goering, (Cold Regions Engineering: The Cold Regions Infrastructure—An In-ternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p1-12.

Mixed Convection Heat Transfer Coefficients for Horizon-tally Emplaced Waste Packages, J. J. Ventresca, W. G. Culbreth and C. Lawson, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

p451-453.

Convergence

Depth-Averaged Boussinesq Equations Applied to Flow in a Converging Channel, Thomas Molls and Gang Zhao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p328-333

Conversion

Chemical Engineer Joins Metric Debate, James A. Sloss, CE Mar. 96, p31.

An English Units Plea, Ernest Gubry, CE Sept. 96, p38. Fear of Metric, Edward Kausel, CE Apr. 96, p38.

A Geologist Discovers ASCE Dinosaurs, Martin Kappeyne, CE June 96, p26.

Getting Wet with Metric, Frederick A. Locher, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3685-3689.

A Metric Experience, Marco A. Raudales, CE Nov. 96,

p41.

A Proponent of Choice, Robert E. Steacy, CE Feb. 96, p28. Reconstruction of Bergstrom Air Force Base to Austin-Bergstrom International Airport, James P. Amick and John Almond, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p1-11.

Sediment Impacts on Yield from a Two-Reservoir System in Puerto Rico, Gregory L. Morris, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2103-2108.

Should Conversion to SI System Continue to be Debated? Autar K. Kaw and Melissa Daniels, El Apr. 96, p69-72. Start the Presses! Ramon Gilsanz, CE Apr. 96, p65-67.

Structural Design Forum, SC Aug. 96, p62-68.

Conveyance structures

Estimating Sediment Conveyance Capacity and Deposition Potential in Culverts, Dennis L. Richards and Michael E. Zeller, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3920-3926.

Cool Roofs and Pavements to Help Hot Smoggy Cities, Ar-thur H. Rosenfeld, Hashem Akbari, Haider Taha and Melvin Pomerantz, (Materials for the New Millennium, Ken P. Chong, ed., 1996), pl-13.

Design of an Advanced Fork System for Assembly Burnup Measurement, Ronald I. Ewing and Kevin D. Seager, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p340-341.

Development of High Performance Steels for Commercial and Military Applications, Eric M. Focht and Thomas W. Montemarano, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p91-99.

International Space Station Payload Accommodations, Daniel W. Hartman, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Mechanical Properties of Reinforcing and Prestressing Steels after Heating, I. Cabrita Neves, João Paulo C. Rodrigues and António de Pádua Loureiro, MT Nov. 96,

Performance of a Passively Refrigerated Gravel Pad Foun-dation in Fairbanks, Stephen Adamczak, Jr., (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p13-22.

Pore Structure Evolution and State of Pore Water in Hydrating Cement Paste at Cryogenic Temperatures, J-Y. Jehng, D. T. Sprague, S. Bhattacharja and W. P. Halperin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p000-607.

Space, Stewart W. Johnson, ed., 1996), pout-607.
Thermal Impact of a Buried Chilled Gas Pipeline, Lutin Raad, Xioalin Yuan and Dieter Weichert, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p203-214.

"Seepage Assessments and Control Associated with Flori-da's Phosphate Industry", Wayne A. Ericson, (Uncer-tainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p866-880.

Visualizing the Flow, Mahadev Raman, Burkhard Bein, Colm Hogan and Dennis Sheldon, CE June 96, p43-45.

Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST May

94, p1471-1488.

94, p1471-1488.
Dynamic Fatigue of High-Rise Natural Draught Cooling Towers, Wilfried B. Krätzig, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p298-309.
Nonlinear Behavior of RC Cooling Towers and Its Effects on Strains, Stresses, Reinforcement and Cracks, Udo Wittek and Anmin Ji, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p287-297.
Structural Consequences of Imperfection in Thin-Walled

Structural Consequences of Imperfection in Thin-Walled Components, Luis A. Godoy and John Carrasquillo, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p997-1000.

Use of Reclaimed Water in Cooling Towers, William T. Bresnahan and Joseph D. Papia, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2660-2665.

Cooling water

Data Analysis for Computer Modeling of Thermal Dis-charges, Chun-Hou Orr and Shu-Fang Peng, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3758-3763.

Current U.S. - Japan Collaborative Activities in Wind Engineering, B. Bienkiewicz, T. Ohkuma and K. Fujii, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1075-1082.

Golden Rule of Contractor-Subcontractor Relations, Joseph

R. Proctor, Jr., SC Feb. 96, p12-14.

How to Build a Consortium to Advance Computing and Technology Transfer to the Project, Yvan J. Beliveau, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p793-799.

International Collaboration in the Design of Three Boundary Layer Wind Tunnels, César Farell, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1061-1068.

Management Framework for Large-Scale Water Problems, Neil S. Grigg, WR July/Aug. 96, p296-300.

Wind Engineering Co-operation: A Perspective of Europe and of China, Brian E. Lee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1069-1074.

Industry-University Partnerships for Construction Engineering Education, Robert K. Tener, El Oct. 96, p156-

Modeling Horizontal Diffusion with Sigma Coordinate Sys-tem, Wenrui Huang and Malcolm Spaulding, HY June

Two-Dimensional Boundary-Fitted Circulation Model in Spherical Coordinates, Muslim Muin and Malcolm Spaulding, HY Sept. 96, p512-521.

Coordination

Coordination

A Computational Organizational Approach to Modeling an Engineering Design Team, Jan Thomsen, Yul J. Kwon, John C. Kunz and Raymond E. Levitt, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p275-280.

Project Management Functions in Facility Owners' Envi-ronment: Organizational Diagnostics, Hossam El-Bibany, Douglas Ault, Ben Branch and John Bechtel, AE Dec. 96, p138-144.

The Virtual Design Team (VDT): Concurrent Design of Fa-cility Products, Processes and Organizations, Raymond E. Levitt, Tore R. Christiansen, Geoff Cohen, Yan Jin and John C. Kunz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p268-274.

Copper

Copper and Copper-Nickel Alloys as Zebra Mussel Anti-foulants, Jane M. Dormon, Catherine M. Cottrell, D. Grant Allen, Joseph D. Ackerman and Jan K. Spelt, EE Apr. 96, p276-283.

Dealing with Uncertain and Highly Variable Geotechnical Conditions Beneath the Inco Smelter in Copper Cliff, Karlis J. Jansons, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1383-1401.

Effect of Copper Slag on the Hydration of Blended Cementitious Mixtures, B. Mobasher, R. Devaguptapu and A. M. Arino, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1677-1686.

Impact of System Chemistry on Electroosmosis in Contam-inated Soil, Gerald R. Eykholk and David E. Daniel, GT May 94, p797-815.

Inelastic Thermal Response of Gr/Cu with Nonuniform Fiber Distribution, Brett A. Bednarcyk and Marek-Jerzy Pindera, AS Oct. 96, p93-105

Modeling the Fate of Copper Discharged to San Francisco Bay, Carl W. Chen, Daniel Leva and Adam Olivieri, EE

Oct. 96, p924-934.

Slowing Corrosion Damage in Concrete: The Use of Or-ganic-Coated, Ceramic-Clad, Metallic-Clad and Solid Metallic Reinforcing Bars, David B. McDonald, Donald W. Pfeifer, Matthew R. Sherman and Gilbert T. Blake, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1266-1275.

Specification of Cu, Pb and Cr in Contaminated Sediment Effected by pH, Chin-Yuan Chen, Jih-Gaw Lin and Cheng-Nan Chang, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p1453-1458.

Coral reefs

Application of the Model SPECIES to Kaneohe Bay, Oahu, Hawaii, Clifford J. Heam, (Estuarine and Coastal Mod-eling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p355-366.

Anelastic Strain Recovery of Deep Cores with Presence of Pore Pressure, Y. Abousleiman and A. H-D. Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p935-938.

Continuum Model for Analysis of Multiply Connected Per-forated Cores, Domenico Capuani, Marco Savoia and Ferdinando Laudiero, EM Aug. 94, p1641-1660.

Localized Load Effects in High-Order Bending of Sandwich Panels with Flexible Core, Y. Frostig and M. Baruch, EM Nov. 96, p1069-1076.

Shear Stiffness D_Q, for C-Core Sandwich Panels, T. C. Fung, K. H. Tan and T. S. Lok, ST Aug. 96, p958-966.

Core walls

Pile Wall Cuts Off Seepage (Available only in Geo/ Environmental Special Issue), Donald A. Bruce and Giovanni Dugnani, CE July 96, p8A-11A. Shear Lag in Shear/Core Walls, A. K. H. Kwan, ST Sept. 96, p1097-1104.

Corporate planning

ASCE's New Logo: A Case of Corporate Identity, NE June 96, p15.

Corporations

Admit, Accept and Apologize to Restore Corporate Image, ME Jan/Feb. 96, p9. Urban Knowledge Parks and Economic and Social Devel-opment Strategies, George Bugliarello, UP June 96,

Correlation analysis

Autoregressive Decision Rule in Aggregated Reservoir Operation, Qingfu Liang, Lynn E. Johnson and S. Mohan, WR Nov/Dec. 96, p438-440.

Comparison of Methods for Estimating REF-ET, D. M. Amatya, R. W. Skaggs and J. D. Gregory, IR Nov/Dec.

95, p427-435.

Relationship between Kelp Beds and Beach Width in Southern California, M. Hany S. Elwany and Reinhard E. Flick, WW Jan./Feb. 96, p34-37. Spectral Relative Motion of Two Structures due to Seismic

Travel Waves, Van Jeng and Kazuhiko Kasai, ST Oct. 96, p1128-1135.

Strange Attractors and Chaos in Wastewater Flow, Donald I. Angelbeck and Rafic Y. Minkara, EE Jan./Feb. 94,

Correlation techniques
Approximated Correlations Response of Nonlinear Systems
Under Normal White Noise Inputs, M. Di Paola and G.
Falsone, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p926-929.

Probability Analysis Method Using Fast Fourier Transform, opaoning Analysis Method Using Fast Fourier Transform, Yasuhiro Mori, Jun Sakamoto and Takayoshi Sekioka, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p696-699

Alternative Strategies for Temporary Support during Struc-tural Repair of Reinforced-Concrete Beams, John Cairns, ST Mar. 96, p238-246.

Assessing Corrosion on Steel Structures Using Corrosion Coulometer, Richard D. Granata, James C. Wilson and

John W. Fisher, IS Sept. 96, p139-144.

Autotrophic and Heterotrophic Bacterial Diversity from Yucca Mountain, M. Khalil, D. L. Haldeman, A. Igbinovia, P. Castro, L. Ragatz and P. Amy, (High Level Radioactive Waste Management, Technical Program Commit-

tee, 1996), p9-11.

Behavior of RC Bridge Decks with Flexible Girders, L.
Cao, J. H. Allen, P. B. Shing and D. Woodham, ST Jan.

96, p11-19.

Bridge Corrosion Cost Model Implementation and Coating Maintenance Model Using Dynamic Programming, C. K. Tam and S. F. Stiemer, CF May 96, p57-66.

Cable Corrosion in Bridges and Other Structures, Frank L. Stahl and Christopher Paul Gagnon, 1996, 0-7844-0014-

8, 225pp.

Comparison of Electromagnetic and Other Surveys to Lo-cate Extensive Water Main Corrosion, T. H. W. Baker, S. E. McDonald and R. J. H. Brousseau, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p829-

Corrosion Effects of Cement Stabilized Backfill on Galvanized Steel Reinforcement, S. N. Popova, B. N. Popov, R. E. White, M. F. Petrou and D. Morris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p988-

Corrosion Test on Candidate Waste Package Basket Materials for the Yucca Mountain Project, Richard A. Van Konynenburg and Paul G. Curtis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p464-467.

Currents Stop Seawall Corrosion, CE May 96, p10-11.

Degradation of Reinforced Concrete Structures Under Aggressive Conditions, Michael P. Enright, Dan M. Frango-pol and George Hearn. (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p978-987.

Development of Bridge Corrosion Cost Model for Coating Maintenance, C. K. Tam and S. F. Stiemer, CF May 96,

Effect of Reinforcement Corrosion on Flexural Behavior of Concrete Slabs, Abdullah A. Almusallam, Ahmad S. Al-Gahtani, Abdur Rauf Aziz, Fahd H. Dakhil and Rasheeduzzafar, MT Aug. 96, p123-127.

Evaluating Coatings for Concrete Wastewater Facilities, C. Vipulanandan, H. Ponnekanti, Dara N. Umrigar and A. D. Kidder, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p851-862.

Experimental Study of Durability of Reactive Powder Concretes, N. Roux, C. Andrade and M. A. Sanjuan, MT

Feb. 96, p1-6.

Golden Gate Bridge Gets Its Color Back, CE Sept. 96, p12. Historic Concrete Structures Assessment and Repair, Je-rome P. O'Connor, James M. Cutts and Gregory R. Yates, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1055-1062.

Impacts of Cathodic Protection on Waste Package Performance, Joel E. Atkins, Joon H. Lee and Robert W. Andrews, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p459-461.

Improving the Performance of Epoxy-Coated Rebar, Robert D. Lampton, Jr. and Dieter Schemberger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1209-1218

In-Situ Corrosion Testing of Selected HLW Container Materials, E. Smailos, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p462-

Inhibiting Action of Calcium Nitrite on Carbon Steel Re-bars, M. Ramasubramanian, B. N. Popov and R. E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1007-1016.

Initial Studies to Assess Microbial Impacts on Nuclear Waste Disposal, J. M. Horn, Annemarie Meike, R. D. McCright and B. Economides, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p7-8.

Laboratory and Field Electrochemical Monitoring Techniques of Reinforcement Corrosion, C. Andrade and C. Alonso, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1501.

Long-Term Corrosion Behavior of Environmental Assess-ment Glass, W. L. Ebert and J. K. Bates, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p399-401.

Mathematical Modeling of Electrochemical Steel Corrosion in Concrete, G. Balabanić, N. Bićanić and A. Dureković,

EM Dec. 96, p1113-1122.

Microbiological Influenced Corrosion (MIC) of Carbon Steel Utilized in the Construction of Nuclear Waste Canisters, Dave Bergman, Pati Castro, Beth Pitonzo, Penny Amy and Denny Jones, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p12-18

New Alloy Prevents Corrosion, ET Oct./Nov. 96, p1,9. Notes on Prestressed Structures, Morris Schupack, CE Nov.

96, p30. Parking Lot Corrosion Cure, Scott Greenhaus, CE Nov. 96,

p58-60.

Physical Distribution System Models for Assessing the Impact of Water Quality on Regrowth and Corrosion, Anne K. Camper, Warren L. Jones and Calvin Abernathy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1437-1441.

Pitting Corrosion of Container Materials in Anticipated Reository Environments, Ajit K. Roy and R. Daniel McCright, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p454-456.

Plumbing the Quality of a Sewer System, Thomas M. Galeziewski, Samuel A. Edmondson and Robert Webb, CE Jan. 96, p55-57.

Potential Microbial Impacts on Groundwater Quality, D. Roy Cullimore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p40-45.

Premature Deterioration of Concrete Structures—Case Study, Ishtiaque Ahmed and M. Zakaria Ahmed, CF

Nov. 96, p164-170.

Probabilistic Durability Analysis of Reinforced Concrete Bridge Decks, Paul C. Hoffman and Richard E. Weyers, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

A Program to Assess Microbial Impacts on Nuclear Waste Containment, Joanne Horn and Annemarie Meike, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p1-3.

Re-Assessment of Concrete Bridges, P. Thoft-Christensen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p613-620.

Rehabilitation of Steel Beams Using Composite Materials, William Edberg, Dennis Mertz and John Gillespie, Jr., (Materiols for the New Millennium, Ken P. Chong, ed., 1996), p502-508.

Relative Humidity in the Near-Field Environment, Wunan Lin, Jeffery J. Roberts and David Ruddle, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p128-129.

Reliability of Underground Pipelines Subject to Corrosion, M. Ahaamed and R. E. Melchers, TE Nov./Dec. 94,

p989-1002.

Repair of Main Pass 69 Waterflood Platform, G. E. Sgouros, T. E. Webster and N. M. Hennegan, WW July/Aug. 96, p165-171.

Replace or Repair? Pipe Study Will Tell, ET Mar/Apr. 96,

Resistance of Silica-Fume Concrete to Corrosion-Related Damage, Safwan A. Khedr and Ahmed F. Idriss, MT May 95, p102-107.

Retrofit of Black Butte Hydroelectric Project Penstock, George A. Inverso, John A. Schwartz, Stephen M. Hart, Erik Bodholt and Billy Ferguson, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996), p469-476.

Scour Monitoring at Johns Pass and Nassau Sound, Florida, J. D. Schall, G. A. Fisher and G. R. Price, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1990-1998.

Stochastic Models for Chloride-Initiated Corrosion in Reinforced Concrete, Svend Engelund and John D. Sørensen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p664-667.

Studies on Galvanized Carbon Steel in Ca(OH), Solutions, Bala S. Haran, Branko N. Popov and Ralph E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p997-1006.

Towards a Probabilistic Model for Marine Corrosion of Steel, Robert E. Melchers, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p660-663.

Unsaturated Flows Around a Horizontal Hole with Constant Heat Input, Y.-T. Chen and R. F. Boehm, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p125-127.

Wastewater System Design and Evaluation, Leonard Bell and Troy Norris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p949-957.

Water Vapor Effects on the Corrosion of Steel, John C. Eswaste Management, Technical Program Committee, 1996), p457-458.

Corresion control

Cable Corrosion in Bridges and Other Structures, Frank Stahl and Christopher Paul Gagnon, 1996, 0-7844-0014-8, 225pp.

Canal Crossing of High-Pressure Pipelines, Hiroya Kishi-no, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p434-440.

Corrosion and Hydrogen Permeation Inhibition by Thin Layer Zn-Ni Alloy Electrodeposition, D. H. Coleman, B. N. Popov and R. E. White, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1281-1287.

Corrosion Control of Drinking Water Using Tray Aerators, Enrique J. La Motta and Srinivas Chinthakuntla, EE July 96, p640-648.

The Nature of Passivity of Reinforcing Steel, Farrel Martin and Jan Olek, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p.1111-1120.

New Sacrificial Anode for Cathodic Protection of Rein-F. Daily, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1256-1265.

Chong, ed., 1996), p1256-1265.

On Estimating the Effect of Passivating Inhibitors on the Time for Corrosion Initiation of Steel in Concrete, A. A. Sagués, S. C. Kranc and R. G. Powers, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1522-1530.

Slowing Corrosion Damage in Concrete: The Use of Organic-Coated, Ceramic-Clad, Metallic-Clad and Solid Metallic Reinforcing Bars, David B. McDonald, Donald W. Pfeifer, Matthew R. Sherman and Gilbert T. Blake, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1266-1275.

Smithfield Interceptor Force Main River Crossings, Fredrick M. Muncy, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p173-179.

The Use of Xypex Admixture to Concrete as an Inhibitor to Reinforcement Steel Corrosion, Robert J. Scancella, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1276-1280.

Corrosion resistance

Cable Corrosion in Bridges and Other Structures, Frank Stahl and Christopher Paul Gagnon, 1996, 0-7844-0014-8, 225pp.

Corrosion-Resistant Steel Reinforcing Bars, David Darwin, Carl E. Locke, Jr., Matthew R. Senecal, Shawn M. Schwensen and Jeffrey L. Smith, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p482-491.

Field Testing & Evaluating Carbon Cable Prestressed Pile, Srinivasa L. Iyer, Sivakumar Ramabhadran and Brian S. Vulcan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p386-393.

New High-Performance Concrete in Canadian Foot Bridge,

CE July 96, p11.

CE July 96, pl 1.

Non-Accelerated Creep-Rupture of Fiber-ReinforcedPlastics in a Concrete Environment, Andrew Hundley
and Charles Dolan, (Materials for the New Millennium,
Ken P. Chong, ed., 1996), p519-526.:

Preserving Williamsburg's Cables, Maria Grazia Bruschi
and Terry L. Koglin, CE Mar. 96, p36-39.

Radical Rebar Forges Ahead, Eric Rasmussen, ET June/
July 06, 11.

July 96, p1,8.

Structures Firm Adds Industrial Focus, CE Dec. 96, p22.

Corrugated metal pipes

Storm-Water Treatment Goes Underground, Brian Roberts, CE July 96, p56-57.

Corrugating

1500 mm Corrugated HDPE Pipe Installation and Performance, David J. Mailhot, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p69-76.

Greenville Installs 1st 1.5m Annular CPE Pipe in the USA, Douglas Hinken and Stephen Matheny, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p88-96.

High Density Polyethylene Pipe under High Fill: A Continuing Study, John J. Meyer and J. L. (Jack) Hilfiker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p77-87.

Shear Strength of Beams with Corrugated Webs, Mohamed Elgaaly, Robert W. Hamilton and Anand Seshadri, ST Apr. 96, p390-398.

Cost analysis

Company-Level Cash-Flow Management, R. Navon, CO

Company-Level Casn-Flow Management, R. Navon, CO Mar. 96, p22-29.

Estimating Loss of Productivity Claims, Gasan G. Kallo, ME Nov.Dec. 96, p13-15.
Indoor Air Quality Cost Comparisons in Three Typical Buildings, Peter Rojeski, Jr. and Harmohindar Singh, AE Sept. 96, p107-114. Sept. 96, p107-114.

Life-Cycle Cost Analysis with Natural Hazard Risk, Steph-anie E. Chang and Masanobu Shinozuka, IS Sept. 96, p118-126.

Life-Cycle Costing in Municipal Construction Projects, David A. Arditi and Hany M. Messiha, IS Mar. 96, p5-

Making a Case for "Cost-Effective" Compliance, Dale T. Bignell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p305-307.

Remote Pipeline Routing with Application to Space Opera-tions, Sandra C. Feldman, Ramona E. Pelletier, Wm. Ed-ward Walser, James C. Smoot and Douglas Ahl, (Engi-neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p231-236.

Risk-Cost Decision Framework for Aquifer Remediation Design, Bruce R. James, Jin-Ping Gwo and Laura Toran, WR Nov./Dec. 96, p414-420.

Space Shuttle Program-Defining a Needed Paradigm for Efficient Access to Space, Lyle M. Jenkins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p426-434.

Use of Probabilistic Methods for Analysis of Cost and Du-Tation Uncertainties in a Decision Analysis of Cost and Du-ration Uncertainties in a Decision Analysis Framework, D. M. Boak and L. Painton, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p.250-251.

Cost control

COMPASS—New Paradigm for Project Cost Control Strategy and Planning, Makarand Hastak, Daniel W. Halpin and Jorge Vanegas, CO Sept. 96, p254-264.

Construction Claims and Disputes: Causes and Cost/Time Overruns, Cheryl Semple, Francis T. Hartman and George Jergeas, CO Dec. 94, p785-795.

Construction Representative: Scheduling and Cost Management, Allan F. Samuels and Michael J. Bruder, CO Sept. 96, p281-290.

Controlling Overhead Costs, Kirti Gandhi, ME July/Aug. 96, p18-22.

Cost Effectiveness and Incremental Cost Analyses for En-vironmental Planning, William Hansen, Kenneth Orth and Ridgley Robinson, (North American Water and Environment Congress & Destructive Water, Chenchayva Bathala, ed., 1996), p4220-4225.

Daulian, cd., 1970, Press.

Developments in Effective Emergency Management: A Means of Natural Disaster Cost Reduction, Gerald R. Schimke, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p37-38.

Innovative Building Construction Technique: Modified Up/Down Method, Joon H. Paek and Jong H. Ock, CO June 96, p141-146.

A Process Unit Based Approach to Media-Integrated Waste Minimization: A Paint Manufacturing Case Study, Rafal D. Walicki, Isobel W. Heathcote and Gordon Hayward, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1632-1637.

SQIG: A DOE Complex-Wide Approach to Savings through Sharing, Michael J. Chestnut and Robert R. Rinderman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p310-311.

Advanced Composites Build on Success, Frieder Seible and Vistasp Karbhari, CE Aug. 96, p44-47. Aluminum Has History, Kurt P. Thompson, CE Sept. 96,

p36,38. Architect Chooses Slenderwall for Gothic Church, CE July

96, p84.

Asphalt Update, Rita Leahy, R. Gary Hicks and Carl L. Monismith, CE Apr. 96, p58-61.

CCATS and CCIDS Technologies for Traffic Data and Inicident Detection. An Overview of the Technology and the Main Applications, V. Picciolo and F. Lemaire, (Ap-plications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p183-187.

A Cost Effective Rehab Scheme for URM Structures, M. Ala Saadeghvaziri, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p262-

263

Cost Effectiveness and Incremental Cost Analyses for Environmental Planning, William Hansen, Kenneth Orth and Ridgley Robinson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4220-4225. A Cost-Effective approach to In Situ Remediation of Soil and Groundwater at a Diesel Fuel Spill Site, David A. Nickerson and James N. Baker, (North American Water

and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), pl 379-1386.
Denitrification of Ground Water/Waste Water using the Aquacel System, Peter Hall and Jerry Shapiro, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p577-581. Do-Nothing Cleanups, Randall T. Hicks and Rais Rizvi, CE

Sept. 96, p54-57.

Evaluation of Nitrate Treatment Methods Under Uncertainty, Crystal C. Tannehill, M. F. Dahab and W. E. Woldt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Evaluation of Select Trade-Offs between Ground-Water Remediation and Waste Minimization for Petroleum Refining Industry, Craig D. Andrews, William F. McTer-nan and Keith D. Willett, EY Aug. 96, p41-60.

Innovative Effluent Management for Sustainability, Dan Bruinsma, Mary Ellen Dick, Eric Rosenblum and David Tucker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1614-1619.

An Iterative, Probabilistic Environmental Decision Analysis Approach, Erik K. Webb, Stephen H. Conrad and Theresa J. Brown, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p249-264. Monitoring Prestressed Structures, Jack F. Elliott, CE July

96, p61-63.

New Applications for Gypsum Products, Semyon Shimanovich and Christian Meyer, (Materials for the New Millen-

nium, Ken P. Chong, ed., 1996), p1687-1693.

Niche for Steam Stripping in Treating Dilute SOCContaminated Waters, Bruce I. Dvorak, Desmond F.
Lawler and Gerald E. Speitel, Jr., EE Sept. 96, p871-874.

Optimal Structures for Decentralized Provision of Roads, Frannie Humplick and Azadeh Moini-Araghi, IS Sept. 96, p127-138.

Pathfinder: Commercial Payload Service on the Russian Mir Space Station, Brent Sherwood and Thomas J. Walmsley, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p170-176. Pavement Management Pays Off, Rita Robison, CE Apr.

96, p44-47.

Reduction of Downstream Impacts Through Use of Varia-ble Detention Basin Volume Requirements, Conor C. Shea, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1858-1863.

Rethinking Training in the 1990s, John V. Farr and James F. Sullivan, Jr., ME May/June 96, p29-33.

Risk Analysis for Urban Stormwater Quality Management, James P. Heaney, Leonard Wright and Samsuhadi, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p219-248.

Risk-Cost Decision Framework for Aquifer Remediation Design, Bruce R. James, Jin-Ping Gwo and Laura Toran, WR Nov-Dec. 96, p414-420. A Space Systems Testbed for Situated Agent Observability

and Interaction, Sam Siewert and Gary Nutt, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p122-128.

Statewide Programming: Implementing Transportation-Policy Objectives, Debbie A. Niemeier, Tracy L. Reed, G. Scott Rutherford and Pat Morin, IS Mar. 96, p30-39.

Successful Partnering: Fundamentals for Project Owners and Contractors by H. J. Schultzel and V. P. Unruh, Frederick S. Merritt, AE June 96, p82.

A Systematic Review of Busways, David R. Martinelli, TE May/June 96, p192-199. Toning Asphalt, ET Aug/Sept. 96, p1,7.

etland Designs for Environmental Protection— Application in India, Subijoy Dutta, Dennis A. Haag and Jon B. Kraft, (North American Water and Environ Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3722-3727.

Cost estimates

COMPASS—New Paradigm for Project Cost Control Strat-egy and Planning, Makarand Hastak, Daniel W. Halpin and Jorge Vanegas, CO Sept. 96, p254-264.

Conceptual Design of Soil Venting Systems, David W. DePaoli, James H. Wilson and Carl O. Thomas, EE May

96, p399-406.

The Cost of Highway Bridge Scour in the State of Minne-sota, W. Robert Ivarson, Mark Gieseke and Dave Hal-vorson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3500-3508.

Costs of Accidents and Injuries to the Construction Indus-try, John G. Everett and Peter B. Frank, Jr., CO June 96,

p158-164.

Data and Data Interpretation in Bridge Management Sys-tems, George Hearn, Dan M. Frangopol, Tianna Szanyi and Steven Marshall, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p245-252.

Life-Cycle Cost Analysis with Natural Hazard Risk, Steph anie E. Chang and Masanobu Shinozuka, IS Sept. 96,

p118-126.

Models for Estimating Core-Cycle Rate of Penetration at Yucca Mountain, Nevada, Lawrence E. Barker and Dale D. Daffern, (High Level Radioactive Waste Management,

Technical Program Committee, 1996), p468-470.
Scheduling with Computer-Interpretable Construction
Method Models, Martin A. Fischer and Florian Aalami, CO Dec. 96, p337-347.

Software Acconts for Productivity Gain, ME Mar./Apr. 96, p10.

Cost minimization

Advanced Control Systems for Integrated Transportation by LIM Devices, R. Di Stefano, G. Gentile, S. Meo, N. Rotondale and M. Scarano, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p49-

Bridge Corrosion Cost Model Implementation and Coating Maintenance Model Using Dynamic Programming, C. K. Tam and S. F. Stiemer, CF May 96, p57-66.

Controlling Overhead Costs, Kirti Gandhi, ME July/Aug. 96, p18-22.

Design Heuristic for Globally Minimum Cost Water-Distribution Systems, G. V. Loganathan, J. J. Greene and T. J. Ahn, WR Mar./Apr. 95, p182-192.

Design of Branched-Water-Supply Network on Uneven Terrain, Brian Young, EE July/Aug. 94, p974-980.

Development of Bridge Corrosion Cost Model for Coating Maintenance, C. K. Tam and S. F. Stierner, CF May 96, p47-56.

Dynamic Programming Approach to Scheduling of Non-serial Linear Project, Ahmed B. Senouci and Neil N. El-

din, CP Apr. 96, p106-114.

Expert System for Water Treatment Plant Operation, Xin X. Zhu and Angus R. Simpson, EE Sept. 96, p822-829.

Minimizing Costs of Northern Highways by Using BST, D. R. MacLeod and Robin Walsh, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p935-946.

A New, Low-Cost Ice Control Structure. Part 1: Concept Development, J. H. Lever, G. Gooch and A. Tuthill, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p617-628.

A New, Low-Cost Ice Control Structure. Part 2: Construc-tion and Performance, J. H. Lever, G. Gooch and C. Clark, (Cold Regions Engineering: The Cold Regions In-frastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p629-639.

Optimum Design and Operation of Multiple Subunit Drip Irrigation Systems, G. C. Dandy and A. M. Hassanli, IR Sept./Oct. 96, p265-275.

Aerated Concrete Finds First U.S. Commercial Application, CE June 96, p14.

Analyses of Lunar Membrane Structures for Potential Failure Scenarios, James Day and Phil Richter, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1052-1058.

An Appropriate Technology to Treat Domestic Sewage, S. A. Mohsin, (North American Water and Environn Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2748-2753.

Author Clarifies His Convictions, Oscar De Pineres, P.E.,

CE July 96, p31.

Balancing on the Tides, Boris Levintov, P.E. and Joseph Klein, P.E., CE Oct. 96, p48-51.

The CSG 2000 Programme: Modernising Europe's Spaceport for the Next 20 Years, Juan de Dalmau, (Engineering Contenting of Contenting Contenting Space Sewart W. port to the Next 20 Tears, Juan de Datmau, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p413-418.

Drying Sludge Saves Costs, CE Oct. 96, p11.

Experimental Study of Behavior of New Space Truss System, A. I. El-Sheikh and H. El-Bakry, ST Aug. 96, p845-853.

p845-853. Geotextiles Cut Costs for Temporary Retaining Wall, CE

July 96, p84.

High-Performance Concrete in Bridge Structures in Virginia, Celik Ozyildirim and Jose Gomez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1357-1366.

Holistic Appraisal of Value Engineering in Construction in United States, Angela Palmer, John Kelly and Steven Male, CO Dec. 96, p324-328.

Innovative Drilling Brings Potable Water to Islanders, CE

June 96, p87. Innovative N.Y. Bridges Add Highway Clearance, CE July 96, p19-20.

Long-Span, Precast Bridge Saves Time, Money, CE June 96, p10.

New Transmission Line Lets Power Come Cheaper, CE

Aug. 96, p14,16.

Optimal Design of Prestressed Concrete Transmission Poles, Fatma Y. Kocer and Jasbir S. Arora, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p111-122. Optimization of Composite Highway Bridge Systems, M. Z. Cohn and J. J. Werner, (Analysis and Computation,

Franklin Y. Cheng, ed., 1996), p135-146.
The Production of Photovoltaic Devices in Space, A. Ignatiev and A. Freundlich, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996).

Rebound of the Bascule Bridge, Patrick A. Cassity, P.E., Vinod C. Patel, P.E. and R. Shankar Nair, P.E., CE Aug.

96, p48-50.

Rethinking Well Efficiency, Otto J. Helweg and Timothy Mays, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p954-959.

Savannah River Recycles Metals, Saves Money, CE Oct. 96, p14.

Scalping Makes Biosolids Safer, Saves Money, CE May 96, p.21.

Site Characterization Process Saves Time and Money, ET

Site Characterization Frocess saves time and money. War/Apr 96, pl.4.
SQIG: A DOE Complex-Wide Approach to Savings through Sharing, Michael J. Chestnut and Robert R. Rinderman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p310-311.

Title: "Self-Constructing Space Systems", Daniele Bedini, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1032-1037.

Twinning Time and Cost in Incentive-Based Contracts, A. Jaafari, ME July/Aug. 96, p62-72.

Cost sharing

A Constructive Act, CE Dec. 96, p13.

Costs

Are Bridge Conditions Improving Under Bridge Management: A Panel Discussion, Bojidar S. Yanev, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p282-289.

BootStrapping Space Resource Utilization with Tethers, Regolith Rockets and Micro Rovers, Bruce A. Mackenzie, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p321-327. Cold-Related Electric Power System Considerations, John Aspnes and James Cote, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p436-446.

Company-Level Cash-Flow Management, R. Navon, CO Mar. 96, p22-29.

Comparing Contracts: Which Type is Best?, ME May/June

Comparison of Alternative Methods for the Mars Sample Companies of American Wethods for the Mars Sample Residual Mission, Robert Zubrin, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p724-733.

Comparison of Commonly Used Odor Control Technologies, Kartik Vaith, Mike Cannon, Darrell Milligan and James Heydorn, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p64-74.

Composite Materials Edge into Mainstream Construction, CE Mar. 96, p16,19-20.

Computational Experiments with a Combined Traffic As-signment and Control Model with Asymmetric Cost Functions, Claudio Meneguzzer, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p609-614.

Computer Modelling and Simulation for High Speed Rail-way Applications, C. Ianniello, S. Savio and G. Sciutto, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p54-58. Construction Forum, SC Feb. 96, p9-11.

Construction Project Control through Risk Management, E.
N. Wirba, J. H. M. Tah and R. Howes, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p28-34.

Controlling Overhead Costs, Kirti Gandhi, ME July/Aug. 96, p18-22.

Corps' Shoreline Work Assessed, CE Oct. 96, p11. Cost-Performance Criteria for Seismic Retrofitting, Alberto

L. Guzmán, Ali Saffar and Leandro Rodríguez Agrait, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Costs and Overhead Not the Same Thing, Ken Anderson, CE May 96, p28-29.

Costs of Treatment for Wastewater Reclamation and Disposal: A Preliminary Assessment, Pamela Doughman, Stephen Lyon, Lydia Chiu and Charles Gunnerson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1425-1430.

Design Decision Making for Infrastructures under the Re-Striction of the Energy Consumption, Minoru Matsuo, Yusuke Honjo and Ikuo Sugiyama, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed.

and Mircea D. Grigoriu, ed., 1996), p376-379.
iscussion of Environmental Engineering Forum:
Backflow Prevention and Water Quality in Residential Discussion Sprinkler Systems (September/October 1993, Vol. 119, No. 5, by Thomas M. Walski (Environmental Engineering Forum)), Ralph E. Wilbur, EE Jan. 96, p80-82

Dynamic Optimal Groundwater Remediation by Granular Activated Carbon, Teresa B. Culver and Gary W. Shenk, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Dynamic vs. Quasi-Static Effluent Limits, Joe Karkoski, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Experimentation of the ERTMS System on the Italian, Ger-man and French Railways, Daniel Lancien, Florian Kollmannsberger and Paolo Ripamonti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed.,

1996), p30-38. Factors Affecting the Selection of a Crossing Method, David E. Hairston, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p214-221. Faster, Cheaper, Better: Teleoperated Space Robots, Tom Billings, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p150-156.

For Public Works, Metrication is a Luxury, Ronald F. Kil-martin, CE Jan. 96, p31-32.

Framework for PMS Using Mechanistic Distress Submod-els. David K. H. Chua, TE Jan./Feb. 96, p29-40.

Genetic Algorithm Design of Piped Irrigation Systems, Graeme Dandy, Angus Simpson and Laurie Murphy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), n364-369

GIGO: Spreadsheet-Based Simulation for MSW Systems, Robert P. Anex, Renée A. Lawer, Jay R. Lund and George Tchobanoglous, EE Apr. 96, p259-262.

Go-Cart Proposal Won't Produce a Ferrari, Sam Bandi-mere, CE Mar. 96, p26,28.

Green Light for Whom? Hermann Zutraun, P.E., CE Sept. 96, p38.

High Performance Concrete for Giles Road Bridge, Amin Einea, Xiaoming Huo, Mohsen Saleh and Maher K. Tadros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p133-140.

HPS: A Space Fission Power System Suitable for Near-Term, Low-Cost Lunar and Planetary Bases, Michael G. Houts, David I. Poston and William A. Ranken, (Engiwart W. Johnson, ed., 1996), p973-983.

In Defense of Design Engineers, Burton A. Lewis, CE Sept. 96, p32.

Insurance and Damage Mitigation - Incentive or Disincentive, George R. Walker, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p195-196.

Life Cycle Cost Analysis of a Storburn Propane Combus Life Cycle Cost Analysis of a Storburn Propane Combus-tion Toilet, Paul Ritz and Herbert P. Schroeder, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p816-827.

Life-Cycle Costing in Municipal Construction Projects, David A. Arditi and Hany M. Messiha, IS Mar. 96, p5-

Offshore Platform's Failure and Repair - Case Studies, T. S. Thandavamoorthy and A. R. Santhakumar, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p181-182.

Orthotropic Steel Deck for the Williamsburg Bridge Reconstruction, R. B. Gajer, J. Patel and D. Khazem, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p491-498.

Performance Characteristics of a Smart Hinge for Solar Array Deployment, Dirk B, Warnaar and Rodney G, Galloway, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1162-1168.

Range of Impacts of Some Recent U.S. Disasters and The Range of impacts of Some Recent U.S. Dissisters and Tubin implications for Housing Recovery, Claire B. Rubin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p168–170. Reader Remembers Cost, Not Fish, Charles C. McCloskey,

P.E., CE Nov. 96, p32,36.

Reducing the Vulnerability of Transmission Lines in Hurri-cane Regions by Choosing Minimum Life Cycle Cost Designs, Peter J. Vickery and Lawrence A. Twisdale, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p245-246.

Reliability/Cost of Adaptive Intraply Hybrid Fiber Composite Structures, Christos C. Chamis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p644-647.

Risk-Based Planning and Management of Maintenance Dredging, L. Leigh Skaggs and David A. Moser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2403-2408.

Seismic Vulnerability and Repair Cost of the University of Memphis Buildings, Howard H. M. Hwang, Min Xu and Jun-Rong Huo, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p143-144.

Selection Among Aqueous and Off-Gas Treatment Tech-nologies for Synthetic Organic Chemicals, Bruce I. Dvorak, Christopher J. Herbeck, Claire P. Meurer, Des-mond F. Lawler and Gerald E. Speitel, Jr., EE July 96, p571-580.

A Simplified Process Audit to Design an Affordable Pollution Prevention and Waste Management Plan - Part 1, Ronald Zaloum and Pierre Sylvestre, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p87-92.

A Simulator to Study the Effects of Earthquakes on Seg-mental Paving, John Clifford, Rob Avenall and Don Brown, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p1-2.

Space Applications of Surplus Ballistic Missiles, Matthew A. Bille, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p406-412.

A Surface Collection Design Approach on the Lower Co-lumbia River, Donald R. Chambers and John H. Plump, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p667-672.

Treating Wastewater in Developing Nations, CE Aug. 96, p10.

Water Resources Investigation Along Salt River in Phoenix and Tempe Area, James Chieh, Jody Fischer and Dennis Marfice, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1399-1405.

World and Lunar Solar Power Systems Costs, David R. Criswell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p293-301.

Since When is 5% Slight?', Merlyn Isaak, CE Feb. 96, p31-32.

Counterweight

Earthquake Response of Structure-Elevator System, F. Segal, A. Rutenberg and R. Levy, ST June 96, p607-616.

Acquisition and Restoration of a Drainage District in the Snohomish River Valley, John Engel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3950-3955.

County-Wide Drainage Study Using GIS, J. J. DeVries and T. V. Hromadka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3623-3628.

The Management Improvement Program: A Model to Improve the Performance of Irrigated Agriculture, A. R. Dedrick, E. Bautista and S. A. Rish, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3470-3475.

Coupled systems

Analytical Study and Verification of a Coupled Theory of Mixtures for Application in Cone Penetration and Tunnel Boring in Soils, George Z. Voyladijs, Murad Y. Abu-Farsakh and Mehmet T. Tumay, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p543-546. [Jun Sub-

Coupled and Uncoupled Poroelastic Solutions to Land Sub-sidence due to Groundwater Withdrawal, Giuseppe Gambolati, Mario Putti and Pietro Teatini, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p483-486.

Coupled Processes of Gas Hydrates Dissociation and Fluid Filtration in Saturated Porous Media, Alexey Maksimov, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

On Efficiency and Accuracy in Simulations of Granular-type Systems, Yi Sun and Oleg Vinogradov, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p96-99.

Some Thoughts on Thermoporoelastic Coupling, M. Bai, Y. Abousleiman and J.-C. Roegiers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p48-51.

Coupled walls

Classification Methodology for Coupled Shear Walls, O. Chaallal, D. Gauthier and P. Malenfant, ST Dec. 96,

Seismic Response of Flexibly Supported Coupled Shear Walls, O. Chaallal and N. Ghlamallah, ST Oct. 96, p1187-1197.

Court decisions

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Cannot Indemnify for Own Negligence, CE Oct. 96, p30. CERCLA Liability and the Environmental Professional— An Overview of Judicial Developments, John J. Allen, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p35-41.
City Rejects Bid, CE Jan. 96, p26.

Claim Review Process, CE May 96, p24.

Clause in Contract Does Not Preclude Other Damages, CE Aug. 96, p24.

Contractor is Due Payment, CE Feb. 96, p24.

Contractor Responsible for Own Negligence, CE Jan. 96,

County Responsible for Bond, CE June 96, p24.

Design-Build Joint Venture Liability, Michael C. Loulakis and William L. Cregger, CE May 96, p32.

Design-Build Limitations of Liability Are Successful, Mi-chael C. Loulakis and William L. Cregger, CE Jan. 96,

Differing Site Conditions—Industry Consensus Opposes Ruling, S. Scot Litke, ME July/Aug. 96, p14-15.

The Enforceability of "Pay When Paid" Clauses, Michael C. Loulakis and William L. Cregger, CE Sept. 96, p40. Expert Testimony Can Prove Negligence, CE June 96, p24. The Importance of Contract Clarity Clarified, Michael C.

Loulakis and William L. Cregger, CE Mar. 96, p32. Indemnity Not Valid, CE Jan. 96, p26.

Insolvency Does Not Excuse From Payment, CE June 96.

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Masaru Hoshiya and Ikumasa Yoshida, EM Feb. 96,

On Translation Processes and Upcrossing Probabilities, Mi-chael Macke and Christian Bucher, (*Probabilistic Me-chanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p608-611.

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am, Ren F. Long, ed., 1970), post-374.
Analysis of Crack Propagation in Concrete Structures by Markov Chain Model and R-curve Method, Yunping Xi and Zdeněk P. Bažant, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p358-361.

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Application of a Reliability-Based Fatigue Life Model to a Gas Turbine Engine Structure, Robert G. Tryon, Thomas A. Cruse and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p636-639.

Behavior of Marble under Compression, C.-T. Chang, P. Monteiro, K. Nemati and K. Shyu, MT Aug. 96, p157-

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Vanies, ed. and E. F. Carak, ed. 1. P. Crack Growth in Uniaxially Aligned Fiber Reinforced Mortar, Mohsen A. Issa and A. B. Shafiq, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p624-627.

Cracking Analysis of Arch Dams by 3D Boundary Element Method, L. M. Feng, O. A. Pekau and C. H. Zhang, ST June 96, p691-699.

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Fatigue Reliability Analysis Based on Time Dependent First Passage, C.-J. Kuo and P. H. Wirsching, (Probabi-listic Mechanics & Structural Reliability, Dan M. Fran-

usine Mechanics & Structural Reliability, Dain St. Francapol, ed. and Mircea D. Grigoriu, ed., 1996), p466-469.
FORM/SORM Search Algorithms in the Presence of Indmissible Domains, Roger Sindel and Rüdiger Rackwitz, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p570-573.

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Modelling of Randomly Meandering Fatigue Crack Growth, Kazimierz Sobczyk and Jerzy Trębicki, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p478-481.

Monitoring Stable Crack Propugation in Metals, Luis A. de Bejar, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p890-893.

Monitoring Systems on Historic Buildings: The Brunelleschi Dome, Gianni Bartoli, Andrea Chiarugi and Vittorio Gusella, ST June 96, p663-673.

Nondestructive Evaluation of Elastic Constants and Crack Depth in Concrete Using Transient Elastic Waves, T.-T. Wu and J.-S. Fang, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p861-868.

Observations of Internal Crack Growth in Mortar Using X-Ray Microtomography, Eric N. Landis, Edwin N. Nagy, Denis T. Keane and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1330-1336.

Possibilities of Fracture Mechanics Models Application to Optimisation of Operational Use of Large-Size Machine Components, Lech Bukowski and Piotr Artymiak, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p780-783.

A Procedure for Evaluating Reflective Cracking, Shakir R. Shatnawi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1429-1438.

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Cellulose Fiber Reinforced Concrete, Parviz Soroushian, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p809-818.

Composite Beam Analogy Fracture Model for Concrete, Mohammed E. Haque and Farhad Ansari, EM Oct. 96, p957-965.

Compression Failure in Reinforced Concrete Columns and Size Effect, Zdeněk P. Bažant and Yuyin Xiang, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p443-451.

Compressive Behavior of Concrete: Physical Mechanisms and Modeling, Pierre Rossi, Franz-Josef Ulm and Fatiha Hachi, EM Nov. 96, p1038-1043.

Computational Modeling of Early Age HPC, Rob ter Steeg, Jan Rots and Ton van den Boogaard, (Worldwide Ad-vances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p542-553.

Continuous and Discontinuous Failure Modes, Z. Chen, EM Jan. 96, p80-82.

Crack Growth in Uniaxially Aligned Fiber Reinforced Mortar, Mohsen A. Issa and A. B. Shafiq, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p624-627.

Design Criteria for Pseudoductile Fiber-Reinforced Composites, Christopher K. Y. Leung, EM Jan. 96, p10-18.

Determining Bridge Inspection Requirements for Fatigue Damage Using Reliability, Theodore Hopwood, II, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p454-457

Dynamic Fatigue of High-Rise Natural Draught Cooling Towers, Wilfried B. Krätzig, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p298-309.

Editor's Note, David Darwin, ST June 96, p579-580.

Embedded Crack Approach to Regularize Finite Element Solutions of Concrete Structures, E. Pramono, J. C. Mould, Jr. and H. S. Levine, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p554-558. 161

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p193-195.

Environmental-Induced Longitudinal Cracking in Cold Regions Pavements, Robert L. Scher, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p899-910.

Estimating Transverse Strength of Masonry Infills, Richard Angel and Joseph Uzarski, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and

S. L. McCabe, ed., 1996), p101-111. Evaluation of Cracking of the Miami Marine Stadium Hyperbolic Paraboloid Roof Structure, Michael L. Brainerd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1659-1668.

Evaluation of Crumb Rubber (CRM) as a Smart Additive in Asphalt Concrete Mixes, Gary Gowda, Kevin Hall and Robert Elliott, (Materials for the New Millennium, Ken

P. Chong, ed., 1996), p612-621.

Evaluation of Microcrack Damage Growth and Healing of Asphalt Concrete Pavements Using Stress Wave Method, Yongon Kim and Y. Richard Kim, (Engineering Me-

Tongon Kim and T. Richard Killi, (Engineering Sechanics, Y. K. Lin and T. C. Su, 1996), p612-615.

Experimental Results for Seismic Resistant Steel Moment Frame Connections, Charles W. Roeder and Douglas A. Foutch, ST June 96, p581-588.

Externally Bonded Carbon Fiber for Strengthening Con-crete, Jay Thomas, Thomas Kline, Peter Emmons and Howard Kliger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p924-931.

Finite Element Analysis of Discontinuities in Concrete, Hong D. Kang and Kaspar J. Willam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1054-1057.

Chanics, T. K. Lin and T. C. Su, 1990, p1034-1057.
A Fracture Mechanics Model for Shrinkage Cracking Ring, C. Ouyang, W. Yang and S. P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p861-864.

The French Experience in Bursting Rehabilitation for Pipe-line Crossings, Y. G. Diab and P. Perrotin, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996),

Implementation of Variance Reduction Techniques Using Monte Carlo Stratified Sampling in the COMPROMIS Code Version 2, Emmanuel Ardillon, Patrice Pinter and Bernard Lapeyre, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p692-695.

Inspection of Fatigue Sensitive Bridge Members, Richard A. Walther and Michael J. Koob, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p321-328.

Interaction between the Crack Tips of a Circular Arc Crack, Y. C. Shiah and Y. M. Tsai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p592-595.

Lateral Strength of Brick Cladded Frames, Stephen P. Schneider and Stephen J. Favieri, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed.

in Structural Concrete and Massonry, A. E. Schultz, ed. and S. L. McCabe, ed. 1996), p112-122.
Low Temperature Cracking and Rutting in Asphalt Concrete Pavements, Ted S. Vinson, R. Gary Hicks and Vincent C. Janoo, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Hore, ed. 1906), p203, 249. Haas, ed., 1996), p203-248.

Micromechanics of Damage in Random Composites, M. Ostoja-Starzewski, A. Al-Ostaz, I. Jasiuk and K. Alzebdeh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p362-363.

NDE of Distributed Cracking in Concrete, Scott F. Selleck, Eric N. Landis, Michael L. Peterson and Surendra P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p604-607.

New Damage Variable in Failure Analysis of Concrete, Woon-Kwong Yip, MT Nov. 96, p184-188. Nonlinear Finite-Element Model of Hollow Masonry, E. Y.

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Orthotropic Steel Decks Are Viable Bridge Option, CE Nov. 96, p19-20.

Pavement Distress Caused by Deep Heave in Anchorage, Alaska, Rupert G. Tart, Jr., Mark R. Musial and Mich E. Krueger, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p923-934.

Performance of Polyethylene Parting Strips in PCC Pave-ments, Samuel P. Lawrence, Awad S. Hanna and Jeffrey

S. Russell, TE Mar./Apr. 96, p155-163.

Pitch-Based Carbon Fibre Reinforced Concretes, A. M. Brandt and L. Kucharska, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p271-280.

Prediction of Concrete Cracking Under Coupled Shrinkage and Creep Conditions, Wei Yang, Kejin Wang and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p564-573.

A Procedure for Evaluating Reflective Cracking, Shakir R. Shatnawi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1429-1438.

Reliability-Based Model for Predicting Pavement Thermal Cracking, Said M. Easa, Ahmed Shalaby and A. O. Abd El Halim, TE Sept./Oct. 96, p374-380.

Road and Airfield Design for Permafrost Conditions, David C. Esch, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p121-150.

Space Station Module Wall Hole Size and Crack Length Following Orbital Debris Penetration at 6.5 km/s, William P. Schonberg and Joel E. Williamsen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl-7.

Statistical Aspects of Size Effects in Quasibrittle Fracture, Zdeněk P. Bažant and Jaime Planas, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1179-1180.

A Stochastic Model for Elastic-Plastic Fracture of Cracked Pipes, Sharif Rahman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p764-767.

A Study on the Link between Damage Mechanics and Fracture Mechanics, Zhen Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p739-742.

Surface Response of a Cracked Layered Half-space Sub-jected to an Antiplane Impact, S. W. Liu, J. C. Sung and M. S. Lin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p616-619.

Thermal Cracking in a Cantilever Bridge made of HSC, C. van der Veen, E. A. B. Koenders and N. Kaptijn, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p892-898.

Time-Dependent Fluid Fracture Interaction in Concrete, Volker Slowik and Victor E. Saouma, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p865-868.

Uniaxial Compression Behavior of Small Blocks of Welded Tuff, Stephen C. Blair and Patricia A. Berge, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p409-411.

A Uniaxial Constitutive Model Accounting for Viscoelas-ticity and Damage Evolution under Cyclic Loading, Hyun-Jong Lee and Y. Richard Kim, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p693-696.

Use of Fibers to Improve Cracking Characteristics of Concrete, P. Balaguru, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p183-192.

Utilization of Recycled Fibers in Concrete, H. C. Wu, Y. M. Lim, V. C. Li and D. J. Foremsky, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p799-808.

Cracks

An Advanced Comprehensive Model for the Statistical Analysis of S-N Data, C. L. Shen, P. H. Wirsching and G. T. Cashman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p462-465. Assessing Bridge Cracks, ET Mar/Apr. 96, p2.

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Cohesive Crack Model with Rate-Dependence and Visco-elasticity, Zdeněk P. Bažant and Yuan-Neng Li, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

Complex Crack Interaction in Composite Plate, Wieslaw K. Binienda, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p408-411.

Concrete Shear Failure in Reinforced-Concrete Elements, Prodromos D. Zararis, ST Sept. 96, p1006-1015.

Cracks in Poroelastic Materials with a Highly Anisotropic Fluid Response, C. Atkinson and R. V. Craster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p212-215.

Desiccation Theory for Soft Cohesive Soils, A. Naser Abu-Hejleh and Dobroslav Znidarčić, GT June 95, p493-502

Detection of Cracks in Concrete Using the Impact Responses, H. L. (Roger) Chen and Lianteng Pei, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p620-623.

Effect of Inclusion Strength and Geometry on Mortar Frac-ture, Mohsen A. Issa, A. B. Shafiq and A. Chudnovsky, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1038-1041

Embedded Fiber Optic Displacement Sensor for Concrete Elements, Xi Chen, Farhad Ansari and Hong Ding, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p359-365.

Experimental Observation of Microstructural Behavior of Concrete, Ahmed M. Farahat, Masashi Kawakami and Tada-aki Tanabe, MT May 95, p87-95.

Experimental Study of Reinforced Concrete Beams Using Acoustic Surface Waveguides, Yidong He and Roger H. L. Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohamman.

madi ed., 1996), p869-875.
Fatigue Cracks at Stringer-Floorbeam Connections, Leon L-Y Lai, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Moham-

madi, ed. 1996), p483-490.

Fiber Sensors for Damage Detection on Large Structures and for Assessment of Deformation Behavior of Cementitious Materials, W. R. Habel, D. Hofmann, B. Hillemeier and F. Basedau, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p355-358.

Florida DOT Applies Gravity Sealer to Seaway Bridges, CE Sept. 96, p96.

A Fracture Mechanics-Based Design Method for SFRC Tunnel Linings, Pruettha Nanakorn and Hideyuki Horii, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p819-828.

Griffith Energy Balance Model for Crack-Growth Prediction in Reinforced Concrete, Kamel Ben Amara, EM July 96, p683-689.

HMA Overlays to Rehabilitate PCC Pavements, Dale S. Decker and Matthew W. Witczak, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1418-1428.

ousner, "Father of Earthquake Engineering," Leads ASCE's Disaster Mitigation Conference, NE Sept. 96,

Identification of Structural Damage, S. Hassiotis and K. M. Grigoriadis, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1107-1114.

Loss of Capacity of Concrete Shear Walls, Hassan Sassi and Richard Ranous, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p80-81.

Nonlinear Behavior of RC Cooling Towers and Its Effects on Strains, Stresses, Reinforcement and Cracks, Udo Wittek and Anmin Ji, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p287-297.

Plane Solutions of Interface Cracks in Anisotropic Dissimilar Media, Chien-Ching Ma and Jyi-Jiin Luo, EM Jan. 96, p30-38.

Probabilistic Framework to Detect and to Identify Anomalies in Structures, Nabil Fares and Roula Maloof, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p910-913.

Protection from Vibrations, S. Drabkin, P.E. and H. Lacy,

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Response of MMC Tubes with Internal Fiber Cracks, Sarah C. Baxter and Marek-Jerzy Pindera, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p412-415.

Seismic Solutions for Steel Frame Buildings, Virginia Fairweather, CE Mar. 96, p40-43.

Semianalytical Solutions to Griffith Fracture Under Varia-ble Pressure, Albert T. Yeung, EM June 96, p580-584. Smeared Crack Approaches—Material Modeling, Marco Petrangeli and Joško Ožbolt, EM June 96, p545-554.

Spotlight on Steel Moment Frames, W. F. Chen and E. Yamaguchi, CE Mar. 96, p44-46.

Steel Moment Frames with Welded Connections, Helmut Krawinkler, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

Mohammadi, ed., 1996), p1115-1122. A Summary of Research and Development Projects in Nondestructive Evaluation Technologies for Bridges, Steven B. Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p230-237.

Three-Dimensional Finite-Element Simulation of FWD Loading on Pavement Systems, W. Uddin, R. M. Hack-ett, P. Noppakunwijai and Z. Pan, (Meeting the Chal-lenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p284-294.

Time-Dependent Fluid Fracture Interaction in Concrete, Volker Slowik and Victor E. Saouma, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p865-868.

Transition from Brittle to Quasi-Brittle Behavior in Fiber Reinforced Brittle Matrix Composites, Claudia P. Oster-tag, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1219-1227.

Very Low Cycle Failure Process of Steel Angle Members, Yeon-Soo Park, Satoshi Iwai, Hiroyuki Kameda and Taijiro Nonaka, ST Feb. 96, p133-141.

A Wheeled Mobile Robot for Automated Pavement Crack Sealing, K. J. Mueller, D. Hong and S. A. Velinsky, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p178-184.

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ALPS: The Automated Lift Planning System, Mike Williams and Craig Bennett, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p812-817.

Beware of Flying Cranes - and Disconnected Codes, M. Russell Nester and Allan R. Porush, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p219-220.

Culture of Using Mobile Cranes for Building Construction, Aviad Shapira and Jay D. Glascock, CO Dec. 96, p298-307

Demonstration of the Smart Crane Ammunition Transfer System, E. Craig Bradley, Steven M. Killough and John C. Rowe, (Robotics for Challenging Environments, Lau-ra A. Demsetz, ed., 1996), p192-198.

Graphic-Based Interactive Path Planning for Large-Scale Bridge Maintenance Cranes, Sungwoo Moon and Leonhard E. Bernold, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p79-85.

How Crane Safety on Construction Sites Has Changed in 25 Years, Harlan W. Fair, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p84-92.

If I Had Not Seen It, I Would Not Have Believed It! John E. Meeks, P.E., SC Nov. 96, p119-121.

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Enhancing Creativity when Solving Contradictory Techni-cal Problems, Sergey Drabkin, El Apr. 96, p78-82.

Examination of Emerging Consciousness in Engineerin Management, Amarjit Singh, ME July/Aug. 96, p50-57.

Algebraic Methods For Creep Analysis of Continuous Composite Beams, Luigino Dezi, Graziano Leoni and Angelo Marcello Tarantino, ST Apr. 96, p423-430. Constitutive Modeling and Analysis of Creeping Slopes, Chandra S. Desai, Naresh C. Samtani and Laurent Vul-

liet, GT Jan. 95, p43-56. Creep Behavior of FRP-Reinforced Wood Members, Nikolaos Plevris and Thanasis C. Triantafillou, ST Feb. 95. p174-186.

Creep Test Results Confirmed, Toby D. Leamon, P.E., CE Sept. 96, p30.

Creeping Suspicion, Michael P. Bruen, Nicholas Pansic and M. I. Schwartz, CE May 96, p60-63.

A Damage Mechanics-Based Approach to Structural Deterioration, Baidurya Bhattacharya and Bruce Ellingwood, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Drained Creep Behavior of Marine Clays, Armand J. Silva and Horst G. Brandes, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p228-242.

Field Instrumentation to Study the Time-Dependent Behavior in Sunshine Skyway Bridge. I, Mohsen A. Shahawy and M. Arockiasamy, BE May 96, p76-86. Model Formulations for Numerical Creep Calculations for

Concrete, Akihiko Kawano and Robert F. Warner, ST Mar. 96, p284-290.

New Analysis for Creep Behavior in Concrete Columns, Raed M. Samra, ST Mar. 95, p399-407.

Not So Suspicious, H. Nierlich, CE Sept. 96, p30-31. Prediction of Concrete Cracking Under Coupled Shrinkage and Creep Conditions, Wei Yang, Kejin Wang and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p564-573.

Ren F. Chong, ed., 1990), p504-573.

Prediction of Time-Dependent Behaviour of Remolded Soft Marine Clay in Axi-Symmetric Undrained Conditions, Satoshi Murakami, Kazuya Yasuhara and Kaoru Bessho, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., oc. Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p181-194.

Prestress Loss Due to Creep in Post-Tensioned Clay Ma-sonry, Subhash C. Anand and Naresh Bhatia, (Worldsonry, Subnasn C. Anano and Statesh Dhades wide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p49-60.

Probabilistic Creep Analysis of Underground Structure in Salt, A. F. Fossum and D. E. Munson, EM Mar. 96, p209-217.

Rate and Creep Effect on the Stiffness of Soils, Diego C. F. Lo Presti, Michele Jamiolkowski, Oronzo Pallara and Antonio Cavallaro, (Measuring and Modeling Time De-pendent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p166-180.

Shear Properties of Components Used in Stressed-Skin Panels, I. Robert Kliger and Patrick J. Pellicane, MT

May 96, p77-82.

Simulation of Pore Pressures in Triaxial Creep Tests, Horst G. Brandes and Armand J. Silva, (Measuring and Model-ing Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p96-108.

cu. and Victor N. Kantakin, ed., 1990, 190-108.
Soil Creep and Creep Testing of Highly Weathered Tropical Soils, Peter G. Nicholson, Philip W. Russell and Clint F. Fujii, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p195-213.

Stabilization of a Creeping Slope Using Soil Nails, Peter R. Cali, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p109-121.

Structural Dynamic and Viscoelastic Analysis via Electric Analogy, Roberto Scotta and Renato Vitaliani, ST Sept. 96, p1118-1121.

Theoretical Joist-Rupture Sequences in Wood-Floor Sys-tem Model, Timothy A. Philipot and David V. Rosowsky, ST Oct. 96, p1225-1233.

"Suspicious" Implications Allayed, William F. Powers, III, Kerry B. Allen and Michael P. Bruen, CE Sept. 96, p31-

Fiber Orientation in Composite Structures for Optimal Resistance to Creep Failure, David N. Robinson and Wei Wei, EM Sept. 96, p855-860.

wet, Em Sept. 30, poss-sou.
Non-Accelerated Creep-Rupture of Fiber-Reinforced-Plastics in a Concrete Environment, Andrew Hundley and Charles Dolan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p519-526.

Stochastic Snow Load Process Model from Daily Climatological Data, Kenneth J. Fridley, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p210-213.

DNAPL Recovery System at a Railroad Tie Treating Facil-ity, Richard Broad, III, David F. Atwater and Riaz Ah-med, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p743-750.

Marine Borers Date Back 60 Million Years, Raymond C.

Oliger, CE Dec. 96, p31.

Rates of Release of PAHs from DNAPL Mixtures, Suparna Mukherji, Catherine A. Peters and Walter J. Weber, Jr., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p575-582.

Backwater Computation for Transcritical River Flows, C. Beffa, HY Dec. 96, p745-748.

Buckling Modes at Coincident Singularities of Stiffness Matrix, Igor Raskin and John Roorda, EM Aug. 96,

Generalized Differential Quadrature Method for Buckling Analysis, H. Du, K. M. Liew and M. K. Lim, EM Feb. 96, p95-100.

A Monitoring System for High-Clearance Scaffold Systems during Construction, Y. L. Huang, T. Yen and W. F. Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p719-726.

Prediction of Buckling Load of Columns Using Artificial Neural Networks, A. Mukherjee, J. M. Deshpande and J. Anmala, ST Nov. 96, p1385-1387.

Critical path method Process Modeling for Design-Build Project Management, Yan Jin, Tore Christiansen, Raymond E. Levitt and Paul Teicholz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p642-648.

gas, cd. and raid Chinoway, ed., 1990, po2-04-8.
Using CPM-Chart Animation to Illustrate the Evolution of Schedules, Julio C. Martinez and John R. Knoke, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p627-633.

Crop production

Design of Runoff Recycling Irrigation System for Rice Cultivation, R. C. Srivastava, IR Nov. Dec. 96, p331-335.

Effects of Sewage Effluent Irrigation on Paddy, S. Krish-namoorthi, K. Shyamala and P. Govindan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2372-2377.

Nonlinear Root-Water Uptake Model, Chandra Shekhar P. Ojha and Amaresh K. Rai, IR July/Aug. 96, p198-202.

Optimum On-Farm Irrigation Efficiency for Sustainable Agriculture, B. Davidoff, E. Craddock, M. Roos and F. Karajeh, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p189-194.

Precipitation and Water-Table Effects on Agricultural Production and Economics, Jorge A. Ramírez and Bryce Finnerty, IR May/June 96, p164-171.

Crop response

Crop Growth and Water Use Model for Lettuce, M. Gallardo, R. L. Snyder, K. Schulbach and L. E. Jackson, IR Nov./Dec. 96, p354-359.

Crop yield

Effect of Reservoir Hedging on Crop Yield Under Deficit Irrigation Conditions, Arathi T. Seshan and K. Sriniva-san, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Dec 20-422.
Interseasonal Irrigation System Planning for Waterlogged Sodic Soils, S. N. Panda, S. D. Khepar and M. P. Kaushal, IR May/June 96, p135-144.
Modeling Seasonal Furrow Irrigation, N. S. Raghuwanshi and W. W. Wallender, IR July/Aug. 96, p235-242.

Crops

Crop Growth and Water Use Model for Lettuce, M. Gallar-do, R. L. Snyder, K. Schulbach and L. E. Jackson, IR Nov./Dec. 96, p354-359.

Dormant Season Evaporation: Challenges to the Current Models, Jerry L. Hatfield and John H. Prueger, (North

Models, Jerry L. Hatfield and John H. Prueger, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p219-224.
Evaluation of Dormant Season Evapotranspiration, Jerry L. Hatfield, John H. Prueger and Thomas J. Sauer, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p418-423.
Evapotranspiration Estimates under Deficient Water Sup-plies, J. L. Hatfield and R. G. Allen, IR Sept/Oct. 96, 2301-330.

p301-308.

Flexible Water Deliveries: One District's Experience, Eric Swenson, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p679-684.

Nongrowing Season Evaporation in Northern Utah, Richard G. Allen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p225-230.

1970), p263-230.
Nonlinear Root-Water Uptake Model, Chandra Shekhar P.
Ojha and Amaresh K. Rai, IR July/Aug. 96, p198-202.
Shallow Ground Water Management with a Modified Subsurface Drainage System, J. E. Ayars, R. A. Schoneman, F. Dale and P. Shouse, (North American Water and Emironment, Competer, & Destructive, Water Changes, & Destructive, & Dest ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2130-2135.

An Update on Surface Renewal Estimation of Evapotran-spiration, R. L. Snyder, D. Spano, P. Duce and K. T. Paw U., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Wisconsin Engineer Designs Irrigation System in the Phil-ippines, NE June 96, p9.

Cross sections

Analysis of Structural Members Under Elevated Tempera-ture Conditions, K. W. Poh and I. D. Bennetts, ST Apr. 95, p664-675.

New Warping Function for Thin-Walled Beams. I: Theory, A. Prokić, ST Dec. 96, p1437-1442. New Warping Function for Thin-Walled Beams. II: Finite Element Method and Applications, A. Prokić, ST Dec. 96, p1443-1452.

90, p1445-1452.
Optimal Sizing of Width- and Depth-Constrained Trapezoidal Channels, David C. Frochlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4294-4299.
Representation of Concrete-Filled Steel Tube Cross-Section Strength, Jerome F. Hajjar and Brett C. Gourley, ST Nov. 96, p1327-1336.

Stiffness Formulation for Nonprismatic Beam Elements, Arturo Tena-Colunga, ST Dec. 96, p1484-1489.

Cross-Flow Vibrations of Cylinder in Irregular Oscillatory Flow, Andrzej Kozakiewicz, B. Mutlu Sumer and Jørgen Fredsøe, WW Nov./Dec. 94, p515-534.

General Integral Formulation of Turbulent Buoyant Jets in Cross-Flow, Vincent H. Chu and Joseph H. W. Lee, HY Jan. 96, p27-34.

Mixing of a Bent-over Jet in Crossflow, Paul C. K. Chu and Joseph H. W. Lee, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p910-913.

Parametric Study on Performance of Cross-Flow Turbine, C. B. Joshi, V. Seshadri and S. N. Singh, EY Apr. 95, p28-45.

Spatial and Temporal Fluctuations of Nearshore Currents Induced by Directional Random Waves, Yoshimi Goda and Tetsuya Mizusawa, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p269-

1500 mm Corrugated HDPE Pipe Installation and Performance, David J. Mailhot, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p69-76.

Renew P. Cardano, ed., 1990, po97-10.
Achieving Reliable Designs for Pipelines Traversing Unstable Slopes, Dimitri A. Grivas, Chakravarthy Bhagvati, B. Cameron Schultz, Verne C. McGuffey, Gregg O'Neil and Gordon Simmonds, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p426-433.

Acoustic Monitoring to Enhance Pipeline Safety at Crossings, Will Worthington and William J. DiMarco, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996),

p1-13

Aerial Pipeline Crossings - Inspection and Rehabilitation, Thomas Spoth, (Pipeline Crossings 1996, Lawrence F.

Catalano, ed., 1996), p298-305.

ridge Hydraulic and Scour Analysis Using FESWMS-2DH, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1555-1564.

Buckeye Water Transmission Main Keswick Dam Crossing, D. Todd Kotey, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p194-201.

Canal Crossing of High-Pressure Pipelines, Hiroya Kishi-no, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p434-440.

Central Artery Utility Crossings, Brian Brenner. (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p130-138.

Coal Pipelines Crossing Railroads: Legal Issues, Peter N. Davis and Henry Liu, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p254-264.

Crossing Bridges with Ductile Iron Pipe—Update 1995, Michael S. Tucker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p120-129.

Crossing Fault Lines with Large Diameter Water Pipelines in the Houston Area, John M. Olden, (Pipeline Crossings) 1996, Lawrence F. Catalano, ed., 1996), p155-162.

Crossing of MacDonald Ranch Wash in Southern Nevada, Roger Beieler, Alvin R. Anderson, Russ Snow and Carol Tate, (Pipeline Crossings 1996, Lawrence F. Catalano,

ed., 1996), p282-289.

Crossing the Cape Cod Canal; A Natural Gas Pipeline Interconnection, Charles A. Pickering, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p48-55.

Crude Oil Pipe Line Crossing Western Panama, Hugh Lacy and Brant Brown, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p356-364.

Design Alternatives for Protection of the Santa Ana River Interceptor Sewer, Thomas Dawes, Chenchayya T. Bathala and Carl Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2378-2383.

Design of a 610-mm Water Pipeline Across Providence Harbor, David E. Hairston, Pasquale DeLise and William Skerpan, Jr., (Pipeline Crossings 1996, Lawrence F. Ca-

talano, ed., 1996), p387-394.

Design of Pressure Class Ductile Iron Pipe on Supports, L. Gregg Horn, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p222-229.

Design of the Santa Ana River Wash Crossing of the Inland Feeder, Birger Schmidt and Roy Cook, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p373-378.
Development of Caltrans Guidelines for Natural Gas Pipe-

lines on Highway Bridges, Anthony Gugino, Chih-Hung Lee, Richard Gailing, Philip Constantine and David Reistetter, (*Pipeline Crossings 1996*, Lawrence F. Ca-talano, ed., 1996), p245-253.

Environmental Permitting for the Canal Electric Project, Gene F. Crouch, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p237-244.

Evaluation and Upgrade of Major Transmission Lines Crossing Active Faults, Robert W. Lau, David D. Lee, David L. Pratt and Marilyn L. Miller, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p418-425.

Fault Crossing Design and Seismic Considerations for the South Bay Ocean Outfall, Jon Y. Kaneshiro, Gregory E. Korbin and James D. Hart, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p477-486.

The French Experience in Bursting Rehabilitation for Pipe-line Crossings, Y. G. Diab and P. Perrotin, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996),

p306-311.

Greenville Installs 1st 1.5m Annular CPE Pipe in the USA, Douglas Hinken and Stephen Matheny, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p88-96.

High Density Polyethylene Pipe under High Fills. A Contin-uing Study, John J. Meyer and J. L. (Jack) Hilfiker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p77-87.

Medium Span Gravity Sewer Aerial Crossings, Curtis W. Swanson and Glenn E. Hermanson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p457-468.

Pipeline Crossing Accidents and Leak Detection Opportunities, Diane J. Hovey and Edward J. Farmer, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p22-

Pipeline Crossings (M&R No. 89), Task Committee on Pipeline Crossings of the Technical Committee on Pipe-line Crossings of the Pipeline Division of the American Society of Civil Engineers, (Randy Robertson, chmn.), 1996, 0-7844-0183-7, 140pp.

Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996, 0-7844-0180-2, 510pp.

Pipeline Crossings and the Corps Regulatory Process in New England, Karen Kirk Adams and David H. Killoy, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p409-417.

The Pre-Planning Phase and the Use of Multipurpose Construction Equipment in Pipeline Crossings, V. L. Khazanet, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p494-501.

Record Breaking Bundled Pipeline Crossings, Gerald Donnelly and Mark W. Struss, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p37-47.

Relocation of Existing Pipelines at New Highway Crossings, Karl J. Rubenacker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p290-297. Seismic Design Issues of Water Pipelines at the Hayward Fault Crossing, Luke Cheng and Lota D. Nuguid, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p. 147-156. p147-154.

Sewer Crossing of Creek with Bridge Widening, Surendra Anketell, (Pipeline Crossings 1996, Lawrence F. Ca-talano, ed., 1996), p275-281.

Steel Water Pipe for Exposed and Buried Crossings, George Ruchti and Robert Card, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p105-111.

Structural Aspects of Pipeline Crossings, R. C. Prevost, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p449-456.

Telesleeve Crossing, David E. Comfort and Paul F. Lucas, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p139-146.

Tenneco's Risk Management Approach to Pipeline Crossings, J. S. Street and J. C. Bowles, (Pipeline Crossings) 1996, Lawrence F. Catalano, ed., 1996), p14-21.

Ultimate Strength of Underwater Pipe-Soil Systems, Mehdi S. Zarghamee, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p230-236.

Utilizing Directional Drilling Techniques to Install Underwater Watermain, Timothy M. Stinson, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p180-185.

Comparative Simulation of Oil Weathering, Hector R. Fuentes, Rudolf Jaffé, Vassilios A. Tsihrintzis and Rahul V. Shrotriya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p559-564.

Construction Through Crude Oil, Kyle R. Ott, Richard J. Switalski and Dale J. Sadowski, CE Feb. 96, p56-59.

Crude Oil Pipe Line Crossing Western Panama, Hugh Lacy and Brant Brown, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p356-364.

Disposal of Drilling Wastes in Permafrost Prudhoe Bay, Alaska, Paul Hansen, Michael Snyder and Per Wangstrom, (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p327-338.

Editorial, Patrick K. Takahashi, EY Dec. 96, p75-77. Method for Estimating Boiling Temperatures of Crude Oils, Robert K. Jones, EE Aug. 96, p761-763.

Oxygen Supplies for Bioremediation in Tundra Soils, Daniel M. White and Robert L. Irvine, (Cold Regions Engineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p339-350.

Soil Type Effect on NAPL Removal by Surfactant, Olubun-mi M. Ogunsola and Mark A. Tumeo, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: As-sessment and Remediation, Lakshmi N. Reddi, ed., 1996), p281-291.

Crushing

Analysis of Behavior of Sand Surrounding Pile Tips, P. Simonini, GT Nov. 96, p897-905.

Significance of Particle Crushing in Granular Materials, Poul V. Lade, Jerry A. Yamamuro and Paul A. Bopp, GT Apr. 96, p309-316.

Undrained Sand Behavior in Axisymmetric Tests at High Pressures, Poul V. Lade and Jerry A. Yamamuro, GT Feb. 96, p120-129.

Crystal Growth in Microgravity, Grant Meyer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1295-1297.

High Frequency Access to Low Gravity Experimentation in Organic Crystal Growth from Solutions, Michael G. Sportiello, Paul Todd, Ching-Yuan Lee, Craig E. Kun-drot, Steve C. Schultz, Louis S. Stodieck and John M. Cassanto, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p378-384.

Controlled Drill & Blast Excavation at AECL's Under-ground Research Laboratory, G. W. Kuzyk, D. P. Onagi and P. M. Thompson, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Geoenvironmental Evaluation of Geological Formations of Lithuania for Radioactive Waste Disposal, Valentinas Kadūnas and Jurgis Valiūnas, (High Level Radioactive Waste Management, Technical Program Committee,

Geological and Geophysical Studies of Sites in the Ukrainian Shield Rock Series Suitable for Construction of Underground Laboratories, L. S. Galetsky, D. P. Khrushchov and A. P. Volik, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p81-82.

Intracrystalline Diffusion in Clinoptilolite: Implications for Radionuclide Isolation, Sarah K. Roberts, Brian E. Viani and Douglas Phinney, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p48-49

The Analysis of the Failure of the Minte Stream Culvert, L. Ayala and E. Brown, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3018.

Culvert Composite Sampler: A Cost-Effective Storm-Water Monitoring Device, Stephen J. Dowling and Brian W. Mar, WR July/Aug. 96, p280-286.

Designing Concrete Culverts to Resist Scour Damage, John Kurdziel, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3942-3949.

Estimating Sediment Conveyance Capacity and Deposition Potential in Culverts, Dennis L. Richards and Michael E. Zeller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3920-3926. Finite Element Analysis of Precast Concrete Box Culverts, K. M. Tarhini, G. R. Frederick and M. Mabsout, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p677-682.

Reliability of a Box Culvert Structure under a Levee during Project Floods, Robert C. Patev and Mary Ann Leggett, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p118-133.

Scour at Culvert Outlets: Considerations Present and Fu-ture, Steven R. Abt and Phillip L. Thompson, (North American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996), p3927-3931. Scour Protection in Bottomless Culverts, D. V. Halvorson and F. J. Laumann, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3932-3941.

Shakwak Highway Project—Construction Challenges, Robin Walsh, Donaldson MacLeod and Dennis Cook, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p640-651.

Curing Evaluation of Grout Materials for Anchor Embedments in Hardened Concrete, Willie E. McDonald, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p958-

Fast Track Basics, James D. Grove and Kevin B. Jones, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p466-474.

1990), p406-4/4.
High-Strength, Rapid-Setting Concrete with Blended Cement, Billy D. Neeley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1627-1636.
Interfacial Shrinkage in Mortars, K. Sujata, Yunping Xi and Hamlin M. Jennings, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1669-1676.

New Materials and Methods for Insitu Rehabilitation of Underground Pipe, Richard D. Blackmore, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1298-1307

Wisconsin Fast-Track Paving Experiences, Michael J. Hall, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p456-465.

2D Velocity Distributions in Nearshore Currents, Marek Szmytkiewicz, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p366-376.

Daniy cu. aind yesard B. Zender Cu., 1990, 1900 Dy-namics, Brian King, Patrick Collins, Duncan Galloway and Eric Wolanski, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996). p192-203

Combined Refraction-Diffraction - Wave-Current Interaction Over a Complex Nearshore Bathymetry, B. A. O'Connor, P. B. Sayers and N. J. MacDonald, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p173-184.

Dynamics of Turbidity Current with Reversing Buoyancy, B. E. Hürzeler, J. Imberger and G. N. Ivey, HY May 96, p230-236.

Equilibrium-Range Spectrum of Waves Propagating on Currents, Kyung Duck Suh, Yoo-Yin Kim and Dong Young Lee, WW Sept./Oct. 94, p434-450. Experimental Study of the Flow Around a Breakwater, Mathieu Mory and Luc Hamm, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1006), 501, 512 1996), p501-512.

Geometry of Sand Ripples due to Combined Wave-Current Flows, Hitoshi Tanaka and Van To Dang, WW Nov./ Dec. 96, p298-300.

Hindcast Simulations of Ocean Currents in Norwegian Coastal Waters; Part 2: Summary of the Main Results, Eivind A. Martinsen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

hindcast Simulations of Ocean Currents in the Norwegian Coastal Waters. Part 1: Model Set Up and Sensitivity Tests, Harald Engedahl, (Estuarine and Coastal Model-ing, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p379-390.

Laboratory Experiments on Density Current Over a Sloping Bottom in Rotating Fluid, Dieter Etling and Gabriel Cha-bert d'Hieres, (Engineering Mechanics, Y. K. Lin and T. C. Su., 1996), p923-926.

Modeling Time- and Depth-Varying Currents at Supertank, Jane McKee Smith and Ib A. Svendsen, (Coastal Dy-namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p245-256.

Numerical Modeling of Turbidity Currents, Scott F. Brad-ford and Nikolaos D. Katopodes, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p404-415.

Shear Stresses and Hydrodynamics of Combined Waves and Currents, R. D. MacIver, R. R. Simons and A. J. Grass, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p676-685.

Ryszard B. Zeidler, ed., 1996), p676-685.
Stably-Stratified Surface Thermal Jet in a Current: Cold Climate Condition, A. M. Zaghloul, R. Martinuzzi and R. E. Baddour, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1062-1065.
Suspended-Solids Flux at a Shallow-Water Site in South San Francisco Bay, California, Jessica R. Lacy, David H. Schoellhamer and Jon R. Burau, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3357-3362.
Towards, Predicting. Sediment Transport in Combined

chayya Bainaia, ed., 1990, p.337-3362.
Towards Predicting Sediment Transport in Combined
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Way July/Aug. 96, p157-164.
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Albano, Koberto Pietroforte and P. Jayacnandran, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p140-146.
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The Elements of Academic Research, Richard H. McCuen, ed., 1996, 0-7844-0171-3, 290pp.

Engineering Education for Appropriate Technology, Richard L. Rosen, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2743-2747.

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graffea, El July 96, p123-133.

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Local Buckling of Curved I-Girder Flanges, James S. Davidson and Chai H. Yoo, ST Aug. 96, p936-947.

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Tralli, EM Apr. 96, p291-299. Thin-Walled Curved Beams. I: Formulation of Nonlinear Equations, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2072-2101.

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in Concrete Bridge Piers, Sashi K. Kunnath, Ashaf El-Bahy, William C. Stone and Andrew W. Taylor, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p381-382.

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Valua and J. Homas, GIT-ev. 39, p103-173.

Loading Cycles for Fatigue Reliability Assessment of Miter Gates at Navigation Locks on the Upper Mississippi River, Bilal M. Ayyub, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p854-857.

Measured Seismic Behavior of a Two-Story Masonry Building, Gregory R. Kingsley, Guido Magenes and G. Michele Calvi, (Worldwide Advances in Structural Con-crete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p123-134.

Monitoring Stable Crack Propagation in Metals, Luis A. de Bejar, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p890-893.

Nonlinear Finite Element Analysis of Masonry-Infilled Re-inforced Concrete Frames, Medhat A. Haroun and Essam

inforced Concrete Frames, Medhat A. Haroun and Essam H. Ghoneam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1022-1025.

Predicted and Observed Cyclic Performance of Piles in Calcareous Sand, Riadh H. Al-Douri and Harry G. Poulos, GT Jan. 95, p1-16.

Resonance Induced Steel Cross-Arm Fatigue Failures, Markus Ostendorp, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p983-986.

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Seismic Behavior of Masonry Walls: Modeling of Hysteret-Seismic Behavior of Masonry Walls: Modeling of Hysteret-Seismic Behavior of Masonry Walls: Modeling of Hysteret-

Seismic Behavior of Masonry Walls: Modeling of Hysteretic Rules, Miha Tomaževič and Marjana Lutman, ST Sept. 96, p1048-1054.

Seismic Resistance of Partially-Grouted Masonry Shear Walls, Arturo E. Schultz, (Worldwide Advances in Stru tural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p211-222.

Statistical Model for Sand Compaction Under Cyclic Shear Strain, R. Ghanem and M. El-Mestkawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p722.

Strain Rate and Preshear Effects in Cyclic Resistance of Soft Clay, G. Lefebvre and P. Pfendler, GT Jan. 96, p21-26.

Strain Rate Effects on Stress-Strain Behaviour of Clay as Observed in Monotonic and Cyclic Triaxial Tests, Satoru Shibuya, Toshiyuki Mitachi, Akihiko Hosomi and Seong Shibuya, Toshiyuki Milachi, Akiniko Hosomi and seong Chun Hwang, (Measuring and Modeling Time Depend-ent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p214-227.
A Uniaxial Constitutive Model Accounting for Viscoelas-

A Umaxial Constitutive Model Accounting for Viscoelas-ticity and Damage Evolution under Cyclic Loading, Hyun-Jong Lee and Y. Richard Kim, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p693-696. Uniaxial Cyclic Behavior of Discontinuous Fiber Rein-forced Composites, Takashi Matsumoto and Victor C. Li, (Materials for the New Millennium, Ken P. Chong, ed. 1996), p426-435. Wind-Induced Failures of Steel Roof Decks, Víctor Figurero Disz, Ali Saffar, Sarquel I. Díaz Santiano and

ind-induced raines of a second of the control of the figure of the figure of the control of the

Cyclic strength

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Plash Floods and Their Control in the Indian Arid Zone, K. D. Sharma, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2539.

A Multi-Objective Analysis for Cyclone Shelter Planning in Bangladesh, Jahir U. Chowdhury, Rezaur Rahman, Fazlul Karim and David W. Watkins, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p213-214.

Comparison of Flow Around Circular Cylinder Using FE and FD Procedures, R. Panneer Selvam, (Building an In-ternational Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1021-1028.

Cross-Flow Vibrations of Cylinder in Irregular Oscillatory Flow, Andrzej Kozakiewicz, B. Mutlu Sumer and Jørgen Fredsøe, WW Nov./Dec. 94, p515-534.

Determination of Force and Surface Pressure Coefficients of High Reynolds Number Flow over Circular Cylinder by Discrete Vortex Method, Fusen He and Tsung-chow Su, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p979-982

Detroit Cushion Wall Has a Positive Impact, CE May 96, p84.

Drift Apex Temperature Distributions due to Cylindrical Heat Sources, W. G. Culbreth and J. J. Ventresca, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p435-437.

Experimental and Numerical Studies of Shear Layers Granular Shear Cell, Jan-Olov Aidanpää, Hayley H. Shen and Ram B. Gupta, EM Mar. 96, p187-196.

Finite Element Analysis of Longitudinally Stiffened Cylinders in Bending, Q. Chen, A. E. Elwi and G. L. Kulak, EM Nov. 96, p1060-1068.

Mixed Convection Heat Transfer Coefficients for Horizontally Emplaced Waste Packages, J. J. Ventresca, W. G. Culbreth and C. Lawson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p451-453.

A Stabilized Formulation of the Navier-Stokes Equations, Arif Masud, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1135-1138.

Three-Dimensional Moving Contact Line for an Accelerat-ing Vertical Cylinder, K.-H. Wang, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p848-851.

Use of Neural Networks for Fluid Resistance Prediction, Jonathan T. Su, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1139-1142.

Cylindrical shells

Analysis of a Long Thick Orthotropic Circular Cylindrical Shell Panel, K. Chandrashekhara and K. S. Nanjunda Rao, EM June 96, p575-579

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Experiments for Ultimate Strength of Reinforced Concrete Cylindrical Panels under Lateral Loading and Comparicylindrical Panels under Lateral Educing and Companison with FEM Analysis, Makoto Takayama, Kazuhiko Mashita, Shiro Kato, Yasuhiko Hangai and Haruo Kunieda, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p310-321.

Vibration of Laminated Shallow Shells on Quadrangular Boundary, A. V. Singh and V. Kumar, AS Apr. 96, p52-

Czech Republic

Practical Experiences with Sealing Technology in the Czech Republic, Michal Vanecek, (High Level Radioac-tive Waste Management, Technical Program Committee,

Seismic Hazard Assessment of the NPPS in the ČR, Dana Procházková, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p179-180.

Dam breaches

Earth Spillway Design Using SITES Software, Darrel M. Temple, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1303-1935.

A Large-Scale Experiment on Breaching in Sand-Dikes, Paul J. Visser, Arie W. Kraak, Wim T. Bakker, Marion J. Smit, D. Wino Snip, Henk J. Steetzel and Jan van de Graaff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p583-594.

Peak Outflow from Breached Embankment Dam, David C.

Froehlich, WR Jan./Feb. 95, p90-97.

Dam Construction in Northern Environment: A Numerical Study, Mu Shen and J.-M. Konrad, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p736-744.

son, ed., 1990), p130-744.

Dam Engineering Exhibit Wins Prize for New Museum in Arizona, NE Dec. 96, p9.

Embankment Dams in the Piedmont/Blue Ridge Province, Chuck Wilson and Ray Martin, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p27-36.

Engineers Roll Out Concrete for New Dam, CE Oct. 96, p97.

How Did a California Dam Get a Section 404 Permit? Gary W. Darling and Joel B. Butterworth, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p976-981.

NA River Project Environmental Compliance with the Na-tional Environmental Policy Act (NEPA), Ruth B. Vil-lalobos, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2347-2349.

Risk in Geotechnical Engineering for Embankment Dams, Gil M. Lawton and Michael P. Forrest, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p550-562.

Santa Ana River Mainstem Project, Brian M. Moore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2169-2175.

South American Dam Failure Studied, CE Aug. 96, p18.

Dam design

A 21st Century Dam, CE Nov. 96, p22-23.

Dam Construction in Northern Environment: A Numerical Study, Mu Shen and J.-M. Konrad, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p736-744.

Optimal Reliability-Based Design of Check Dam Structure, Satoshi Katsuki, Nobutaka Ishikawa and Kazuo Itoh, (Analysis and Computation, Franklin Y. Cheng, ed.,

1996), p91-98.

Problem and Technical Solutions: The Seven Oaks Dam. Physical Elements of the Seven Oaks Dam Feature. Robert E. Koplin, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2177-2184.

Risk in Geotechnical Engineering for Embankment Dams, Gil M. Lawton and Michael P. Forrest, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p550-562. South American Dam Failure Studied, CE Aug. 96, p18.

Channel Routing with Flow Losses, Ming Jin and Danny L.

Fread, HY Oct. 96, p580-582.

Embedded Sensors for Improved Early-Warning Emergen-Embedded Sensors for Improved Early-Warning Emergency Q Response to Damaged Structures, Peter L. Fuhr, Dryver R. Huston and Edward Von Turkovich, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p39-40. Failure of Tapo Canyon Tailings Dam, Leslie F. Harder, Jr. and Jonathan P. Stewart, CF Aug, 96, p109-114.

Guist Creek Dam Spillway Upgrade: A Maze (Labyrinth) of Difficulties, David C. Froehlich, Michael A. Woolum and W. Keith Crim, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1918-1923.
Inundation Studies in Case of Failure of King Talal Dam,
Ahmed Kassem, M. Hanif Chaudhry and Muhammad R. Shatanawi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1924-1929.

Peak Outflow from Breached Embankment Dam, David C.

Froehlich, WR Jan/Feb. 95, p90-97.

Performance of San Fernando Dams During 1994 Northridge Earthquake, J. P. Bardet and C. A. Davis, GT July 96, p554-564.

Regionalization of Annual Precipitation Maxima in Montana, Charles Parrett, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p57-58.

The Reliability Analysis of a Major Dam Project, J. Bar-neich, D. Majors, Y. Moriwaki, R. Kulkarni and R. Davidson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1367-1382

Roosevelt Dam Reaches a New Height of Safety, CE May 96, p10.

South American Dam Failure Studied, CE Aug. 96, p18.

The Timberlake Dam Failure: A Hydrometeorological As-sessment, J. Warner, G. V. Loganathan, R. J. Kane, M. Gillen, D. F. Kibler and K. Kostura, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2522-2527.

Dam foundations

Dam Foundation Erosion Study: Pit 4 Scale Model Simula-tion, R. J. Wittler, S. R. Abt, T. L. Lewis, J. F. Ruff and K. Adhya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3829-3834.

Dam Foundation Erosion Study: the Design of a Sidewall Orifice for Simulation of a Free Trajectory Overtopping Jet, R. J. Wittler, S. R. Abt, T. L. Lewis, J. F. Ruff and K. Adhya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p340-345.

Dam-Foundation Rock Interaction Effects in Earthquake Response of Arch Dams, Hanchen Tan and Anil K.

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Roosevelt Dam Reaches a New Height of Safety, CE May 96, p10.

Dam safety

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Dam Safety Policy for Spillway Design Floods, James R. Dubler and Neil S. Grigg. El Oct. 96, p163-169.

Dynamic Effects of Sediment and Foundation on Dam Hydrodynamic Pressure Under Vertical Ground Accelerations, Kuo-Chyang Chang, Tin-Kan Hung, David A. Margo and Jeen-Shang Lin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p511-514.
From Wasteland to Paradise, CE Feb. 96, p10, 12.
Guist Creek Dam Spillway Upgrade: A Maze (Labyrinth) of Difficulties, David C. Froehlich, Michael A. Woolum and W. Keith Crim, (North American Water and Environment, Congress & Destructive Water, Cheschavae Dynamic Effects of Sediment and Foundation on Dam Hy-

ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1918-1923.

Hydraulic Structures by P. Novak, A. I. B. Moffat, C. Nal-luri, and R. Narayanan, Steven Abt, HY Nov. 96, p674. Risk Analysis in Dam Safety Practice, Steven G. Vick and

R. A. Stewart, Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p586-603.

Risk Assessment Approach to Dam Safety Criteria, David S. Bowles, Loren R. Anderson and Terry F. Glover, (Un-S. Bowles, Lotter R. Anderson and Telry F. Ordered, (Order certainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p451-473. Risk Assessment of Nambe Falls Dam, J. Lawrence Von

Thun, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p604-

Roosevelt Dam Reaches a New Height of Safety, CE May 96, p10.

Water Resources Legislation, Martin Hight, CE Sept. 96,

Watershed Modeling and Flood Routing for Safety Assessment of an Existing Dam, C. F. Lee, WR Sept./Oct. 96, p334-341.

Dam stability

Cracking Analysis of Arch Dams by 3D Boundary Element Method, L. M. Feng, O. A. Pekau and C. H. Zhang, ST June 96, p691-699. Creep Test Results Confirmed, Toby D. Leamon, P.E., CE

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Creeping Suspicion, Michael P. Bruen, Nicholas Pansic and M. I. Schwartz, CE May 96, p60-63.

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Kerry B. Allen and Michael P. Bruen, CE Sept. 96, p.31-

Damage

Analysis of Exceptional Meteorological Conditions on July Amalysis of exceptional Meteorological Conditions on July and August in Conakry, Mamadou Tounkara, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1144.
Analytical Modelling of Damage Based on an Improved Percolation Model, A. Delaplace, S. Roux and G. Pijaudier-Cabot, (Engineering Mechanics, Y. K. Lin and T. C. St., 1996), p1171-1175.

Su, 1996), p1171-1174.

Benefits and Costs Associated with Flood Mitigation in the United States, Eugene A. Stallings, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p153-154.

Biaxial Low-Cycle Fatigue Behavior of Steel Fiber-Reinforced Concrete, Li Fang and Christian Meyer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p436-445. Computation of Structural Flexibility for Bridge Health

Monitoring Using Ambient Modal Data, Scott W. Doe-bling and Charles R. Farrar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1114-1117.

Contract Waived Rights to Recovery of Loss, CE Aug. 96,

orrelation of Component Damage, Insurance Losses and Wind Storm Severity, Timothy A. Reinhold, Gregory L. F. Chiu and Robert Akins, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p191-192.

Damage Analysis of a Water Distribution System Subject to Natural Hazards, James Bates, Matthew J. Cassaro and Michael A. Cassaro, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p357-358.

Damage Mechanics Model for Evaluation of Bridge Deterioration, Roberto Lopez-Anido, Hota V. S. GangaRao and Raimondo Luciano, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p458-461.

The Danger to Satellites from Meteor Storms—A Case Study of the Leonids, P. Brown, J. Jones and M. Beech, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p13-19.

Stewart W. Johnson, ed., 1990, p15-19.
Gegradation of Reinforced Concrete Structures Under Aggressive Conditions, Michael P. Enright, Dan M. Frangopol and George Hearn, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p978-987.

Design and Construction Criteria for Hurricanes - Preventing Your Pre-Engineered Building from Becoming a Scrap Metal Heap, Michael K. H. Yee, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p269-271.

Design of Energy Dissipation Devices Based on Concept of Damage Control, K. L. Shen and T. T. Soong, ST Jan.

30, pro-82.
Detecting Damage in Highway Bridges from Vehicle Induced Girder Strains, Leon L-Y Lai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), pl 122-1125.
Development of a Multivariate Vulnerability Indicator, Wilbert O. Thomas, Jr., Betty Bonn and Albert V. Romano, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p303-304. Effects of Hurricane Luis on Structures in Antigua, Tony

Gibbs, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p295-296.

ed. and Riley M. Chung, ed., 1997), p293-290. Embedded Sensors for Improved Early-Warning Emergen-cy Response to Damaged Structures, Peter L. Fuhr, Dryver R. Huston and Edward Von Turkovich, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p39-40.

Evaluation of Bridge Strengthening Measures Using Forced Vibration Tests, Kosal Krishnan, Frieder Seible and Gerald Pardoen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p845-852.

Mohammadi, ed., 1996), p843-852.
A Finite Element Damage Model for the Evaluation and Rehabilitation of Brick Masonry Shear Walls, Luigi Gambarotta and Sergio Lagomarsino, Worldwide Advances in Structural Concrete and Masonry. A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p72-81.

First Smart Bridge Tested, CE June 96, p18.

First Smart Bridge Tested, ET Apr./May 96, p1,6. Gradient Damage and Size Effects, Jan Carmeliet, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1175-1178.

Grout Repair of Dent-Damaged Steel Marine Tubulars, James Ricles and Troy Gillum, WW May/June 96,

p110-117.

Hurricanes Erin, Marilyn and Opal, Kishor C. Mehta, James R. McDonald and Douglas A. Smith, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p46-47.

Hysteretic MDOF Model to Quantify Damage for RC Shear Frames Subject to Earthquakes, H. Ugur Köylüoğlu, Søren R. K. Nielsen and Ahmet Ş. Çakmak, (Probabilistic Mechanics & Structual Reliability, Dan (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p768-771

Identification of Structural Damage, S. Hassiotis and K. M. Grigoriadis, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, p1107-1114.

Implementation and Application of Parallel Processing Computer Methods for Probabilistic Analysis, Harry R. Millwater, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p266-269.

ed., 1996), p266-269.

Insight into the Inelastic Response to a Fully Nonstationary Earthquake Ground Motion Model, Bor-Feng Peng and Joel P. Conte, Cengineering Mechanics, Y. K. Lin and T. C. Su, 1996), p269-272.

The Integrated Flood Control System of the Great Miami Valley, M. Zoghi and K. A. Rinehart, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p384-385.

Iron(II) Anime Complex Soil Stabilization, David A. Hemstreet and Ted S. Vinson, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p447-458.

Measuring Absorbed Cyclic Energy in Reinforced Concrete

Measuring Absorbed Cyclic Energy in Reinforced Concrete Beams, Ken Gaver and Sophia Hassiotis, ST Sept. 96,

Measuring Blast Damage, Clifton E. R. Lawson, P.E., CE Oct. 96, p38-39. Method for Probabilistic Evaluation of Seismic Structural

Damage, Ajay Singhal and Anne S. Kiremidjian, ST Dec. 96, p1459-1467. Micromechanics of Damage in Random Composites, M. Ostoja-Starzewski, A. Al-Ostaz, I. Jasiuk and K. Alzebdeh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p362-363.

Minimum Thermal Protection for Cold Weather Mason C. J. Korhonen, E. R. Cortez and R. D. Thomas, Orly, C. J. Korhonen, E. R. Cortez and R. D. Thomas, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p128-140.

New Damage Variable in Failure Analysis of Concrete, Woon-Kwong Yip, MT Nov. 96, p184-188.

Numerical Analysis of Damage in Lattices and Consequences on Continuum Modelling, Gilles Pijaudier-Cabot, A. Delaplace and S. Roux, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1034-1037.

Observations of Internal Crack Growth in Mortar Using X-Ray Microtomography, Eric N. Landis, Edwin N. Nagy, Denis T. Keane and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1330-1336.

New Millennium, Ken P. Chong, ed., 1996), p1330-1330.

Optimal Rehabilitation of Locally Damaged Structures
Using the Pseudo Distortion Method, Prafulla V.

Makode, Ross B. Corotis and Martin R. Ramirez, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996).

p606-612.

ORDER: A Preliminary Concept for ORbital DEbris Removal, Brian A. Phail, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p334-340.

p334-340.
Pavement Design Applying Allowable Frost Heave, Seppo Saarelainen, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed. 1996), p890-898.
Prediction of Cavitation Damage for Spillways, Wenping

Prediction of Cavitation Damage for Spiliways, Wenping Lee and John A. Hoopes, HY Sept. 96, p481-488. Probabilistic Modeling of Radiation Damage in Charge-Coupled Devices, D. H. Ebbeler, L. E. Newlin and N. R. Moore, (Probabilistic Mechanics & Structural Reliabili-ty, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p776-779. Quantitative Approach to Rapid Seismic Evaluation of Slab-on-Girder Steel Highway Bridges, Murat Dicleli and Michel Bruneau, ST Oct. 96, p1160-1168.

Rate Dependent Damage Model for Concrete in Dynamics, Jean-François Dubé, Gilles Pijaudier-Cabot and Chris-tian La Borderie, EM Oct. 96, p939-947.

Redundancy of Prestressed Concrete I-Beam Bridges, Redundancy of Prestressed Concrete 1-Beam Bridges,
Michel Ghosn and Fred Moses, (Building an International Community of Structural Engineers, S. K. Ghosh, ed.
and Jamshid Mohammadi, ed., 1996), p88-695.
Residential Vulnerability Functions and Their Variability
Based on Claims Data, Ben Lashkari and Ronald Wartees (Alverd Divised Programs).

drop, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p307-308.

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Slowing Corrosion Damage in Concrete: The Use of Or-ganic-Coated, Ceramic-Clad, Metallic-Clad and Solid Metallic Reinforcing Bars, David B. McDonald, Donald W. Pfeifer, Matthew R. Sherman and Gilbert T. Blake, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1266-1275.

Snow Guards for Metal Roofs, Wayne Tobiasson, James Buska and Alan Greatorex, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p398-409.

Softening-Induced Dynamic Localization Instability: Seismic Damage in Frames, Zdeněk P. Bažant and Milan Jirásek, EM Dec. 96, pl 149-1158.

Space Station Module Wall Hole Size and Crack Len Following Orbital Debris Penetration at 6.5 kms, Wil-liam P. Schonberg and Joel E. Williamsen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl-7.

Strengthening Concrete Block Walls Using Carbon Fiber, Dan Engebretson, Rajan Sen, Gray Mullins and Alfred Hartley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1592-1600.

Structural Consequences of Imperfection in Thin-Walled Components, Luis A. Godoy and John Carrasquillo, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996).

Structural Damage due to Hurricane Marilyn in St. Thomas and Culebra, Luis A. Godoy, Roberto Huyke, Ricardo R. Lopez, J. A. Martinez-Cruzado and Raul Zapata, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p135-136.

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94,

p2437-2450.

A Study on the Link between Damage Mechanics and Frac ture Mechanics, Zhen Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p739-742.

A Uniaxial Constitutive Model Accounting for Viscoelas-ticity and Damage Evolution under Cyclic Loading, Hyun-Jong Lee and Y. Richard Kim, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p693-696.

Chairms, I. L. Band and J. C. Wallerability Curves for Buildings in Tropical-Cyclone Regions, John Holmes, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p78-81.

Welded Steel Moment Frame Joint Testing Programs, Thomas A. Sabol and Michael D. Engelhardt, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1228-1235.

Wind-Induced Fatigue Loading and Damage to Hip and Gable Roof Claddings, Y. L. Xu, ST Dec. 96, p1475-

A Windstorm Damage Model for the Identification of In-surance and Reinsurance Risk, Brian E. Lee and David R. Whiting. (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p197-198.

Damage accumulation

A CDM-Based Approach to Stochastic Damage Growth, Baidurya Bhattacharya and Bruce Ellingwood, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p772-775.

New Damage Variable in Failure Analysis of Concrete, Woon-Kwong Yip, MT Nov. 96, p184-188.

Random Field of Cumulative Damage by Space Debris Impact, A. Der Kiureghian, P. V. Geyskens and M. R. Khalessi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p668-671.

Stiffness Reductions of Flexible Pavements due to Cumula-tive Fatigue Damage, A. C. Collop and D. Cebon, TE Mar/Apr. 96, p131-139.

An Analysis of Damage from Hurricane Andrew; A Dissenting View, Leonard J. Morse-Fortier, (Natural Disas ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p293-294.

- An Approximate Method for Assessment of Seismic Dam-age on Buildings, Mario Paz and Jeffrey S. Janover, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p428-434.
- Article Should Be Required Reading, James Warner, P.E., CE Nov. 96, p32.
- Assessing Opal's Impact, David J. Greenwood and Darryl J. Hatheway, CE Jan. 96, p40-43.
- Assessment of Damage Identification Algorithms on Experimental and Numerical Bridge Data, David V. Jauregui and Charles R. Farrar, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p892-899.
- Bad Vibrations, Lawrence W. Gubbe, P.E., CE Aug. 96. p58-60.
- Comprehensive Evaluation Method on Earthquake Damage Using Fuzzy Theory, Bo Song, S. Hao, Suminao Mu-rakami and Satoru Sadohara, UP Mar. 96, p1-17.
- 1996), p1141-1147.
- Damage Assessment of Reinforced Concrete Structures through Acoustic Emission Monitoring, Christian C. Steputat and Sashi K. Kunnath, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p837-844.
- Decision-Support System for Infrastructure Preservation, Yung-Ching Shen and Dimitri A. Grivas, CP Jan. 96,
- Diagnosis and Treatment of Structures in Distress by R. N. Raikar, Kenneth L. Carper, CF Feb. 96, p42.
- Energy-Based Linear Damage Model for High-Intensity Seismic Loading, Y. H. Chai, K. M. Romstad and S. M. Bird, ST May 95, p857-864.
- Evaluation of Structural Integrity of Damaged Masonry Building, Sherif A. Mourad and Farouk A. El-Hakim, CF May 96, p73-78.
- Fuzziness of the Modified Mercalli Intensity as a Measure of Damage, Nozar G. Kishi and Timothy H-J. Yao, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p247-248.
- The Great Lakes Storm Damage Reporting System, David Wallin and P. S. Chawla, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p183-184.
- Ground-Movement-Related Building Damage, Storer J. Boone, GT Nov. 96, p886-896.
- Intelligent Bridge Monitoring System, Pei-Ling Liu, Yun-Fu Luo and Shyh-Jang Sun, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p608-611.
- Local Damage Assessment of Metal Barriers under Turbine Missile Impacts, Amde M. Amde, Amir Mirmiran and Thomas A. Walter, ST Jan. 96, p99-108.
- Looking Back At The Great Flood of 1993, Gary R. Dyhouse, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p375-376.
- Neural Network Approach to Detection of Changes in Structural Parameters, S. F. Masri, M. Nakamura, A. G. Chassiakos and T. K. Caughey, EM Apr. 96, p350-360.
- Post-Hurricane Investigations: Quantifying Damage, Greg-ory L. F. Chiu, Sara Wadia-Fascetti and Mussaddeque Hossein, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p74-75.
- A Rapid Barrier Island Hazard Mapping Techni Basis for Property Damage Risk Assessment and Mitiga-tion, David M. Bush, William J. Neal and Orrin H. Pil-key, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p185-186.
- Tornado and Hail Risk Modeling: An Event Based Approach, Khalid I. Bouzina, Mohan Sharma, Auguste Boissonnade and Surya Gunturi, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p19-20.

Damage estimation

Damage Federal Programmer The Applicability of Neural Network Systems for Structural Damage Diagnosis, Chatmongkol Peetathawatchai and Jerome J. Connor, Ir., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p68-71.

Assessing Opal's Impact, David J. Greenwood and Darryl J. Hatheway, CE Jan. 96, p40-43.

Damage Estimation Using Substructural Identification in Time Domain, Chung-Bang Yun and Hyeong-Jin Lee, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p846-849.

A Damage Mechanics-Based Approach to Structural Deterioration, Baidurya Bhattacharya and Bruce Ellingwood, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

A Damage Simulation Model for Buildings and Contents in a Hurricane Environment, N. Stubbs and D. C. Perry, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., gineers, S. 1. 1996), p989-996.

Dynanic Brittle Material Response Based on a Nonlocal Damage Model, E. P. Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p580-583.

Fatigue Lifetime Prediction of Steel Bridge Details, Peter J. Massarelli and Thomas T. Baber, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p450-453.

Fatigue Model of Asphalt Concrete, Jian Zhou and Robert Y. Liang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p563-567.

Fiber Sensors for Damage Detection on Large Structures and for Assessment of Deformation Behavior of Cemen-nitious Materials, W. R. Habel, D. Hofmann, B. Hil-lemeier and F. Basedau, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p355-358.

Flood Damage Estimates Using GIS Spatial Analysis, Craig R. Wilkening, (North American Water and Enviment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3405-3410.

Modeling Rotation of Principal Load Axes in Brittle Solids with Damage, S. Karnawat and S. Yazdani, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p596-599.

Monotonic Loading of Brittle Materials: A Stochastic Damage Model, David J. Kirkner, B. F. Spencer, Jr. and Satish Kandarpa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p354-357.

A Predicting Method of Typhoon Wind Damages, Yasushi Mitsuta, Takeshi Fujii and Ichiro Nagashima, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p970-973.

A Probabilistic Formulation of Damage Detection, Loukas Papadopoulos and Ephrahim Garcia, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p350-353.

A Strength Sensitivity Index for Assessing Climate Warm-ing Effects on Permafrost, Branko Ladanyi, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p35-45.

Damage patterns

Complex Crack Interaction in Composite Plate, Wieslaw K. Binienda, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p408-411.

Energy Dissipation in Concrete Materials Due to Viscoelastic and Damage Mechanisms, Vassilis P. Panoskaltisi, Saurabh Bahuguna and Dimitris Soldatos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p857-860.

Evaluation of Microcrack Damage Growth and Healing of Asphalt Concrete Pavements Using Stress Wave Method, Yongon Kim and Y. Richard Kim, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p612-615.

Strong Ground Motion Characteristics and Damage Distrito the design of Thermo-Micromechanical Damage Modeling of Airfield Concrete Pavement, J. W. Ju and Y. Zhang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p727-730. Updates on Steel Moment Frames, David Bonowitz, CE

Aug. 96, p30.

Damage prevention
Blast Resistant Design of Commercial Buildings, Mohammed Ettouney, Robert Smilowitz and Tod Rittenhouse,

SC Feb. 96, p31-39.

Designs for Blast Protection (Available only in *Structures* special issue), Martin J. Fertal, P.E., CE Sept. 96, p3A-5A.

50... Drought Management: Crisis vs. Risk Management, Mi-chael J. Hayes, Donald A. Wilhite, Mark D. Svoboda and Kelly Helm Smith, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p371-

372 372.

Full-Scale Test Studies on Prevention of Frost Damage for Retaining Wall Reinforced with Geotextile, Lun Chen, Guangxin Li and Wenfeng Huang, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p724-735.

Hurricane-Induced Storm Surge Analysis for the City of New Orleans, LA, David J. Mark and Norman W. Scheffner, (Natural Disaster Reduction, George W. Mourage et al. 1987), 243-244.

Scheiner, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p343-344. Incorporating Damage Control in Structural Design, Dan M. Frangopol, Marek Klisinski and Kai-Yung Lin, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p598-605.

New Hybrid Seismic System Set for Seattle, CE Oct. 96, p20,22.

p20,22.
Protecting Buildings against Vehicle Bomb Attacks, Anatol Longinow and Kim R. Mniszewski, SC Feb. 96, p51-54.
Smart Materials and Structures: A Review, C. Shakeri, M. N. Noori and Z. Hou, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p863-876.
Structural Model Updating Using Expanded Modeshapes, James L. Beck and Michael W. Vanik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p152-155.

Clause in Contract Does Not Preclude Other Damages, CE Aug. 96, p24.

Insurance and Damage Mitigation - Incentive or Disincentive, George R. Walker, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p195-196.

Statute of Limitations on Negligence, CE Nov. 96, p28. Subcontractor Beware, CE July 96, p27.

Damping
Aerial Pipeline Crossings - Inspection and Rehabilitation,
Thomas Spoth, (Pipeline Crossings 1996, Lawrence F.
Catalano, ed., 1996), p298-305.
Analysis and Design of ER Damper for Seismic Protection
of Structures, Nicos Makris, Scott A. Burton, Davide Hill

and Mabel Jordan, EM Oct. 96, p1003-1011.

Analysis of Damped and Undamped Systems Using DFT, Fady F. Barsoum and William F. Carroll, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p951-954.

A Comprehensive Relational Database of Structural Damping Data, Sandeep Khare and Nicholas P. Jones, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1236-1243.

esign of Energy Dissipation Devices Based on Concept of Damage Control, K. L. Shen and T. T. Soong, ST Jan. 96, p76-82.

Design of Supplemental Dampers for Control of Structures, N. Gluck, A. M. Reinhorn, J. Gluck and R. Levy, ST Dec. 96, p1394-1399.

The Development of New Structural Systems in the Aftermath of the Kobe Earthquake, Mark P. Sarkisian, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996).

p934-943. Dynamic Properties of Cohesive Soils Treated with Lime, K. Fahoum, M. S. Aggour and F. Amini, GT May 96, p382-389. 173

Dynamical Model of a Magnetorheological Damper, B. F. Spencer, Jr., S. J. Dyke, M. K. Sain and J. D. Carlson, (Analysis and Computation, Franklin Y. Cheng, ed.,

1996), p361-370. Editor's Note, David Darwin, ST June 96, p579-580.

Effect of Uncertainty on an Active Mass Damper System, H. S. Deoskar, R. V. Tappeta and B. F. Spencer, Jr., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p426-429

p420-429.

Eigenproperties of Massive Rigid Body on Elastic Half-Space, Z. Sienkiewicz, GT June 96, p488-491.

An Electrorheological Damper with Annular Duct, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1197-1204.

An Emerging Technology: Damping Design for Wind and Seismic Events, Robert J. McNamara, (Building an In-ternational Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p1252-1260.

Energy Dissipation Devices in Bridges using Hydraulic Dampers, E. A. Delis, R. B. Malla, M. Madani and K. J. Thompson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

Minctural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, pl 188-1196.
Energy-Based Modeling of High Damping Rubber Seismic Isolators for Dynamic Analysis, Peter W. Clark and James M. Kelly, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p200-211.

Experimental Study of Seismic Response of Structures with Semi-Active Damping Control Systems, M. D. Symans and M. C. Constantinou, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p350-360.

Forces in Pile Foundations under Seismic Loading, Amir M. Kaynia and Saeed Mahzooni, EM Jan. 96, p46-53.

Inelastic Behavior of Steel Frames with Added Viscoelastic Dampers, K. C. Chang, S. J. Chen and M. L. Lai, ST Oct. 96, p1178-1186.

Interparticle Contact Behavior and Wave Propagation, Giovanni Cascante and J. Carlos Santamarina, GT Oct. 96, p831-839.

Inverse Damping Perturbation for Stiffness Design of Shear Buildings, Tsuneyoshi Nakamura and Masaaki Tsuji, ST June 96, p617-625.

Modal Coupling and Accuracy of Modal Strain Energy Method, Alessandra Zambrano, José A. Inaudi and

James M. Kelly, EM July 96, p603-612. Modeling of the Oscillatory Response of Electrorheological Fluids, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p894-897.

Modeling the Response of ER Damper: Phenomenology and Emulation, Scott A. Burton, Nicos Makris, I. Konstantopoulos and P. J. Antsaklis, EM Sept. 96, p897-906.

A New Semi-Active Control Device for Seismic Response Reduction, S. J. Dyke, B. F. Spencer, Jr., M. K. Sain and J. D. Carlson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p886-889.

No More Flapping in the Wind, CE Aug. 96, p14.

Nonlinear Identification of Semi-Active Control Devices, B. F. Spencer, Jr., S. J. Dyke, M. K. Sain and J. D. Carl-son, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p164-167.

1990), p104-107.
Nonlinear Pounding of Bridges in Earthquakes, Xian Ma and Chris P. Pantelides, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1180-1187.
Passive Control Systems for Mitigation of Near-Field Earthquake Ground Motions, Peter W. Clark and James M. Kelly (Matusel Diseases Reduction, George W.

Larunquake Ground Motions, Peter W. Clark and James M. Kelly, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p.217-218. Performance of Multiple Mass Dampers Under Random Loading, Ahsan Kareem and Samuel Kline, ST Feb. 95, p.348-361.

Random Vibrations of an Isochronous SDOF Bilinear System with Secondary Structure, Mikhail Dimentberg and Philip Muller, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p958-961.

Research on Semiactive Dampers Makes Headway, Monica

Research on Semiactive Dampers Makes Freadway, Fronta-Maldonado, ET Aug./Sept. 96, p6-7. Seismic Isolation of Bridges Using Elastomeric Isolation Systems, Ronald L. Mayes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed.

and Jamshid Mohammadi, ed., 1996), p33-40.
Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST

Sept. 94, p2583-2601.

Some Computational Issues in the Control of Distributed Systems, Weiming Xu, Sami F. Masri and Bingen Yang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p747-750.

Stochastic Response of Systems with Linear Hysteretic Damping, B. F. Spencer, Jr. and L. A. Bergman, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p677-680.

Strategy for Active Control of Tall Civil Structures Using Regenerative Electric Actuators, A. C. Nerves and R. Krishnan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p503-506.

Structural Control with Electrorheological Dampers: Viscoplastic Behavior and Anticipation, Scott A. Burton and Nicos Makris, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

Structural Engineers, S. K. Onosa, ed. and Jamshid Mohammadi, ed., 1996), p1261-1268.
Structural Control: Basic Concepts and Applications, Y. Fujino, T. T. Soong and B. F. Spencer, Ir., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), 1277-1287.

Tall Buildings Triumph, CE June 96, p21-22. Theory and Application of Restoring Force Sliding Isola-tion Systems in Low Seismicity Regions, Paul Bradford and Ching Shi Liu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), pl 102-1105.

Time Delayed Control of Classically Damped Structures,

Time Detayed Control of Classically Datapase Students, R. Kumar and F. E. Udwadia, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p751-755.

Vibration Control of Structures Utilizing Architectural Walls, H. Allison Smith, Luciana R. Barroso and Vicki L. Vance, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p495-498.

Damping ratio

Effect of Degree of Weathering on Dynamic Properties of Residual Soils, Emir José Macari and Laureano Hoyos, Jr., GT Dec. 96, p988-997.

A 21st Century Dam, CE Nov. 96, p22-23. American Rivers Rates Worst Waterways, CE Oct. 96,

Artificial Recharge Using Inflatable Rubber Dams, Michael R. Markus, Curtis A. Thompson and Matt Ulukaya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p736-741.

Benefits of the Santa Ana River Mainstem Project, William L. Zaun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2176.

Buckeye Water Transmission Main Keswick Dam Crossing. D. Todd Kotey, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p194-201.

r. Catatano, ed., 1996), p194-201.
Cooperative Approaches in Achieving Additional Water Conservation at Prado Dam, James A. Van Haun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2352-2353.
Corps Begins Work on California Dam, CE Feb. 96, p17.19.

Corps Opens Dam Center, CE June 96, p8.

Corps Opens Dam Center, Cc. June 96, ps.
Corrections, CE Nov. 96, ps.
Dam Engineering Exhibit Wins Prize for New Museum in Arizona, NE Dec. 96, p.
Dam Requires Record-Setting Slurry Walls, CE Jan. 96,

p12,15.

Dam-Foundation Rock Interaction Effects in Earthquake Response of Arch Dams, Hanchen Tan and Anil K. Chopra, ST May 96, p528-538.

Designers Use Analysis Software for Planned Zimbabwe Dam, CE Feb. 96, p83.

Earth Spillway Design Using SITES Software, Darrel M. Temple, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1930-1935.

Ed Groff: A "Muddy Boots" President, Virginia Fairweather, CE Dec. 96, p66-68.

Examples of Structural Identification from Measured Earthcampies of structural tolentineation from neasured earni-quake Response: Buildings, Bridges, and Dams, G. L. Fenves, E. Safak and M. Raghavendrachar, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p659-

Ground Penetrating Radar for Infrastructure Condition Assessment and Geophysical Applications: A Review, Udaya B. Halabe, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

Mohammadi, ed., 1996), p812-819.

Guist Creek Dam Spillway Upgrade: A Maze (Labyrinth) of Difficulties, David C. Froehlich, Michael A. Woolum and W. Keith Crim, (North American Water and Environment Congress & Destructive Water, Chenchayya

ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1918-1923.

Impacts of Reservoir Sedimentation on Decommissioning of Dams, George W. Annandale, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2114-2119.

Largest Roller Gate Dam Gets New Chain, CE July 96, p8. Modeling the Ecological Impacts of Flaming Gorge Dam Operations, S. C. L. Yin, K. E. LaGory, J. W. Hayse, I. Hlohowskyj, R. A. Van Lonkhuyzen and H. E. Cho, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1911-1917.

A Modified Dam for Fish Up the River, CE Dec. 96, p16-17.

Nation's Largest Grouting Contract Under Way, CE Aug.

Numerical Modeling of Anhui Debris Flow, Guoqi Han and Deguan Wang, HY May 96, p262-265. Permanent Deformation on Preexisting Sliding Surfaces in Dams, George Gazetas and Nasim Uddin, GT Nov. 94,

Plans for Testing and Evaluating the New Autoventing Tur-bines at TVA's Norris Hydro Project, Paul Hopping, Pa-trick March, Thomas Brice and Joseph Cybularz, (North American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996), pl 299-1304. Proud to Be a Civil Engineer, G. Andrew Reti Makes Major Gift to ASCE Building Campaign, NE Nov. 96, p2. Reservoir Sediment Management Practices of the Los Angeles County Department of Public Works, Sree Kumar and Martin Moreno, (North American Water and Envi-

nent Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1651-1656.

Risk Assessment of Rockfall Hazard at Horse Mesa Dam: A Case History, Peter M. Kandaris and Kenneth M. Euge, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1402-1416.

Sound Way to Save Fish, John Nestler and Gene Ploskey,

CE Sept. 96, p58-61.

Surface Bysas-Collector Concepts and Performance, Peter C. Klingeman, Lisa M. Wieland, Kenneth R. Elbert and Thomas K. Lorz, (Morth American Water and Environment Congress & Destructive Water, Chenchayya Batha-

ment Congress as Destructive Water, Chenchayya Bathala, ed., 1996), p673-678.

Surface Oriented Fishway and Fish Guidance Curtain, Lynn
A. Reese, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p165-170.

Three-Dimensional Numerical Model for Fish Bypass Studies, E. A. Meselhe, A. J. Odgaard and V. C. Patal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), Two-Dimensional Modeling of River Dynamics for the Expansion of Clover Island, Kennewick, Washington, Thomas S. Wang, David P. Simpson and Raymond Watton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2861-2866.

Water Resources Investigation Along Salt River in Phoenix and Tempe Area, James Chieh, Jody Fischer and Dennis Marfice, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p.1399-1405.

Wisconsin Engineer Designs Irrigation System in the Phil-ippines, NE June 96, p9.

Cracking Analysis of Arch Dams by 3D Boundary Element Method, L. M. Feng, O. A. Pekau and C. H. Zhang, ST June 96, p691-699.

Dynamic Response Analysis of High Arch Dam-Water-Foundation System, Du Xiuli, Chen Houqun and Hou Shunzai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p987-988.

Roosevelt Dam Reaches a New Height of Safety, CE May 96, p10.

Dams, concrete

Earthquake Response of Gravity Dams Including Effects of Porous Sediments, José Domínguez and Rafael Gallego, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p649-652

Procedure for Time-Domain Seismic Analyses of Concrete Dams, R. Yang, C. S. Tsai and G. C. Lee, EM Feb. 96, p116-122.

Dams, earth

Correlations Between a Simple Field Test and Relative Density Test Values, Danny K. McCook, GT Oct. 96,

Creating of a Data Base of Small Earth Dam for Natural Disaster Reduction, Shigeru Tani, Kenichi Ushikubo and Souji Harima, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p72-73.

Dam Construction in Northern Environment: A Numerical

Study, Mu Shen and J.-M. Konrad, (Cold Regions Engineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p736-744.

Influence of Backwater on Headcut Advance, Kerry M. Robinson and Gregory J. Hanson, (North American Water and Environment Congress & Destructive Water, Chen-

and Environment Congress as Destructive Water, Chen-chayya Bathala, ed., 1996b, p117-122.

Inundation Studies in Case of Failure of King Talal Dan, Ahmed Kassem, M. Hanif Chaudhry and Muhammad R. Shatanawi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1924-1929.

Performance of San Fernando Dams During 1994 North-ridge Earthquake, J. P. Bardet and C. A. Davis, GT July

96, p554-564.

Problem and Technical Solutions: The Seven Oaks Dam, Physical Elements of the Seven Oaks Dam Feature, Robert E. Koplin, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2177-2184.

Santa Ana River Mainstern Project, Brian M. Moore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p2169-2175.

Seismic Rehabilitation of Earth Dams, W. F. Marcuson, III, P. F. Hadala and R. H. Ledbetter, GT Jan. 96, p7-20.

Statistics of Free Surface Flow through Stochastic Earth Dam, Gordon A. Fenton and D. V. Griffiths, GT June 96, p427-436.

pa27-430.
The Timberlake Dam Failure: A Hydrometeorological Assessment, J. Warner, G. V. Loganathan, R. J. Kane, M. Gillen, D. F. Kibler and K. Kostura, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2522-2527.

Dams, embankment Asphalt-Concrete Water Barriers for Embankment Dams, Patrick J. Creegan and Carl L. Monismith, 1996, 0-7844-0141-1, 185pp.

Embankment Dams in the Piedmont/Blue Ridge Province, Chuck Wilson and Ray Martin, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p27-36.

Peak Outflow from Breached Embankment Dam, David C. Froehlich, WR Jan./Feb. 95, p90-97.

Ranking Models Used for Condition Assessment of Civil Infrastructure Systems, L. E. Chouinard, G. R. Andersen and V. H. Torrey, III, IS Mar. 96, p23-29.

Reliability Applied to Slope Stability Analysis, John T. Christian, Charles C. Ladd and Gregory B. Baecher, GT Dec. 94, p2180-2207.

Dams, gravity

Earthquake Response of Gravity Dams Including Effects of Porous Sediments, José Domínguez and Rafael Gallego, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996). p649-652.

Dams, movable

Danis, movable Flood Protection Using Inflatable Dams, R. H. Plaut, S. Liapis and D. P. Telionis, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p264-265.

Dams, rockfill Problem and Technical Solutions: The Seven Oaks Dam, Physical Elements of the Seven Oaks Dam Feature. Robert E. Koplin, (North American Water and Environment Congress & Destructive Water, Chenchavya Batha-

la, ed., 1996), p2177-2184.

The Reliability Analysis of a Major Dam Project, J. Barneich, D. Majors, Y. Moriwaki, R. Kulkarni and R. Davidson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1367-1382.

Santa Ana River Mainstem Project, Brian M. Moore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2169-2175.

Data acquisition

Mobile Field Data Acquisition for Construction Quality

Control and ISO 9000 Certification, Robert F. Cox and Raja R. A. Issa, (Computing in Civil Engineering, Jorg Vanegas, ed. and Paul Chinowsky, ed., 1996), p1041-1046.

Analysis of Data Collected from Two Italian Freeways, E. Volta, T. Vernazza, C. Ardemagni and S. Grosso, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p243-247. Assessing Integrity of Weather Data for Reference Evapo-

transpiration Estimation, Richard G. Allen, IR Mar/Apr.

96, p97-106.

Data Analysis for Computer Modeling of Thermal Dis-charges, Chun-Hou Orr and Shu-Fang Peng, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3758-3763.

DBMS Implementation of a Linear Referencing Model, Nancy K. Wiegand, Teresa M. Adams and Alan P. Von-

Nancy N. Wiegand, 1eresa M. Adams and Alan P. Von-derohe, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p179-185. Engineering Aspects of Wetland Mitigation, A. Mahendra Rodrigo, Kenneth P. Dunne, Lewis O. Morgan and Rao Nivargikar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2027-2032.

Geophysical Log Interpretation Using Neural Network, S. Pezeshk, C. V. Camp and S. Karprapu, CP Apr. 96,

Granular-Flow Rheology: Role of Shear-Rate Number in Transition Regime, Cheng-lung Chen and Chi-Hai Ling, EM May 96, p469-480.

Intensity, Duration, and Frequency of Residential Water Demands, Steven G. Buchberger and Greg J. Wells, WR Jan./Feb. 96, p11-19.

Multicriteria Traffic Control with Video Feedback, Andrzej Adamski, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p620-627. Multimedia Data Management in a Highway Information System, Kelvin C. P. Wang and Xuyang Li, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p607-612.

Neural Networks and AASHO Road Test, M. R. Banan and K. D. Hjelmstad, TE Sept./Oct. 96, p358-366.

Data collection

21st Century Earth Observing Systems: Emerging Role for Spaceports, Stanley A. Morain, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p245-253.

Acquisition and Use of Coastal-Storm Related Data for Zoning Purposes, Andrew W. Garcia, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p393-394.

Adaptation of Barcode Technology for Construction Project Control, Diego Echeverry, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1034-1040.

Analysis of Data Collected from Two Italian Freeways, E. Volta, T. Vernazza, C. Ardemagni and S. Grosso, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Franceso Filippi, ed., 1996), p243-247.

Analysis of Shoring Loads Using Field Data, T. W. Phil-brick, Jr. and D. V. Rosowsky, (Building an Internation-al Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p711-718.

Bar Codes in the Design Office, Richard L. Bland, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p951-957.

COASTMAP: An Integrated System for Environmental Monitoring, Modeling and Management, Thomas Op-ishinski, Malcolm L. Spaulding and Craig Swanson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2528-2532.

Cropping Systems on the Delmarva Peninsula to Reduce Ground Water Contamination, W. F. Ritter and R. W. Scarborough, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2341-2346.

Data Acquisition and Handling for the Minnesota Road Re-search Project, David E. Newcomb and Joseph A. Cornell, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p510-514.

Detailed Measurements of Scour at Bridges, David S. Mueller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p2541-2549.

Development of a Wireless Global Bridge Evaluation and Monitoring System (WGBEMS), Kenneth Maser, Robert Egri, Abba Lichtenstein and Steven Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p734-

Development of Flood Hazard Boundary Information, R. Cris Hughes and Gregory W. Lowe, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p365-366.

Engineering Aspects of Wetland Mitigation, A. Mahendra Rodrigo, Kenneth P. Dunne, Lewis O. Morgan and Rao Nivargikar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2027-2032.

EPA Requires Cryptosporidium Watch, CE July 96, p20. Every Road That Rises Must Converge on GIS, Eric

Rasmussen, ET Oct./Nov. 96, p8.

FEMA-NIBS Earthquake Loss Estimation Methodology, Robert V. Whitman, Henry J. Lagorio and Philip J. Schneider, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p113-114.

Field and Laboratory Measurements of Shoring Loads, Dryver R. Huston, Peter L. Fuhr and Jamie Willsey, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p704-710.

Field Data Collection and Analysis for Verification of Estu-arine Models, W. H. McAnally, T. C. Pratt, G. T. Stevens and T. M. Parchure, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p204-214.

Field Inspection Data Collection using Personal Digital Assistants and Digital Cameras, Anthony D. Songer and Eddy M. Rojas, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1047-

1051.

First Interactive Drought Atlas Released, CE Oct. 96. p17,19.

First Smart Bridge Tested, CE June 96, p18.

First Smart Bridge Tested, ET Apr./May 96, p1,6.

Gator Communicator Design of a Hand Held Digital Data Mapper, John F. Alexander, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1052-1057.

Groundwater Monitoring For a Tunneling Project, James C. Burton and John e. Shamma, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p691-696.

Housing Losses, Mary C. Comerio, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p167.

Interface Design for Pen-Based Computers in the FIRS Project, Eddy M. Rojas and Anthony D. Songer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1027-1033.

Chinowsky, ed., 1990), p1027-1033.
Inverse Transient Analysis in Pipe Networks, James A. Liggett and Li-Chung Chen, HY Aug. 94, p934-955.
Measurements of Bridge-Scour Depths in Mississippi, K. Van Wilson, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3023-3032.

Mobile Field Data Acquisition for Construction Quality Control and ISO 9000 Certification, Robert F. Cox and Raja R. A. Issa, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1041-1046

Modeling Dry Weather Wastewater Flow in Sewer Net-works, D. Butler and N. J. D. Graham, EE Feb. 95,

p161-173.

Natural Disaster Losses to Conventional Construction and their Mitigation (An Insurance Company Response to Catastrophic Losses Since Hurricane Hugo), Edward M. Lautsch, Rose Geier Grant and Laird Macdonald, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p778-785.

pr/6-83.
The O'Hare International Airport Pavement Management System, Margaret Broten, George Schwandt and William Weiss, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Senewiratne, ed., 1996), pc73-283.
On Exploration and Usage of Near-Earth-Missing Objects, VA Signments Conference of the Conference

V. A. Simonenko, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p61-67

Area, Quinto Riccardo Bertini and Pietro Antonio Cappa, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p408-412.

PC-Based Remote Monitoring of an Instrumented Struc-ture: Case Study and Lessons Learned, R. J. Helgeson, S. Chen and K. Kuhl, Analysis and Computation, Franklin Y. Cheng, ed., 1996), p310-321.

Y. Cheng, ed., 1996), p310-321.
Post-Hurricane Investigations: Quantifying Damage, Gregory L. F. Chiu, Sara Wadia-Fascetti and Mussaddeque Hossein, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p74-75.
Results from the PLEIADES Automatic Traffic Surveillance System in the Kent Sector of the Paris-London Corridor, Neil Hoose and Nigel Cox, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p233-237.
Risk-Cot Decision Francework for Aquifer Remediation

Risk-Cost Decision Framework for Aquifer Remediation Design, Bruce R. James, Jin-Ping Gwo and Laura Toran, WR Nov/Dec. 96, p414-420.

Seismic Reflection Evidence Against a Shallow Detachment Beneath Yucca Mountain, Nevada, Thomas M. Brocher and W. Clay Hunter, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p148-150.

Significance of Lateral Elevation Gradients in Tidally Affected Tributaries, Frederick E. Schuepfer, Guy A. Apicella and Vincent J. DeSantis, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p229-239.

The Strategic/Master Plan at Boeing Field: A Means of Optimizing Airport Utilization at an Inner City Airport, Ju-lie Rodwell, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p12-23.

Traffic Engineering Recurrent Spatial Knowledge Base: Design and Implementation, Pawan Lingras, CP Jan. 96, p50-59.

Venting Test Analysis Using Jacob's Approximation, Kenneth B. Edwards, EE Mar. 96, p232-234.

Wavelet Transforms for Incident Detection on Motorways, Simon Cohen and Bian-shun Jing, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p222-226.

Data collection systems

An Automatic System for the Definition of the Setting Rules for Speed Diagrams, Francesco Saverio Capaldo and Rodolfo Grossi, (Applications of Advanced Technol-ogies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p193-197.

Corps Opens Dam Center, CE June 96, p8.

Issues Related to Intelligent Bridge Monitoring, A. Emin Aktan, Arthur J. Helmicki and Victor J. Hunt, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p750-757.

Karst Water Inventories Using Thermography, C. Warren Campbell, Joseph W. Foster and Mohamed Abd El Latif, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p3910-3914.

Long-Term Pile Load Testing System Performance in Sa-line and Ice-Rich Permafrost, K. W. Biggar, D. C. Sego

and R. P. Stahl, CR Sept. 96, p149-162.

Models for Estimating Core-Cycle Rate of Penetration at Yucca Mountain, Nevada, Lawrence E. Barker and Dale D. Daffern. (High Level Radioactive Waste Management, Technical Program Committee, 1996), p468-470.

Data communication

Design of a Freeway Control System Based on Artificial Intelligence Methods for Travel Time Detection, Reinhart D. Kühne, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p439-443.

The Electronic Highway System for the Building Industry, Paul Mark Evans, (Analysis and Computation, Franklin

Y. Cheng, ed., 1996), p262-272.

Electronic Signatures Are Revolutionizing Highway Programs, Michael J. Vecchietti and Lawrence I. Neff, CP Oct. 96, p264-266.

The EURATN Project, Jean-Michel Crenais, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p159-165.

Geographic Data Exchange Format in Taiwan, Wei-hsin Ho and Ge-wen Lee, SU Aug. 96, p114-131.

Intranet Technology to Aid Engineers, CE Dec. 96, p20. PC-Based Remote Monitoring of an Instrumented Struc-ture: Case Study and Lessons Learned, R. J. Helgeson, S. Chen and K. Kuhl, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p310-321.

T. cheng, ed., 1990), p310-321.
The Use of Digital Geographic Information in Transportation Engineering, Patrice Boursier, Bernard Allouche, Laurent Coudercy and Yonnel Gardes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p403-407.

Data handling

Concurrent Engineering and Electronic Data Interchange, Tony Tascione, (Analysis and Computation, Franklin Y.

Cheng, ed., 1996), p397-406.

Data Acquisition and Handling for the Minnesota Road Re-search Project, David E. Newcomb and Joseph A. Cornell, (Applications of Advanced Technologies in Trans-

netl, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p510-514.
A Data Management Model for Change Control in Collaborative Design Environments, Karthik Krishnamurthy and Kincho H. Law, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p536-543.

The Electronic Highway System for the Building Industry, Paul Mark Evans, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p262-272.

Geographic Data Exchange Format in Taiwan, Wei-hsin Ho and Ge-wen Lee, SU Aug. 96, p114-131.

Integrating Information with 3D Models for Facility Life-Cycle Support, A. B. Cleveland, Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p253-261.

Korean Gas Company Digitizes Maps, Records, CE Dec.

Linked Lists for Transport Simulations Using Lagrangian Parcels, Poojitha D. Yapa, Li Zheng and Tomonao Koba-yashi, CP Jan. 96, p88-90.

Managing Multiple Views of Design Product Models, Maher Hakim, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p273-277.

Simplified Transformation between NAD27 and NAD83 in Southeastern Wisconsin, Kurt W. Bauer and Earl F. Burkholder, SU Feb. 96, p26-39.

Status of Electronic Data Interchange for Steel Structures, D. W. McConnell and J. A. Bohinsky, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p389-396.

Data processing

Design—Cornerstone of Your Career: Advice for Young Engineers, Rodney Attwood, El July 94, p241-245.

Dynamic Effects from the Space Shuttle Liftoff, Fady F. Barsoum and William F. Carroll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1190-1196.

Graphical Methods for Assessing Changes in Water Quality, Karen Cozzetto and P. M. Berthouex, EE July 96, p667-668.

Models of Construction Process Information, Thomas

Froese, CP July 96, p183-193.

Using Fuzzy Logic in Aircraft Navigation Systems, A. Lopes Pereira, A. K. Achaibou and F. Mora-Camino, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p99-103.

Data processing techniques

A Method for Extrapolation of Extreme Value Data, Arvid
Naess, (Engineering Mechanics, Y. K. Lin and T. C. Su,
1996), p273-276.

Redesign of Vendor-Data Processes for Industrial Projects, H. Y. Goucha and J. T. O'Connor, ME Sept./Oct. 96, p53-61.

Data retrieval

Mapping the Future, CE July 96, p18-19.

Data systems

Entity-Relationship Modeling of Composite Materials Data, Lisa K. Spainhour and William J. Rasdorf, CP July 96, p226-235

The EURATN Project, Jean-Michel Crenais, (Applications of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p159-165.

Examples and Characteristics of Shared Project Models, Martin Fischer and Thomas Froese, CP July 96, p174-Geographic Data Exchange Format in Taiwan, Wei-hsin Ho and Ge-wen Lee, SU Aug. 96, p114-131.

Redesign of Vendor-Data Processes for Industrial Projects, H. Y. Goucha and J. T. O'Connor, ME Sept./Oct. 96. p53-61.

Database management systems

Abstracting Lessons Learned from Design Reviews, I William East and Michael C. Fu, CP Oct. 96, p267-275. Accessible Information, William J. Douglas and Izak Maitin, CE June 96, p59-61.

Automated Constructibility Analysis of Work-Zone Traffic-Control Planning, Deborah J. Fisher and Naveen Rajan, CO Mar. 96, p36-43.

DBMS Implementation of a Linear Referencing Model, Nancy K. Wiegand, Teresa M. Adams and Alan P. Vonderohe, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p179-185.

Geo-data System for Landslide Hazard Assessment, Cassandra T. Rogers, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p70-71.

Time for an Integrated Approach to Facility Management, Paul Scarponcini, CP Jan. 96, p3.

Acoustic Efficiency Analysis Using Infrasound from NEOs, Douglas O. ReVelle and Rodney W. Whitaker, (Engi-neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p102-108.

W. Johnson, ed., 1996), p102-108.
A Boolean Material Property Database, S. Dobson, M. Noori and A. Crespo, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p673-676.
Correlation of Component Damage, Insurance Losses and Wind Storm Severity, Timothy A. Reinhold, Gregory L. F. Chiu and Robert Akins, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p191-192.
Cramming CE Oct. 65, 211.

Cramming, CE Oct. 96, p11. Creating of a Data Base of Small Earth Dam for Natural Disaster Reduction, Shigeru Tani, Kenichi Ushikubo and Souji Harima, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p72-73.

Amaging Farthquakes: A Scientific Laboratory, Walter W.

Pousier, ed. and Niely M. Cruning, ed., 1971, pp.273.
Damaging Earthquakes: A Scientific Laboratory, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p151-152.
Data-Centered Thinking, John G. Voeller, CP Jan. 96, p1-2.

Database Preparation for Pavement Modeling—Virginia's Experience, Adel W. Sadek, Thomas E. Freeman and Michael J. Demetsky, TE Nov/Dec. 96, p454-461.

Development of an Interactive Multimedia and Database Model, Michael H. Woo, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p767-773.

Development of Integrated Inventory Databases and Earth-quake Damage and Loss Estimation Methodologies for Structures in Utah, Christopher Rojahn, Stephanie A. King, Roger E. Scholl, Anne S. Kiremidjian, Lawrence D. Reaveley and Robert F. Wilson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p7-8.

ed., 1997), p.7-8.
Development of Probabilistic Earthqake Damage Estimation Models, D. Mirfendereski and C. Scawthorn, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p.243-244.
Engineering Education Goes Digital with World Wide Web Database, CE Jan. 96, p.16,18.
Engineers Commune in Virtual Village, CE Jan. 96, p15-

Entity-Relationship Modeling of Composite Materials Data, Lisa K. Spainhour and William J. Rasdorf, CP July 96,

p226-235.

The Environmental Valuation Reference Inventory (EVRI) for Water Related Benefits Transfers, Jim Frehs, Matthew Clark, Paul De Civita, Fernand Filion, Virginia Kibler and Mahesh Podar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1331-1336.

Expected Moments Alogrithms for Flood Frequency Analysis, William L. Lane and Timothy A. Cohn, (North

substitution of the control of the C Basin, Maged Hussein and Franklin W. Schwartz, (Con puting in Čivil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p515-521. The Federal Government's Existing Building Inventory, Ann Bieniawski, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p161-162

First Interactive Drought Atlas Released, CE Oct. 96.

Fluid Management in Space-Based Systems, Jack A. Salzman, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p521-526. GIS Gains Ground as Disaster Mitigation Tool, CE Sept.

96, p19-20.

A GIS Sewer Database for a University Campus, D. J. Schuller, D. I. Pusey and A. R. Rao, (North American Water and Environment Congress & Destructive Water,

Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1765-1770. Identifying Potential Trophic Relationships and Bioaccumulation Pathways Between Fish and Invertebrates, Mike Moore, Don Maurer, George Robertson, Hai Nguyen and Tom Gerlinger, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1609-1704. Latin American Infrastructure Database Formed, CF, Dec.

Latin American Infrastructure Database Formed, CE Dec.

96, p22.

Managing Border Irrigation for Near-Zero Discharge, T. S. Strelkoff and A. J. Clemmens, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1711-1715.

Mapping Underground, ET June/July 96, p7,11

icrotunneling Database for the USA and Canada From 1984 to 1995, Alan Atalah and Paul Hadala, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p332-339

The NEA International FEP Database: Outcome of the Working Group, Trevor J. Sumerling, (High Level Radioactive Waste Management, Technical Program Commit-

tee, 1996), p317-319.

tee, 1996), p317-319.

Non-Federal Flood Control Works Inspection Program, Jim Crum, Ruh-Ming Li and Henry M. Fehlman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1796-1800.

Probabilistic Seismic Hazard and Sensitivity Analysis: A Case Study from Southern California, Mehrdad Mahise (North Chief Chengle).

Case Study from Southern California, Mehrdad Mah-dyiar, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997, p299-300.

A Satellite in Your Future?, ME Mar./Apr. 96, p9-10.
Seismic Risk Assessment for Environmentally Sensitive Facilities in Northern Maine, Elizabeth A. Champeon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p1052-1067.
Soil Thermal Properties for the Design of Underground Structures in Cold Regions, J. E. Steinmanis, D. Parmar, H. S. Radhakrishna and A. S. Judge, (Cold Regions Envi

H. S. Radhakrishna and A. S. Judge, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p471-482.
Use of a National Loss Estimation Methodology for Risk

Management, Thalia Anagnos, Scott Lawson, Jawhar Bouabid and Mourad Bouhafs, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p249-250.

Visualization of Spatial and Geometric Databases for Construction Projects, M. R. Halfawy, F. C. Hadipriono, J. W. Duane and R. E. Larew, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p920-926.

Dend loads

Aluminum Has History, Kurt P. Thompson, CE Sept. 96, p36,38.

Analysis of Effect of Dead Loads on Natural Frequencies of Beams Using Finite-Element Techniques, Shi-Jun Zhou and Xi Zhu, ST May 96, p512-516. New Aluminum Decks Cut Loads, Add Life, CE Aug. 96,

p12.

Analysis of Rainfall-Induced Debris Flows, Scott A. Anderson and Nicholas Sitar, GT July 95, p544-552.

Damage due to Northridge Earthquake Induced Movement of Landslide Debris, Robert W. Day and Dennis M. Poland, CF Aug. 96, p96-108.

Debris Basin Design Procedures, J. J. DeVries and T. V. Hromadka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

Congress & Destructive Water, Chenchayya Baulain, ed., 1996), p1657-1662.

Debris Flow Events at Mountainous Creeks near Santiago, Chile- Hydrologic Analysis, X. Vargas and P. Lara, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1550-1551.

pl300-1531.
The Debris Management Cycle: An Overview, Robert C.
Swan, (Natural Disaster Reduction, George W. Housner,
ed. and Riley M. Chung, ed., 1997), pl71-172.
Firm Serves As a Model for its Piers, CE Oct. 96, p97.
Floodplain Management in Los Angeles County, Allen Ma,
(North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4131-4135.

Geo-data System for Landslide Hazard Assessment, Cassandra T. Rogers, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p70-71

71. Glacier-Generated Floods and Debris Flows, Andrew G. Fountain and Joseph S. Walder, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2449.
Glazed Opening Designs for Windborne Debris Impact, Joseph E. Minor, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p117-118.
Hazard Assessment of Debris Fans at Rico, Colorado, B. Cheistenber, Willbur, (Uncortaints in the Capitalian Paris.

Christopher Wilbur, (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth,

tord, ed., Priscinia P. Neison, ed. and Mary J. S. Rottn, ed., 1996), p1432-1445. Land-Use Policy Decisions Based on a Probabilistic As-sessment of Landslide and Debris Flow Risks after the 1991 Oakland Hills Firestorm, Scott R. Huntsman and Ram B. Kulkarni, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed.,

ed., Priscilla F., Nelson, ed. and Mary J. S. Kotn, ed., 1996), p535-549. Making Windows Safer, CE Dec. 96, p8. Nanotechnology and Orbital Debris, Hans-Joachim Blome and Thomas L. Wilson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p328-333

Newtonian Fluid Mechanics Treatment of Debris Flows and Avalanches, Bruce Hunt, HY Dec. 94, p1350-1363. Numerical Modeling of Anhui Debris Flow, Guoqi Han and Deguan Wang, HY May 96, p262-265.

Deguan Wang, HY May 96, p262-265.

ORDER: A Preliminary Concept for ORbital Debris Removal, Brian A. Phail, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p334-340.

Performance of Laminated Glass Units under Simulated Windborne Debris Impacts, Richard A. Behr and Paul A.

Windborne Debris Impacts, Richard A. Behr and Paul A. Kremer, AE Sept. 96, p95-99.
Post-Hurricane Investigations: Quantifying Damage, Gregory L. F. Chiu, Sara Wadia-Fascetti and Mussaddeque Hossein, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p74-75.
Prediction of Effects of Woody Debris Removal on Flow Resistance, F. Douglas Shields, Jr. and Christopher J. Gippel, HY Apr. 93, p341-354.
Progress of the ASTM Standard on Fenestration Relative to Windstorms and its Relationship to Building Codes, David B. Hattis. (Natural Disaster Reduction, George W.

David B. Hattis, (Natural Disaster Reduction, George W.

Housner, ed. and Riley M. Chung, ed., 1997), pl 19-120.
Random Field of Cumulative Damage by Space Debris Impact, A. Der Kiureghian, P. V. Geyskens and M. R.
Khalessi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p668-671.

Sance Debris, Trisha Chhabildas, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1270-1273.

Space Debris Hazard to Defense Systems, Gregory H. Canavan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p20-25.

Space Debris: A Growing Threat, Michelle Mancuso, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1290-1294.

Space Station Module Wall Hole Size and Crack Length Following Orbital Debris Penetration at 6.5 km/s, Wil-liam P. Schonberg and Joel E. Williamsen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl-7.

Techniques to Obtain Orbital Debris Encounter Speeds in the Laboratory, Lalit C. Chhabildas, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p8-12.

Verification of Vertically Rotating Flume Using Non-Newtonian Fluids, Richard J. Huizinga, HY Aug. 96, p456-459.

Decay

- Condition Assessment of Marine Timber Piles Using Stress Wave Method, Shunyi Chen and Y. Richard Kim, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p853-860.
- Weathering Rates of Marble in Laboratory and Outdoor Conditions, Srinivas S. Yerrapragada, Surendra R. Chir-ra, John H. Jaynes, S. Li, Jayanta K. Bandyopadhyay and K. L. Gauri, EE Sept. 96, p856-863.

- 21st Century Leadership and Technology, Malcolm J. Todd, ME July/Aug. 96, p40-49.
- An Architecture Integrating Symbolic and Connectionist Models for Traffic Management Center Decision Sup-port, Martin Molina, Filippo Logi, Stephen G. Ritchie and Jose Cuena, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p320-324.
- Bayesian Decision Analysis for Contaminant Travel Time, Marian W. Kemblowski and Hewa A. Wijedasa, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p207-218.
- Between the Devil and the Deep Blue Sea: A Tale of Two Scientific (?) Analyses, T. R. Muraleedharan, El Jan. 96, p1-5.
- A Computerized Decision Support System Applied to NAPL Cleanup, Dale W. Lough and Wade E. Hathhorn, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p693-704.
- Construction Engineers Driving into the 21st Century, Vir K. Handa, CO Mar. 96, p1-6.
- Constructor Prequalification: Choosing the Best Construc-tor and Avoiding Constructor Failure, Jeffrey S. Russell, 1996, 0-7844-0052-0, 200pp.
- Decision Process for Mitigating Seismically Vulnerable Water Facilities, Walter J. Bishop and Ernesto A. Avila, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p209-210.
- Design Decision Making for Infrastructures under the Restriction of the Energy Consumption, Minoru Matsuo, Yusuke Honjo and Ikuo Sugiyama, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p376-379.
- Engineering Judgment in the Evolution from Deterministic to Reliability-Based Foundation Design, Fred H. Kulhawy and Kok Kwang Phoon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p29-48.
- Equity Measures for Selecting Sustainable Projects, Sam Matheson and Barbara Lence, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4371-4376.
- Examination of Emerging Consciousness in Engineering Management, Amarjit Singh, ME July/Aug. 96, p50-57.
- Experiment with Simulation Models in Water-Resources Negotiations, René Reitsma, Ilze Zigurs, Clayton Lewis, Vance Wilson and Anthony Sloane, WR Jan./Feb. 96, p64-70.
- Free Checking, ME Jan./Feb. 96, p13.

- A General Framework for Approaching Mobility Problems in Urban Areas, Walter Ukovich, Davide Tercelli, Nicola Campanella and Marco Crasnich, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p166-170.
- Geologic Uncertainties in Tunneling, Herbert H. Einstein, Vijaya B. Halabe, Jean-Paul Dudt and François Descoeudres, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p239-253
- How Strategies Happen: A Decision-Making Framework, Karen Lee Hansen and C. B. Tatum, ME Jan./Feb. 96,
- Hydrologic Risk, Robert C. Patev, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p416-418.
- The Influence of Trust on Risk-Based Decision Making, David L. McLain and B. Katarina Hackman, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p169-179.
- Integrated Hydrological/Ecological/Economic Modeling for Examining the Vulnerability of Water Resources to Climate Change, John P. Kochendorfer and Jorge A. Ramirez, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2157-2162.

An Iterative, Probabilistic Environmental Decision Analy sis Approach, Erik K. Webb, Stephen H. Conrad and Theresa J. Brown, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p249-264.

- Just One More Boring, and We'll Know for Sure! Sam S.
 C. Liao, David L. Druss, Thom L. Neff and Brian R.
 Brenner, (Uncertainty in the Geologic Environment:
 from Theory to Practice, Charles D. Shackelford, ed.,
 Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996),
- Key Risk Attributes in the Perception of Engineering De-sign Options, P. Grindrod, D. J. Waters, H. Takase and F. A. Yousaf, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p499-501.
- Management Framework for Large-Scale Water Problems, Neil S. Grigg, WR July/Aug. 96, p296-300.
- Modeling and Debugging Engineering Decision Procedures with Machine Learning, Yoram Reich, Miguel Medina, Tung-Ying Shieh and Timothy Jacobs, CP Apr. 96, p157-166.
- Modeling Freeway Lane Changing Behavior, Haris N. Koutsopoulos, Moshe E. Ben-Akiva, Rabi G. Mishalani and Kazi I. Ahmed. (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p455-459.
- Modeling Project Performance for Decision Making, Luis F. Alarcón and David B. Ashley, CO Sept. 96, p265-273.
- Multicriterion Design of Long-Term Water Supply in Southern France, Oscar Cordeiro Netto, Éric Parent and Lucien Duckstein, WR Nov./Dec. 96, p403-413.
- Multijurisdictional Project Evaluation in Chattanooga Urban Area, Catherine L. Ross and W. Jeffrey Davis, UP June 96, p71-81.
- Nonstructural Evaluation of Competing Bridge Materials, Robert L. Smith and Robert J. Bush, MT May 96, p88-
- Optimum Risk Management with Uncertain Hazard and Vulnerability Information, Lawrence A. Twisdale and Peter J. Vickery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p88-
- Organizing and Evaluating Uncertainty in Geotechnical En-gineering, Robert V. Whitman, (Uncertainty in the Geo-logic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1-28.

Policy and Engineering Decision-making under Global Change: Case of the Upper Rio Grande River Basin, Lu-cien Duckstein, Bijaya P. Shrestha and Marvin Waterstone, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p38-60.

Probabilistic Slope Stability in Theory and Practice, Thomas F. Wolff, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996).

Reflections on the Regulatory Reform Debate, Leonard Shabman, (Risk-Based Decision Making in Water Re-sources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p1-9.

Reversibility Measures for Sustainable Decisions, Nick Fanai and Donald H. Burn, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1525-1530.

Risk Analysis in Dam Safety Practice, Steven G. Vick and R. A. Stewart, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p586-603.

Risk Assessment Approach to Dam Safety Criteria, David S. Bowles, Loren R. Anderson and Terry F. Glover, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p451-473.

isk Communication: Guidelines and Commentary, Clifford S. Russell and Duane D. Baumann, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p396-400.

Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996, 0-7844-0168-3, 450pp.

Risk-Cost Decision Framework for Aquifer Remediation Design, Bruce R. James, Jin-Ping Gwo and Laura Toran, WR Nov./Dec. 96, p414-420.

River Meander Zones and Floodplain Reconnection, David A. Bella, Peter C. Klingeman and Hiram W. Li, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2613-2618.

Selection Among Aqueous and Off-Gas Treatment Technologies for Synthetic Organic Chemicals, Bruce I. Dvorak, Christopher J. Herbeck, Claire P. Meurer, Desmond F. Lawler and Gerald E. Speitel, Jr., EE July 96,

Selection of Sediment Transport Relations: Part I, Review of Sediment Transport Comparisons, Martin J. Teal and David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2831-2836.

A Sequential Hypothesis-Testing Based Freeway Incident Secondary Tryponnesis-Testing Based Freeway Incident Response Decision-Making System, Samer M. Madanat, Hua-Liang Teng and Pen-Chi Liu, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p286-291.

Subjective Probability Assessment in Water Resources Planning, Charles Yoe, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p294-314.

Summary of Responses to Participant Questionnaire, Yacov Y. Haimes, David A. Moser and Eugene Z. Stakhiv, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p422-434.

Uncertainty as a Parameter for Decision Making, Jiff Fal-tejsek, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p320-321.

Understanding Why Stakeholders Matter, Richard C. Eschenbach and Ted G. Eschenbach, ME Nov/Dec. 96,

Utility-Theory Model for Bid Markup Decisions, S. P. Doz-zi, S. M. AbouRizk and S. L. Schroeder, CO June 96, pl 19-124.

A Verification System for Probabilistic Hydrograph Fore-casts, Edwin Welles and Momcilo Markus. (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p223-224.

Decision support systems

An Architecture Integrating Symbolic and Connectionist Models for Traffic Management Center Decision Support, Martin Molina, Filippo Logi, Stephen G. Ritchie and Jose Cuena, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p320-324.

COMPASS—New Paradigm for Project Cost Control Strat-egy and Planning, Makarand Hastak, Daniel W. Halpin and Jorge Vanegas, CO Sept. 96, p254-264.

Consensus Building Model to Select CASIS in Small Communities, Steven W. McCrary, Colin O. Benjamin and Vijay E. Ambavanekar, UP June 96, p46-70. Constraint Based Reasoning Using Grobner Bases, Sivand

Lakmazaheri, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p559-564.

A Decade of Experience in Developing Pavement Management Systems for Local Agencies, Chi Amy Chow, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p992-998.

Decision Support, R. B. Allen, CE July 96, p53-55.

A Decision Support System for Dynamic Pre-Trip Route Decision Support System to Dynamic Pre-Trip Rough Planning, Nagui M. Rouphail, S. Ranji Ranjithan, Wael El Dessouki, Timothy Smith and E. Downey Brill, (Ap-plications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p325-329.

A Decision Support System for Minimizing the Distur-bance of Airfield Construction (SFIA Case Study), Adib Kanafani and Manar Shami, (Meeting the Challenge: Re-building Inner City Airports, Prianka Seneviratne, ed.,

1996), p234-245.

A Decision Support Tool for the Steel Building Industry, Gregory P. Pasley and W. M. Kim Roddis, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p725-731.

Decision-Support System for Infrastructure Preservation, Yung-Ching Shen and Dimitri A. Grivas, CP Jan. 96,

Evaluation of a Real-Time Expert System for Surface Street Traffic Management and Control, Stephen G. Ritchie, Filippo Logi, Seungmin Kang and Craig Rindt, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p276-280.

A Fuzzy Logic Paradigm for Fault Trees and Event Trees in Risk Assessment, Timothy J. Ross and Sunil Donald, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p369-375.

GIS Gains Ground as Disaster Mitigation Tool, CE Sept. 96, p19-20.

HERMES: An Integrated Environment for the Design of On-Line Decision Support Systems, Franco Arcieri and Ettore Apolloni, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p315-319.

Implementing the Knowledge Worker System (KWS) in an Engineering Environment, Bruce C. Goettel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p288-293.

Integrated Planning Decision Support System (IPDS), Mario Mejía-Navarro and Luis A. García, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), pl 89-190.

Integrated Planning Decision Support System (IPDS) Application: Glenwood Springs, Colorado, Mario Mejfa-Navarro and Luis A. García, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p386-387.

Landfill Siting Using Geographic Information Systems: A Demonstration, Muhammad Z. Siddiqui, Jess W. Everett and Baxter E. Vieux, EE June 96, p515-523.

Moving from a Model to a Decision Support System: Salt River Project's Experience with a Reservoir Simulation System, Jon Behrens and Yvonne Reinink, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4113-4118.

Multiple Heavy Lifts Optimization, Kuo-Liang Lin and Carl T. Haas, CO Dec. 96, p354-362.

Optimal Design of Water-Distribution Networks with GIS. Saud A. Taher and John W. Labadie, WR July/Aug. 96,

Package System for Supporting Decisions in a County Area, Quinto Riccardo Bertini and Pietro Antonio Cappa, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p408-412.

Preliminary Features of a Decision Support System for Incident Detection, John Hourdakis and Athanassios P. Chassiakos, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p227-232.

Risk-Based Spatial Decision Support System for Mainte-nance Dredging of Navigation Channels, Samuel J. Ra-tick and Holly Morehouse Garriga, IS Mar. 96, p15-22.

Semantic Comparison of Selective and Constructive Induction, Witold Szczepanik, Tomasz Arciszewski and Janusz Wnek, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p845-851.

Structuring Cases in a Case-Based Design Aid, Craig Zimring, Sonit Bafna and Ellen Do, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p308-313.

Uncertainty Modeling for Preliminary Design of Structures, Yung-Ching Shen and Larry J. Feeser, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p565-571.

Use of Fuzzy Logic and Similarity Measures in the Risk Management of Hazardous Waste Sites, Sunil Donald and Timothy J. Ross, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p376-382.

Visualization of Spatial and Geometric Databases for Con-struction Projects, M. R. Halfawy, F. C. Hadipriono, J. W. Duane and R. E. Larew, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p920-926.

Aerodynamic Considerations for Rooftop Helideck Design, César Farell and M. Mohamed Sitheeq. (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1245-1251.

Composite Repair/Upgrade of Concrete Structures, Orange S. Marshall, Jr. and John P. Busel, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p932-938.

A Review of Dynamic Behavior of Sector Plates and Curved Bridge Decks, H. R. Molaghasemi and I. E. Harik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p993-996.

Stress-Laminated Timber Decks Using Glass FRP Ten-dons, H. J. Dagher, B. Abdel-Magid, S. Iyer and W. Lu, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1458-1468.

Wind-Induced Failures of Steel Roof Decks, Victor Figueron Díaz, Ali Saffar, Samuel I. Díaz Santiago and Bernardo Deschapelles. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p894-897.

Do-Nothing Cleanups, Randall T. Hicks and Rais Rizvi, CE Sept. 96, p54-57.

Hydrologic Theory of Dispersion in Heterogeneous Aqui-fers, Sergio E. Serrano, HE Oct. 96, p144-151.

Low Building Wind Load Variability for Code Applications, T. C. Eric Ho, (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1053-1060.

Optimal Waste Decomposition—Landfill as Treatment Process, Robert P. Anex, EE Nov. 96, p964-974.

Slowly-varying Components of Hydrodynamic Field at the Wall of Breakwater of Gdańsk North Port, Piotr Wilde and Eugeniusz Sobierajski, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

Deep foundations

181

Friction Characteristics of Cohesionless Soil Penetrated by Polymer and Mineral Slurries, Kamal Tawfiq, P.E. an Hubert Lee Broughton, III, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1170-1178.

Lateral Earth Pressures on Deep Braced Walls, Daniel O. Wong, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p746-758

The Taller the Deeper (Available only in the Geo/ Environmental Special Issue), Clyde N. Baker, Jr., Elliott E. Drumright, P.E., Leonard M. Joseph and Tarique Azam, CE Nov. 96, p3A-6A.

Deep soil mixing

Boston Blockbuster, Virginia Fairweather, CE Dec. 96, p40-43.

The Return of Deep Soil Mixing, Donald A. Bruce, CE Dec. 96, p44-46.

Deep water
Inflated Contour Approach for Deepwater Tendon Design,
J. W. van de Lindt and J. M. Niedzwecki, (Probabilistic
Mechanics & Structural Reliability, Dan M. Frangopol,
ed. and Mircea D. Grigoriu, ed., 1996), p582-585.
Probabilistic Analysis of Tendon Loads for a TLP in Deep
Water, Charles G. Acquaah and Robert B. Gilbert,
(Probabilistic Mechanics & Structural Reliability, Dan
M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),
p162-165.

PIO2-103. Velocity Measurements of Post-Breaking Turbulence Generated by Plunging Breakers, Paul A. Quinn, Timothy C. D. Barnes, Simon T. Lloyd, Clive A. Greated and D. Howell Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p293-304.

Article Should Be Required Reading, James Warner, P.E., CE Nov. 96, p32.

Defect Detection (Available only in Geo/Environmental Special Issue), Tracy Brettmann and Larry Olson, CE July 96, p2A-6A.

Defects in Soft Clays: A Challenge to Site Characterization

for Stability Analysis, G. A. Leonards and R. J. Deschamps, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1347-1366

Effects of Faulty Design and Construction on Building Maintenance, Sadi Assaf, Abdul-Mohsen Al-Hammad and Mansoor Al-Shihah, CF Nov. 96, p171-174.

Expert Testimony Can Prove Negligence, CE June 96, p24. Meter Helps Rescuers Keep Level Heads After Roof Collapse, CE Aug. 96, p78.

Modeling Rail Fatigue Behavior with Multiple Hazards, Feng-Yeu Shyr and Moshe Ben-Akiva, IS June 96, p73-

Statute of Limitations on Negligence, CE Nov. 96, p28 Study of Parameters Affecting Impulse Response Method, Soheil Nazarian and Srinivasa Reddy, TE July/Aug. 96, p308-315.

Suspicious Inspection Begs ASCE Intervention, Marshall D. Collins, CE Dec. 96, p28.

Web Buckle at I-40 Bridge Test, John Minor and Clinton Woodward, BE Feb. 96, p34-36.

Definitions

Alluvial Fan: Proposed New Process-Oriented Definitions for Arid Southwest, Richard H. French, Jonathan E. Fuller and Steve Waters, WR Sept./Oct. 93, p588-598.

1500 mm Corrugated HDPE Pipe Installation and Performance, David J. Mailhot, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p69-76.
Analysis of Concrete Paverments by Rectangular Thick-Plate Model, T. F. Fwa, X. P. Shi and S. A. Tan, TE Mar./Apr. 96, p146-154.

182

Barriers to the Use of High Performance Steel in I-Girder Highway Bridges, Richard Sause, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p108-115.

Behavior of RC Bridge Decks with Flexible Girders, L. Cao, J. H. Allen, P. B. Shing and D. Woodham, ST Jan.

96, pl 1-19.

Characterization of Pultruded FRP Wide-Flange Beams, Julio F. Davalos, Pizhong Qiao and Hani A. Salim, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Closed-Form Back-Calculation of Rigid-Pavement Parameters, Li Shuo, T. F. Fwa and K. H. Tan, TE Jan./Feb. 96,

p5-11.

Computer Application of CLM Lateral Load Analysis to Piles and Drilled Shafts, Tracy Brettmann and J. Michael Duncan, GT June 96, p496-498.

Cyclic Axial Loading of Drilled Shafts in Cohesive Soil, Kevin J. McManus and Fred H. Kulhawy, GT Sept. 94,

p1481-1497.

Deflection Control of Two-Way Reinforced Concrete Slabs, Shyh-Jiann Hwang and Kuan-Yung Chang, ST Feb. 96, p160-168.

Deflection of Beams with Integral Elastic Supports, Karl K. Stevens, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p343-346.

Deflection Serviceability Design for Wood Members and Systems, D. Rosowsky and K. Fridley, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p452-459

Earth-Crossing Asteroids and Comets, Tyler Donnell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1278-1280.

Effect of Reinforcement Corrosion on Flexural Behavior of Concrete Slabs, Abdullah A. Almusallam, Ahmad S. Al-Gahtani, Abdur Rauf Aziz, Fahd H. Dakhil and Rasheeduzzafar, MT Aug. 96, p123-127.

Effective Moment of Inertia of Elasto-Plastic Beams, Barry T. Rosson and Ronald K. Faller, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p254-257.

Effective Stiffness Model for Reinforced Concrete Slabs, Maria Anna Polak, ST Sept. 96, p1025-1030.

Fracture Mechanics Modeling with Fracture Surface Image Data, Anne B. Abell and David A. Lange, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p741-750

Greenville Installs 1st 1.5m Annular CPE Pipe in the USA, Douglas Hinken and Stephen Matheny, (Pipeline Cross-ings 1996, Lawrence F. Catalano, ed., 1996), p88-96.

Lateral Earth Pressures on Deep Braced Walls, Daniel O. Wong, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p746-758.

Long-Term Deflection Control in Cantilever Prestressed Concrete Bridges. I: Control Method and Algorithm, Hui-Sheng Chiu, Jenn-Chuan Chern and Kuo-Chun Chang, EM June 96, 9489-494.

Long-Term Deflection Control in Cantilever Prestressed Concrete Bridges. II: Experimental Verification, Hui-Sheng Chiu, Jean-Chuan Chern and Kuo-Chun Chang, EM June 96, p495-501.

Membrane Analogy for Saint-Venant Torsion: New Re-sults, S. M. Heinrich, EM Nov. 96, p1110-1112.

Nonlinear Lateral Pile Deflection Prediction in Sands Shamsher Prakash and Sanjeev Kumar, GT Feb. 96,

Performance Monitoring of Three Stress-Laminated Timber Bridges in Leon County, Nur Yazdani and Joy Orlando Kadnar, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p268-275.

Practical Estimation of Two-Way Slab Deflections, Kua Yung Chang and Shyh-Jiann Hwang, ST Feb. 96, p150-

159

Punching Shear Failure in Concrete Decks as Snap-Through Instability, Michael F. Petrou and Philip C. Per-dikaris, ST Sept. 96, p998-1005.

Reliability Analysis of Beam with Initial Deflection by Entropy Model, Yoshiro Kohama, Toyofumi Takada and Atsunori Miyamura, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p652-655.

Serviceability Reliability Analysis of Reinforced Concrete Structures, Mark G. Stewart, ST July 96, p794-803.

Simplified Analysis of Rectangular Plates with Stepped Thickness, Hideo Takabatake, Takayuki Imaizumi and Kunihiro Okatomi, ST Jan. 95, p28-38.

Stiffness Reductions of Flexible Pavements due to Cumula-tive Fatigue Damage, A. C. Collop and D. Cebon, TE Mar./Apr. 96, p131-139.

Three-Dimensional Finite Element Analysis of Deep Excavations, Chang-Yu Ou, Dar-Chang Chiou and Tzong-Shiann Wu, GT May 96, p337-345.

Three-Dimensional Finite-Element Simulation of FWD Loading on Pavement Systems, W. Uddin, R. M. Hackett, P. Noppakunwijai and Z. Pan, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p284-294.

Use of Pasternak Foundation Model in Concrete Pavement Analysis, T. F. Fwa, X. P. Shi and S. A. Tan, TE July/ Aug. 96, p323-328.

Deformation

Age. Deformation, and Temperature Effects of Viscoelastic Materials Under Large Deformations, Ashok Gurjar, Tianxi Tang, Dan Zollinger and Kenneth Slavick, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1398-1407.

Anisotropic Thermal Expansion Causes Deformation of Marble Claddings, Clemens Widhalm, Elmar Tschegg

and Walter Eppensteiner, CF Feb. 96, p5-10.

Behavior of Reinforced Concrete Buildings: Deformations & Deformation Compatibility, John W. Wallace, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p245-256.

A CDM-Based Approach to Stochastic Damage Growth, Baidurya Bhattacharya and Bruce Ellingwood, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p772-775.

Computer Modelling for a Discrete Particle System, Kofi B. Acheampong, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p731-734.

Critical State Model at Finite Strains, Ronaldo I. Borja and Claudio Tamagnini, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p148-151.

A Damage Mechanics-Based Approach to Structural Deterioration, Baidurya Bhattacharya and Bruce Ellingwood, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p588-591.

Deformation Characteristics of Piedmont Residual Soils. Chainchye E. Wang and Roy H. Borden, GT Oct. 96,

Deformation Patterns in Biaxial Shear of Particulates, Anil Misra and Hongjun Jiang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p568-571.

Deformation, Alignment, and Vibration in Large Turbine-Generator Set, W. F. Teskey, J. W. Lovse and N. N. Al-Hanbali, SU May 96, p65-79.

Development of Localization in Undrained Deformation, J W. Rudnicki, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p939-942.

Doubly Symmetric Tube Structures. I: Static Analysis, Hideo Takabatake, Hisao Mukai and Tadato Hirano, ST July 93, p1981-2001.

Doubly Symmetric Tube Structures. II: Dynamic Analysis, Hideo Takabatake, Hisao Mukai and Tadato Hirano, ST July 93, p2002-2016.

Dynamics of Highly Deformable Sandwich Frame Structures, H. Deng and L. Vu-Quoc, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p1147-1150.

Elasto-Plasticity of Sand Deformation, Egramul Hoque and Fumio Tatsuoka, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p547-550.

Experimental Measurement of Strain Gradient Effects in Granular Materials, Matthew R. Kuhn, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p881-885.

Fiber Sensors for Damage Detection on Large Structures and for Assessment of Deformation Behavior of Cemen-titious Materials, W. R. Habel, D. Hofmann, B. Hil-lemeier and F. Basedau, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p355-358.

Lin and T. C. Su. 1970), p335-358.
Formation of Shear Zones in Reinforced Sand, Scott E. Shewbridge and Nicholas Sitar, GT Nov. 96, p873-885.
Fractals of Aggregates Correlated with Creep in Asphalt Concrete, Mohan Yeggoni, Joe W. Button and Dan G. Zollinger, TE Jan./Feb. 96, p22-28.

Gain-Scheduled Adaptive Control of a Hybrid Structure, Moises A. Abraham, James R. Morgan and Alexander G. Parlos, (Natural Disaster Reduction, George W. Hous-

Parlos, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p260-261.
Interfacial Shrinkage in Mortars, K. Sujata, Yunping Xi and Hamlin M. Jennings, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1669-1676.
Issues of Uncertainty Regarding Localized Strains in Gran-ular Soils, M. A. Mooney, R. J. Finno, G. Viggiani and W. W. Harris, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p312-325.

Large Deformation Analysis of Inelastic Space Truss Structures, George E. Blandford, ST Apr. 96, p407-415.

Localization of Inelastic Deformation in Elasto-Plastic Pore

Solids Saturated by Liquid, Igor A. Garagash, Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p931-934. Loss of Capacity of Concrete Shear Walls, Hassan Sassi and Richard Ranous, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p80-81.

1997), psu-81.
Measured Seismic Behavior of a Two-Story Masonry Building, Gregory R. Kingsley, Guido Magenes and G. Michele Calvi, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p123-134.
A Model of Meteoroid Atmospheric Entry with Implications of Mateoroid Atmospheric Entry with Implications of Meteoroid Atmospheric Entry With Implications of Meteoroi

tions for the NEO Hazard and the Impact of Comet Shoemaker-Levy 9 on Jupiter, D. A. Crawford and M. B. Boslough, (Engineering, Construction, and Operations

in Space, Stewart W. Johnson, ed., 1996), p81-87. Modified Janssen Theory for Flexible Circular Bins, Y. T. Feng and Y. L. Hua, ST Apr. 96, p454-456.

Multiphase Flow in Deforming Porous Media by the Finite Element Method, Pedro Arduino and Emir J. Macari, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p420-425

No-Fines Concrete Pavements, Nader Ghafoori and Shivaji Dutta, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1637-1646.

Numerical Simulation of Permanent Deformation in Flexible Pavement Systems Subjected to Moving Loads, David J. Kirkner, Weixin Shen, Michael I. Hammons and Donald M. Smith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p430-433.

Permafrost Formation and Aggradation in a 23-m High Homogeneous Dyke: A Case-Study, J.-M. Konrad and R. Ladet, (Cold Regions Engineering: The Cold Regions In-

Lauce, Cola Aegions Engineering, The Cola Regions in-frastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p700-711. Permanent Deformation and Fatigue Characteristics of SMA Mixtures, Louay N. Mohammad and Harold R. Paul, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p622-630.

Permanent Deformation on Preexisting Sliding Surfaces in Dams, George Gazetas and Nasim Uddin, GT Nov. 94, p2041-2061.

Pipeline Beam Models Using Stiffness Property Deforma-tion Relations, Zhilong Zhou and D. W. Murray, TE Mar/Apr. 96, p164-172.

Probabilistic Creep Analysis of Underground Structure in Salt, A. F. Fossum and D. E. Munson, EM Mar. 96, p209-217.

Rapid Slope Monitoring, William F. Kane and Timothy J. Beck, CE June 96, p56-58.

Rate-dependent Deformation of Structured Natural Clays, Kenichi Soga and James K. Mitchell, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p243The Thermodynamic Structure of a Fluid-Saturated Compressible and Incompressible Elastic Porous Solid, Reint de Boer, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p56-59.

Uniaxial Compression Behavior of Small Blocks of Welded Tuff, Stephen C. Blair and Patricia A. Berge, (High Level Radioactive Waste Management, Technical Program

Committee, 1996), p409-411

A Unified Limit State Approach Using Deformability Factors in Concrete Beams Reinforced with GFRP Bars, P. V. Vijay and H. V. S. GangaRao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p657-665.

Yield Acceleration of Lined Landfills, Scott E. Shewbridge, GT Feb. 96, p156-158.

Deformation analysis

An Analysis of Strong-Discontinuities in Inelastic Solids with Applications to the Finite Element Simulation of Strain Localization Problems, F. Armero and K. Garikipati, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p136-139.

Error Mohr Circle and Invariants of Cofactor Coefficient, Xinjian Kou and Jimian Song, SU Nov. 96, p158-167.

A New Method for Solving Large Deformation Problems, Xiangjun Qiu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p242-245.

The Viscoelastic-Large Deformation Response of the Tayor Impact Cylinder, H. L. Schreyer and D. Sulsky, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p250-253.

Degradation

Analysis of the Nonlinear Hysteretic Response of an RC Building, Sarwidi and Apostolos S. Papageorgiou, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1099-1106.

Analytical Model for Heterogeneous Reactions in Mixed Porous Media, K. Hatfield, D. R. Burris and N. L. Wolfe,

EE Aug. 96, p676-684.

Characterization of a Nonlinear Polymer-Based Composite Material System, R. M. Hackett and P. I. Rodriguez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p771-780.

Degradation and Toxic Effects of Acrylic Acid on Anaerobic Systems, Mingbo Qu and Sanjoy K. Bhattacharya, EE Aug. 96, p749-756.

Degradation of Carboxydiphenyl Ether via Bioaugmenta-tion, Rolf U. Halden, Barbara G. Fischer and Daryl F. Dwyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2396-2401.

Degradation of Reinforced Concrete Structures Under Ag-gressive Conditions, Michael P. Enright, Dan M. Frangopol and George Hearn, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p978-987.

Design Alternatives for Protection of the Santa Ana River Interceptor Sewer, Thomas Dawes, Chenchayya T. Bathala and Carl Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2378-2383.

Engineering Models of Combined Chemical and Biological Processes, Jon P. Scott and David F. Ollis, EE Dec. 96,

p1110-1114.

Laboratory Experiments with Heterogeneous Reactions in Mixed Porous Media, David R. Burris, Kirk Hatfield and N. L. Wolfe, EE Aug. 96, p685-691.

Mathematical Model for Durability of Cladding, K. D. Hjelmstad, D. A. Lange, I. D. Parsons and F. V. Lawrence, MT Aug. 96, p172-174.

Photocatalytic Degradation of Formic Acid via Metal-Supported Titania, Heung Yong Ha and Marc A. Ander-son, EE Mar. 96, p217-221.

Phytoremediation: Plant Uptake of Atrazine and Role of Root Exudates, Joel G. Burken and Jerald L. Schnoor, EE Nov. 96, p958-963.

Recover Inorganic Solids from Obsolete Propellants, Frank J. Y. Shiu, Iris C. Y. Yang and T. F. Yen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1373-1378.

Small Inocula Can Effect In Situ Biodegradation, Rolf U. Halden and Daryl F. Dwyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2402.

Surface Modifications to Reduce Thaw Degradation of Permafrost, John P. Zarling and Jasper Rajesh, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p46-59.

Thermogravimetric Analysis of Fiber Reinforced Plastics, Luca Prian, Ritsuko Pollard and Aaron Barkatt, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p54-62.

Uniaxial Cyclic Behavior of Discontinuous Fiber Reinforced Composites, Takashi Matsumoto and Victor C. Li, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p426-435.

'Cold Fire' Degrades Organic Contaminants, CE Mar. 96, p15.

Degradation failures

Time-Dependent Degradation of Structural Systems During Fire -- A Method for Failure Prediction, Jiahong Jane Zuo and Jamshid Mohammadi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1042-1045.

Advances in System Identification Using Output Measure-ments, N. P. Jones, J. H. Ellis and K. Pan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p160-163.

Boolean Modeling and Analysis of Smart Material Properties, S. Dobson, M. Noori and A. Crespo, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p838-841.

Comparative Assessment of Prediction Strategies for Adap-tive Control, R. Ghanem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p134-137.

Dynamics of Multi-DOF Stochastic Nonlinear Systems, Timothy M. Whalen, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p82-85.

Hysteretic MDOF Model to Quantify Damage for RC Shear Frames Subject to Earthquakes, H. Ugur Köylüoğlu, Søren R. K. Nielsen and Ahmet Ş. Çakmak, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p768-771

Managing Multi-Degree-of-Freedom Systems in Structural Fuzzy Control, Fabio Casciati and Lucia Faravelli, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996).

Performance Characteristics of a Smart Hinge for Solar Array Deployment, Dirk B. Warnaar and Rodney G. Galloway, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1162-1168.

Random Vibrations of an Isochronous SDOF Bilinear System with Secondary Structure, Mikhail Dimentberg and Philip Muller, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p958-961.

Response to Arbitrarily Time-Varying Forces Using Convex Model, Chris P. Pantelides and Shyh-Rong Tzan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1252-1258.

Stochastic Linearization of a Boolean Hysteresis Model, S. ochastic Linearization of a Boolean Hysteresis Model, S. Dobson, M. Noori, Z. Hou and M. Dimentberg, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p502-505.

System and Input Identification with Partially Correlated Load Processes. K. Pan, N. P. Jones and J. H. Ellis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996). p138-141

Versatile Variable-Node Flat-Shell Element, Chang-Koon Choi and Wan-Hoon Lee, EM May 96, p432-441.

Probabilistic Durability Analysis of Reinforced Concrete Bridge Decks, Paul C. Hoffman and Richard E. Weyers, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Reconstruction of Bergstrom Air Force Base to Austin-Bergstrom International Airport, James P. Amick and John Almond, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), pl-11.

Bridge Monitoring Using An Optical Fibers Sensor System, R. L. Idriss and M. B. Kodindouma, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p.238-

Delamination Modes in Composite Plates, H. Luo and S. Hanagud, AS Oct. 96, p106-113.

Modeling the Impact of Sea Level Rise in Delaware Bay, K. W. Kim and B. H. Johnson, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2737-2742.

Nested Three-Dimensional Hydrodynamic Modeling of the Delaware Estuary, John S, Ramsey, Robert P. Hamilton, Jr. and David G. Aubrey, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p53-65.

State of Delaware - Scour Evaluation Program, Thomas M. Heil, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p459-468.

Delaware basin

Water Based Land Use Regulations Using GIS Water Budgeting Model, H. William Sellers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3962-3968.

Delay time

Clause in Contract Does Not Preclude Other Damages, CE Aug. 96, p24.

Construction Claims and Disputes: Causes and Cost/Time Overruns, Cheryl Semple, Francis T. Hartman and George Jergeas, CO Dec. 94, p785-795.

Effects of Tow Sequencing on Capacity and Delay at a Waterway Lock, Ching-Jung Ting and Paul Schonfeld, WW Jan./Feb. 96, p16-26.

Practitioners' Forum, Georges Jacquemart, P.E., TE Nov./ Dec. 96, p411-413.

Thinking Ahead with Forward Pricing, Brian E. Kasen and Victor C. Oblas, ME Mar./Apr. 96, p12-16.

The Construction Manager as Project Integrator, Charles H. Kluenker, ME Mar./Apr. 96, p17-20.

Design-Build Continues to Grow in U.S., CE Dec. 96, p18-19.

Design-Build Origins in Question, Dean E. Stephan, Jeffrey L. Beard and Michael Charles, CE Aug. 96, p26,28.

Federal Legislation Will Increase Design-Build Opportuni-ties, Michael C. Loulakis and William L. Cregger, CE July 96, p35.

Great Tips from Client Feedback Programs, Sylvia Wheeler, ME Nov./Dec. 96, p10.

Practitioners' Forum, Frederick S. Merritt, AE Dec. 96, p125-128.

Deltas

Application of Artificial Neural Networks to the Sacramen to-San Joaquin Delta, Nicky Sandhu and Ralph Finch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p490-504.

Dredging in the Southern Sacramento-San Joaquin Delta, Mike Mirmazaheri, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p2636-2641.

Extraordinary Flood Disaster in Tai Lake Basin of China in 1991, Ruiju Liang, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p48Impacts due to Density Current Deposition in Reservoirs, Jiahua Fan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2097-2102.

Physicostatistical Approach to River Delta Hydrology, V. F. Polonsky, HY June 96, p333-340.

F. FURDINSKY, FI.J. JURIE VR., 233-5-340.
Simulation of Dissolved Oxygen in Sacramento-San Joaquin Delta, Haridarshan L. Rajbhandari, Gerald T. Orlob and Francis I. Chung, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathalia, ed., 1996), p3545-3550.

Two Dimensional Modeling of the Mobile River Delta and the Mobile Bay System, Conor C. Shea, Charles D. Powell and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3662-3667.

chayya Batnata, ed., 1990, p.3062-3007.
Wave Induced Nearshore Circulation in the Ebro Delta, A.
Sánchez-Arcilla, F. Collado, M. G. Coussirat and A. Rodriguez, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p437-448.

Application of Artificial Neural Network to Guideway Demand Modeling, Young-Kyun Lee and Federico Frigerio, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p214-219.

Airfield Pavement Reconstruction at DFW International Airport, Dwain K. Brown and Darryl Boyd, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p140-150.

Development of a CO₂-Solidification Method for Recycling

Concrete Wastes, Toshiyuki Hashida, Satoshi Teramura. J. C. Ha and Hideaki Takahashi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p674-683. Enhancing Performance of Soundless Chemical Demolition

Agents, Jimmie Hinze and Andrew Nelson, CO June 96,

Methods and Procedural Considerations in Demolishing Tall Concrete Chimneys, Kenneth K. Walker, Cliff Schexnayder, Richard E. Mayo and Kenneth D. Walsh, CO Sept. 96, p223-230.

Denitrification

Anaerobic Biodegradation of High Energetics in Digestion Sewage Sludge, Sung-Hyun Kwon, Frank J. Y. Shiu and Teh Fu Yen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p794-799.

Denitrification Incorporating Microporous Membranes, R. Reising and E. D. Schroeder, EE July 96, p599-604. Editor's Note, Thomas L. Theis, EE July 96, p556

Eutor S Note, Thomas L. Heis, Ez July 90, 5050.

Evaluation of the Nitrogen Cycle in a Tidal Flat, Kyoko Hata, Iwao Oshima, Takcaki Kuramoto and Kisaburo Nakata, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p542-554.

Production of Nitrous Oxide Gas under Sequencing Batch

Reactor System, Cheng-Nan Chang, Jih-Gaw Lin, Jin-Yuan Chen and Fong-Bing Hsu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p782-787.

Danish Suspension Bridge is World's Largest, CE June 96,

History of Coastal Engineering in Denmark, Torben Sørensen, Jørgen Fredsøe and Per Roed Jakobsen, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p103-141.

HPFRCC - Extruded Pipes, Henrik Stang and Carsten Pedersen, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p261-270.

VMS Control in Aalborg, Peder Jensen, Lone Jensen, Mar-kos Papageorgiou, Albert Messmer, Habib Haj-Salem and Said Mammar, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p373-377.

Blasting Densifies Volcanic Debris (Available only in Focus on Geo/Environmental Special Issue), Thomas C. Badger, CE Mar. 96, p8A-12A.

Estimating Settlement of Sand Caused by Construction Vibration, S. Drabkin, H. Lacy and D. S. Kim, GT Nov. 96, p920-928

Density

Density and Conditioning Characteristics of Motorway Ve-hicular Traffic Flow, V. Torrieri, D. Gattuso, G. Musolino and A. Vitetta, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p198-202

Numerical Modeling of Turbidity Currents, Scott F. Brad-ford and Nikolaos D. Katopodes, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng,

1996), p404-415.

Swelling of DNAPL by Cosolvent Flooding to allow its Removal as an LNAPL, Eberhard Roeder, Scott Eppes Brame and Ronald William Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p333-

Uncertainty Analysis of Dredge Production with Correlation, Said M. Easa, WW Sept./Oct. 94, p499-507.

Impacts due to Density Current Deposition in Reservoirs, Jiahua Fan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2097-2102.

Laboratory Experiments on Density Current Over a Sloping Bottom in Rotating Fluid, Dieter Etling and Gabriel Cha-bert d'Hieres, (Engineering Mechanics, Y. K. Lin and T.

C. Su, 1996), p923-926.

Aspects of River House Cleaning During Floods, Parviz Monadjemi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2192.

Deposition of Particles from a Vertical Jet, M. J. Neves, H. J. S. Fernando and A. A. Neves, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p442-445.

Dry Deposition of Polycyclic Aromatic Hydrocarbons in Ambient Air, Hwey-Lin Sheu, Wen-Jhy Lee, Chun-Ching Su, How-Ran Chao and Yi-Chin Fan, EE Dec. 96, p1101-1109.

Impacts due to Density Current Deposition in Reservoirs, Jiahua Fan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2097-2102.

Multiphase Distribution of Cohesive Sediments and Heavy Metals in Estuarine Systems, Parmeshwar L. Shrestha and Gerald T. Orlob, EE Aug. 96, p730-740.

Resuspension of Particle Bed by Round Vertical Jet, Jordi Colomer and Harindra J. S. Fernando, EE Sept. 96, p864-869.

Screening-Level Approach for Estimating Contaminant Export from Tributaries, Mark Velleux, Joseph Gailani and Doug Endicott, EE June 96, p503-514.

Measurements of Erosion of Undisturbed Bottom Sedi-ments with Depth, Joe McNeil, Catherine Taylor and Wilbert Lick, HY June 96, p316-324.

Normal-Depth Equations for Irrigation Canals, Prabhata K. Swamee, IR Sept./Oct. 94, p942-948.

Rainfall Depth—Duration Relationship for South Italy, Vito Ferro and Vincenzo Bagarello, HE Oct. 96, p178-

Sectional Depth of Prestressed Concrete Beams with Excess Capacity, Y. H. Chai, ST July 96, p788-793.

Water Surface Profiles in Compound Channel with Multi-ple Critical Depths, Terry W. Sturm and Aftab Sadiq, HY Dec. 96, p703-709.

Teatment of Concrete: A New Approach to Extend the Service Life of Chloride Contaminated, Carbonated, or Alkali Silica Reactive Concrete Structures, David W. Whitmore and Keith Stewart, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1504-1511.

Studies on Herbal Desalination, Godavarthy Ramprasad and Varanasi Kaliprasad, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1015-1020.

Desalination plants
Advanced Seawater Desalination Plant, David W. Dean and
Earl B. Lindquist, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya
Bathala, ed., 1996), p685-690.

Conjunctive Water Use Transforms a California Desert, Tom Levy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2672-2678.

Dormant Season Alfalfa Water Balance on the NIIP. Brian Boman, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p231-236.

Prediction of Bed-Load Transport by Desert Flash Floods, Ian Reid, D. Mark Powell and Jonathan B. Laronne, HY Mar. 96, p170-173.

Visualizing the Flow, Mahadev Raman, Burkhard Bein, Colm Hogan and Dennis Sheldon, CE June 96, p43-45.

Desiccation Theory for Soft Cohesive Soils, A. Naser Abu-Hejleh and Dobroslav Znidarčić, GT June 95, p493-502.

Hydraulic Conductivity of Desiccated Geosynthetic Clay Liners, B. Tom Boardman and David E. Daniel, GT Mar. 96, p204-208.

Design
3D & 4D CAD Modeling on Commercial Design-Build Projects, Frank Vaugn, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p390-396.

ostracting Lessons Learned from Design Reviews, F William East and Michael C. Fu, CP Oct. 96, p267-275.

Adaptive Self-Tuning Control of Excavators, A. J. Koivo and Allen D. Nease, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p220-226. Advanced Seawater Desalination Plant, David W. Dean and Earl B. Lindquist, Ir., (North American Water and Envi-

ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p685-690.

Advanced Site Design Software for Landfill Closure and Remedial Design, Douglas Cervenak, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p818-824.

Aerodynamic Considerations for Rooftop Helideck Design, César Farell and M. Mohamed Sitheeq, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1245-1251.

An Agent-Supported Framework for Collaborative Design, Yan Jin and Hiroshi Ohira, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p529-535.

Air Transportation: A Systems Approach, Harry A. Kinnis-on, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p246-253.

Alabama-Huntsville Students Again Crowned as Concrete

Canoe Champs, NE Aug. 96, p1,6.

Alternative Wastewater Pumping Station Design Considerations, Thomas R. Dion, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p328-334.

Anaheim State-of-the-Art Water Treatment Plant - Six years from Conception to Completion, Isaac Pai, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2654-2659. Analysis and Design of ER Damper for Seismic Protection

of Structures, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, EM Oct. 96, p1003-1011.

and mades housed, Est Oct. 90, pr005-1016.

Analysis and Design of Microirrigation Laterals, Yaohu Kang and Soichi Nishiyama, IR Mar/Apr. 96, p75-82.

Application of a Hydrodynamic Model in Design of the Kingman Lake Wetland Restoration Project, Karen M. Nook and William G. Grosskopf, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p58-63.

Applications of Soil Nailing in Residual Soil, James W. Sigourney, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p57-65.

etc., 1990), p57-65.
Approaches to Simulating Organizational Behavior of Concurrent Design Teams, Yan Jin and Raymond E. Levitt, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p281-287.
Architect Gives Precast Care to Nursing Center, CE Sept.

Architectural Anatomy: Interdisciplinary Multimedia Tools for Building Analysis and Design, Anthony Webster, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p753-759. Architecture on the Moon: The Importance of Human Fac-

tors Considerations in the Design of a Lunar Base, John Bergquist, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1038-1044. The Art of the Structural Engineer by Bill Addis, Wolfgang Schueller, AE Dec. 96, p145-146.

ASCE Publishes Guide to Federal A/E Contracts, CE May

96, p72-73.

Asphalt-Concrete Water Barriers for Embankment Dams, Patrick J. Creegan and Carl L. Monismith, 1996, 0-7844-0141-1, 185pp.

Assessment of Kinematic Wave Time of Concentration, Richard H. McCuen and Jill M. Spiess, HY Mar. 95, p256-266.

An Automated Design and Review Assistant: SEDAR, Mi-chael C. Fu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), pl 18-125.

Automated Generation of Productivity Functions, Alan D. Russell and Simaan AbouRizk, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p261-267.

1990, p.201-207.
Automated Optimal Structural Design Synthesis using Machine Generated Rule Base and Artificial Neural Networks, J. M. Deshpande, M. J. Skibniewski and K. Lueprasert, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p867-873.

Vanegas, ed. and Paul Uniowsky, ed., 1990), p807-873.
Automation-Related Quality Improvements in Power Plant
Design and Operation, George V. Jones, Phillip W. Garrett, Jones Randall E. and Carl K. Toner, (Computing in
Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p487-493.

Bar Codes in the Design Office, Richard L. Bland, (Com-

puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p951-957. Behavior of Pressure Tunnels and Guidelines for Liner De-

sign, Gabriel Fernández, GT Oct. 94, p1768-1791. The Best Partnering Books for Your Design Firm, Ned Godfrey, ME Sept/Oct. 96, p7-9.

Bridge-Column Footings: An Improved Design Procedure, Lian Duan, SC Feb. 96, p20-24.

Building Evaluation Techniques by George Baird et al. Frederick S. Merritt, AE Sept. 96, p122-123. Building Process Models for Design Management, David

G. Platt, CP July 96, p194-203. Cable-Stayed Bridge Concept for Longer Spans, Uwe Starossek, BE Aug. 96, p99-103.

CAD and Visualization in Architectural Design Education -A View from Germany, Undine Kunze, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p927-930.

Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

Case History of a Lined Wastewater Treatment Lagoon Failure, Kelly S. Merrill and Matt Stephl, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p518-532.

Central Artery/Tunnel (CA/T) Project Environmental Permitting, Jeffrey M. Paul, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2236-2241.

Co-Evolution of Design Specifications and Design Solution, Mary Lou Maher and Josiah Poon, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p77-83.

COFPAES Supports House Bill on Design-Build Fee Re-imbursement, CE June 96, p73.

Cold-Related Electric Power System Considerations, John Aspnes and James Cote, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p436-446.

ps.30-440.
Collecting, Abstracting, and Compiling Review Comments: the Reviewer's Assistant and the Lessons-Learned Generator, Michael C. Fu and E. William East, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p104-111.

Column Design in Fire Exposed Steel Frames, Ricardo Ramos Cabeza, Ali Saffar, Robert W. Fitzgerald and Hossein Davoodi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p906-909.

Combining Snow and Earthquake Loads for Limit States Design, Bruce Ellingwood and David Rosowsky, ST

Nov. 96, p1364-1368.

Comparison of Methods for Sizing Secondary Treatment Filters for Wastewater, Paily P. Paily, (North American Water and Environment Congress & Destructive Water,

Chenchayya Bathala, ed., 1996), p565-570.

Comparison of Water Backwash and Brush Cleaning Sys-tems for Vertical Panel Fish Screens, Morton D. McMillen and Clint W. Smith, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1129-1134.

A Computational Organizational Approach to Modeling an Engineering Design Team, Jan Thomsen, Yul J. Kwon, John C. Kunz and Raymond E. Levitt, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p275-280.

Computational Support for Distributed and Concurrent Design Team, John L. Wilson and Chenggang Shi, (Com puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p544-550.

Computer Modelling and Simulation for High Speed Rail-way Applications, C. Ianniello, S. Savio and G. Sciutto, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p54-58.

Computer-Aided Design of Braced Excavations, Chandra S. Brahma and Howard C. Biddlecome, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p838-844.

Conceptual Design of Soil Venting Systems, David W. DePaoli, James H. Wilson and Carl O. Thomas, EE May 96, p399-406.

A Conceptual Model for Construction Clients' Requirements Processing, Chimay J. Anumba and Nosa F. O. Evbuomwan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p431-437.

Concrete Canoe Finals Set for Wisconsin in June, CE May 96, p73.

Control of Floor Vibrations, Linda Morley Hanagan, Cheryl Rottmann and Thomas M. Murray, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p428-

Coordination of Empirical and Rational Alluvial Canal Formulas, Shrikrishna V. Chitale, HY June 96, p357-359.

TOTAL CONTROL OF THE CONTROL OF THE

Crossing Bridges with Ductile Iron Pipe—Update 1995, Michael S. Tucker, (Pipeline Crossings 1996, Lawrence

F. Catalano, ed., 1996), p120-129.

Dam Foundation Erosion Study: the Design of a Sidewall Orifice for Simulation of a Free Trajectory Overtopping Jet, R. J. Wittler, S. R. Abt, T. L. Lewis, J. F. Ruff and K. Adhya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p340-345.

Dam Safety Policy for Spillway Design Floods, James R. Dubler and Neil S. Grigg, El Oct. 96, p163-169.

Data Exchange: File Transfer, Transaction Processing and Application Interoperability, James Andrew Arnold and

Application Interoperability, James Andrew Arnold and Paul Teicholz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p438-444. A Data Management Model for Change Control in Collaborative Design Environments, Karthik Krishnamurthy and Kincho H. Law, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p536-543. Data-Centered Thinking, John G. Voeller, CP Jan. 96, p1-2. De Architectura—Hypermedia On-line Architecture, Building & Construction Bookshelf: The First Step Toward an Hypermedial Approach to Computer Aided Architectural Design, Alfredo M. Ronchi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p746-752.

1990), p740-732.
A Decision Support Tool for the Steel Building Industry, Gregory P. Pasley and W. M. Kim Roddis, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p725-731.
Deflection Control of Two-Way Reinforced Concrete Slabs, Shyb-Jiann Hwang and Kuan-Yung Chang, ST

Feb. 96, p160-168.

Deflection Serviceability Design for Wood Members and Systems, D. Rosowsky and K. Fridley, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p452-

Dempster-Shafer Approach to Soil Properties, David Rees Gillette, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1254-1268.

Design Alternatives for Protection of the Santa Ana River Interceptor Sewer, Thomas Dawes, Chenchayya T. Ba-thala and Carl Nelson, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2378-2383.

Design and Construction of Large Diameter High Pressure Gas Transmission River Crossing for San Diego Gas and Electric Using Directional Boring, Jey K. Jeyapalan and Robert Dalby, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p379-386.

Catalano, ed., 1793, p. 17-260.

Design and Construction of the Santa Ana River Wash

Crossing of the Inland Feeder, Burt Yu, Jay Arabshahi,

Birger Schmidt and Roy Cook, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1789-1795. Design and Construction of Zero-Gravity Gymnasium, Pa-

trick Collins, Sunao Kuwahara, Tsuyoshi Nishimura and Takashi Fukuoka, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p200-

Design and Implementation of a Multi-Faceted Site Remediation, Stephen A. Kessel and Arnold S. Vernick, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., p541-546.

Design and Implementation of On-Farm Surface Drainage Projects in the Humid Tropics of Mexico, John C. Tiedeman and Rodolfo Namuche Vargas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2480-2485. Design and Operation of the Sub-Orbital Lunar Explorer,

Walter Collins, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p949-

Design and Repair for Surficial Slope Failures, Robert W. Day, SC Aug. 96, p83-87. Design Case Adaptation Using Genetic Algorithms, Mary Lou Maher and Andrés Gómez de Silva Garza, (Comput-Chinowsky, ed., 1996), p294-300.

Design Decision Making for Infrastructures under the Re-

striction of the Energy Consumption, Minoru Matsuo, Yusuke Honjo and Ikuo Sugiyama, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p376-379.

Design Formulas for Block Revetments, Adam Bezuijen and Mark Klein Breteler, WW Nov./Dec. 96, p281-287. Design Guidelines for Spillway Gates, Chander K. Sehgal, HY Mar. 96, p155-165.

Design Heuristic for Globally Minimum Cost Water-Distribution Systems, G. V. Loganathan, J. J. Greene and T. J. Ahn, WR Mar/Apr. 95, p182-192.

Design Information Evolution in a Collaborative Engineering Software Environment, Beth A. Brucker and Annette L. Stumpf, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p732-738.

Design of a Freeway Control System Based on Artificial In-telligence Methods for Travel Time Detection, Reinhart D. Kühne, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p439-443. Design of a Multi-Generational, Interstellar Ship, Divya

Chander, (Engineering, Construction, and Operations in Space, Stewart W Johnson, ed., 1996), p311-320. Design of Class-I Sedimentation Tanks, Prabhata K. Swamee and Aditya Tyagi, EE Jan. 96, p71-73.

Design of Energy Dissipation Devices Based on Concept of Damage Control, K. L. Shen and T. T. Soong, ST Jan.

96, p76-82.

Design of Guide Banks for Bridge Abutment Protection, P. F. Lagasse, E. V. Richardson and L. W. Zevenbergen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4188-4197.

Design of Large Space Systems for Packaging and Launch on Multiple, Heterogeneous Vehicles, Steven D. Jolly, AS Apr. 96, p45-51.

Design of Microirrigation Submain Units, Yaohu Kang and

Design of Statemengation Supraman Units, 7 atom Kang and Soichi Nishiyama, IR Mar/Apr, 96, p83-89.
Design of Prestressed Concrete Transmission Poles: Optimization Approach, Fatma Y. Kocer and Jasbir S. Arora, ST July 96, p804-814.

Design of Riparian Habitat Replacement in Active Flood-plains, Bruce M. Phillips, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1406-1412. Design of Round Reinforced-Concrete Columns, A. Tayem and A. Najmi, ST Sept. 96, p1062-1071.

Design of Sheet Pile Walls, U.S. Army Corps of Engineers,

1996, 0-7844-0135-7, 75pp. Design of the Santa Ana River Wash Crossing of the Inland Feeder, Birger Schmidt and Roy Cook, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p373-378.

Design Provisions for Stair Slabs in the Bangladesh Build-ing Code, I. Ahmed, A. Muqtadir and S. Ahmad, ST Mar. 96, p262-266.

Design Quality Management Activities, Abdulaziz A. Bubshait and Ahmad Al-Abdulrazzak, El July 96, p104-

Design Rationale for Computer-Supported Conflict Mitiga-tion, Feniosky Peña-Mora, Duvvuru Sriram and Robert Logcher, CP Jan. 95, p57-72.

Design Recommendations for Bond of GFRP Rebars to Concrete, M. R. Ehsani, H. Saadatmanesh and S. Tao, ST Mar. 96, p247-254.

Design Relationship for Filters in Bed Protection, K. J. Bakker, H. J. Verheij and M. B. de Groot, HY Sept. 94, p1082-1088.

Design Synthesis: Transcending to Stochastic Realm Part 3: Optimization, Jean M. Parks, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and

ics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), pl30-133. Design Tools for Public Cars Transportation Systems, Chafik Allal, François Dumontet and Michel Parent, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p6-18. Design with Residual Materials: Geotechnical and Construction Considerations, Geotechnical Special Publication No. 63, Gordon Matheson, ed., 1996, 0-7844-0207-8. 88nn.

8, 88pp.

Design-Build Origins in Question, Dean E. Stephan, Jeffrey
L. Beard and Michael Charles, CE Aug. 96, p26, 28. Design—Cornerstone of Your Career: Advice for Young Engineers, Rodney Attwood, El July 94, p241-245.

Designing a PC Network to Meet the Specific Needs of Engineers, Shawn A. Dent, Daniel P. Davis and Thomas Gdula, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p937-943. Desilting Basin System of the Dul Hasti Hydroelectric Project, Daniel Develay, Jean Binquet, E. Divatia and C. R. Venkatesha, HY Oct. 96, p565-572.

Determination of Bridge Scour Velocity in an Estuary, Billy L. Edge, Stephan N. Vignet and John S. Fisher, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1720-1729.

Deterministic and Probabilistic Analyses of Preload Design at a Hydraulic Fill Site, S. Thevanayagam, E. Kavazan-jian, Jr., A. Jacob and S. Nesarajah, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1417-1431.

Development of a Pressure Suit Simulation System for Neutral Buoyancy Operations, David L. Akin and Claudia U. Ranniger, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p552-

Development of the San Joaquin County Hydrology Manual, T. V. Hromadka, J. J. DeVries, M. Callahan and J. Pulver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2078-2083.

1996), p.20/8-2083.
Development Testing of the Mars Pathfinder Inflatable Landing System, Tommaso P. Rivellini, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1059-1068.
Direct Sizing of Small Stormwater Pump Stations, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed. 1996), p2022-2027. ed., 1996), p2072-2077.

Double-Layer Grids: Review of Dynamic Analysis Meth-ods and Special Topics, Ramesh B. Malla and Reynaud L. Serrette, ST Aug. 96, p882-892.

Doubly Symmetric Tube Structures. I: Static Analysis, Hideo Takabatake, Hisao Mukai and Tadato Hirano, ST July 93, p1981-2001.

Doubly Symmetric Tube Structures. II: Dynamic Analysis, Hideo Takabatake, Hisao Mukai and Tadato Hirano, ST July 93, p2002-2016.

Dynamic Optimal Groundwater Remediation by Granular Activated Carbon, Teresa B. Culver and Gary W. Shenk, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p123-128.

Dynamic Service Actions for Floor Systems - Human Ac-tivity, Per-Erik Eriksson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p413-419.

Earth Spillway Design Using SITES Software, Darrel M. Temple, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1930-1935.

Economic Evaluation of Design Codes—Case of Seismic Design, A. Warszawski, J. Gluck and D. Segal, ST Dec. 96, p1400-1408.

Editor's Letter, Tom Williamson, SC Aug. 96, p59. Editor's Note, David Darwin, ST Feb. 96, p115.

Editor's Note, David Darwin, ST Nov. 96, p1257.

Editor's Note, David Darwin, ST Dec. 96, p1393. Editors' Letters, Vernon B. Watwood, P.E., SC Feb. 96,

Education and Research Needs for Appropriate Technology, Maurice L. Albertson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2760-2765.

The Educational Ozone Researcher: A University Satellite, Linden H. McClure and Ellen L. Riddle, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1327-1333.

Effective Subsurface Retention/Detention Systems, James E. Milligan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2276-2281.

Effects of Approach Flow Conditions on Pump Sump Design, Gustavo Arboleda and Mutasem El-Fadel, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p376-381. Effects of Approach Flow Conditions on Pump Sump Design, Gustavo Arboleda and Mutasem El-Fadel, HY Sept. 96, p489-494.

96, p469-494.

Effects of Faulty Design and Construction on Building Maintenance, Sadi Assaf, Abdul-Mohsen Al-Hammad and Mansoor Al-Shihah, CF Nov. 96, p171-174.

and Mansoor Al-Shihah, CF Nov. 96, p171-174.
Effects of Ignoring Well Losses on the Specific Capacity
Function, Onto J. Helweg and Timothy Mays, (North
American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2224-2229.
EMC Issues in Electric Railway Traction Systems, M.
Mazzucchelli, P. Pozzobon and G. Sciutto, (Applications

of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p44-48.

Engineering Aspects of Wetland Mitigation, A. Mahendra Rodrigo, Kenneth P. Dunne, Lewis O. Morgan and Rao Nivargikar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2027-2032.

Engineering Automation Expands, CE Sept. 96, p22.
Engineering Features of the Red Bluff Research Pumping
Plant, K. Warren Frizell, Charles R. Liston and Stephen Atkinson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p316-321. Engineering Judgment in the Evolution from Deterministic

to Reliability-Based Foundation Design, Fred H. Kulhawy and Kok Kwang Phoon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p29-48.

Engineers On the Line, J. A. Morgan, CE Dec. 96, p27.
Enhancing Creativity when Solving Contradictory Technical Problems, Sergey Drabkin, El Apr. 96, p78-82. Ethics Not Dependent on Consequences, Robert F. Brown,

Ethics Not Dependent on Consequences, Robert F. Brown, P.E., CE Nov. 96, p40-41.

Evaluation of FRP Composites Bolted and Adhesive Joints, Sotiris Sotiropoulos, Hota V. S. CangaRao and Roberto Lopez-Andio, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p233-242.

Chong, ed., 1996), p.233-242.
Evolving Design Genes as well as Design Solutions, John S. Gero, Vladimir A. Kazakov and Thorsten Schnier, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p84-90.
Extension and Compression of Elastomeric Butt Joint Seals, Stephen A. Ketcham, Jan M. Niemiec and Grego-

Seals, Stephen A. Ketcham, Jan M. Niemiec and Gregory B. McKenna, EM July 96, p669-677.
Fatigue Testing of Anchor Bolts, James P. Van Dien, Mark R. Kaczinski and Robert J. Dexter, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed. 1996), p337-344.
Federal Legislation Will Increase Design-Build Opportunities, Michael C. Loulakis and William L. Cregger, CE July 06, e3.

July 96, p35.

Field Trial Results of VMS Travel Time Display on the Corridor Peripherique of Paris, H. Haj Salem, S. Cohen, E. Sididki and M. Papageorgiou, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p368-372.

Finite Element Analysis of Precast Concrete Box Culverts, K. M. Tarhini, G. R. Frederick and M. Mabsout, (Con puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p677-682.

Crintowsky, ed., 1990), pol. 7-682. Finite Element Computer Models for Analysis of Cold-Formed Steel Members, K. S. Sivakumaran and Nabil Abdel-Rahman, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p690-696. Flexural Buckling of Steel Angles: Experimental Investigation, Seshu Madhava Rao Adluri and Murry K. S. Manaya Rao Adluri and Murry K. S. Manaya Rao Pages (1996).

dugula, ST Mar. 96, p309-317.

dugula, S1 Mar. 90, p309-317.

Florida Department of Transportation's MastArm Program—Placing the Engineer in Control, Andre V. Pavlov, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p473-479.

For Design/Construct Engineers, A Practice-Oriented Publication About Real-World Experiences, CE Apr. 96,

Four ASCE Student Chapters Win Awards for Excellence, NE Oct. 96, p2.

A Fracture Mechanics-Based Design Method for SFRC Tunnel Linings, Pruettha Nanakorn and Hideyuki Horii, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p819-828.

Gabled Hyperbolic Paraboloid Roofs without Edge Beams, Tamara Jadik and David P. Billington, ST Feb. 95,

p328-335

A Gatehouse for Johnson, Pedro Sifre and David Harrison, CE Feb. 96, p44-47

Genetic Algorithm Design of Piped Irrigation Systems, Graeme Dandy, Angus Simpson and Laurie Murphy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Geotechnical Study and Remediation Design for Coal Mine Spoil Instability in Discontinuous Permafrost—A Case Study, Andrew J. Hardy, Patrick G. Corser and Daniel C. Graham, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p712-723.

GIS and CAD-based Design Software in CE Education, Randy Dymond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p501-507.

Vanegas, et. and Faut Chinowsky, ed., 1990, p.501-307.
Groundwater Monitoring System Design Using a Probabilistic Observation Method for Site Characterization,
Mauricio Angulo and Wilson H. Tang, (Uncertainty in
the Geologic Environment: from Theory to Practice,
Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p797-812

Guideline for Automatic Docking in Space, Samuel E. Moskowitz, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p164-170.

Henry's Problem and Its Representation --- Representing an Architect's Reasoning Structure, Quinsan Cao, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul nowsky, ed., 1996), p1058-1064.

HERMES: An Integrated Environment for the Design of On-Line Decision Support Systems, Franco Arcieri and Ettore Apolloni, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p315-319.

High Performance Fiber-Cement Composites by Extrusion Processing, Yixin Shao and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p251-260.

High-Temperature Properties of Stainless Steel for Building Structures, Y. Sakumoto, T. Nakazato and A. Matsuzaki, ST Apr. 96, p399-406.

hot-Spot Faigue Design of Aluminum Joints, Maurice L. Sharp, Glenn E. Nordmark and Craig C. Menzemer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1027-1036.

A Hybrid Approach to Integration in Construction, E. T. Thompson, J. H. M. Tah and R. Howes, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p417-423.

A Hybrid System for Partial Prestressed Concrete Beam Design, Nicolaas Stuurstraat, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p887-891.

Hydraulic and Engineering Considerations in Designing Constructed Treatment Wetlands for a Lake Restoration. C. Charles Tai, Donthamsetti V. Rao and Jonathan Polinkas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996).

Hydraulic and Sediment Models for Design of Restoration of Former Tidal Marshland, Guang-dou Hu, M. L. Johnson and R. B. Krone, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p215-228.

IAC Network for Composition of Waste-Incineration Facility, Jehng-Jung Kao and Yu-Ying Liao, CP Apr. 96, p168-171.

ICeD: An Interdisciplinary Conceptual Design Environ-ment, Paul S. Chinowsky, (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p133-139.

IFPATS: A Link Between Distributed AI Systems and Expert Users, G. J. Krige, CP Apr. 96, p151-156.

190

Ignorance Factors Using Model Expansion, Marc A. Maes, EM Jan. 96, p39-45.

The Importance of Plant Community Structure on Form and Function of Created Wetland Systems, Richard A. Orson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1197-1202.

Inelastic Local and Lateral Buckling in Design Codes, Alan R. Kemp, ST Apr. 96, p374-382.

Inflated Contour Approach for Deepwater Tendon Design, J. W. van de Lindt and J. M. Niedzwecki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p582-585.

Influence of Steel Fibers on Design Stress-Strain Curve for High-Strength Concrete, L. Taerwe and A. Van Gysel, EM Aug. 96, p695-704.

Insect Robots: Case Studies for Teaching Students About Design of Computer-Aided Experimentation. James Moller and Osama Ettouney, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p310-316.

An Integrated Approach to Maintaining a Program Baseline on the International Space Station, Roy Patrick Norris and Larry D. Toups, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Integration of a Design Concept Learning Scheme Within a Knowledge-Based Design Support System, Ming Xi Tang, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p852-858.

Integration of Generic Knowledge and Cases in DOM, Wolfgang Oertel and Shirin Bakhtari, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p301-307.

The Integration of Receiving Water Impacts in the Evalua-tion Process of Alternative Designs for CSO Abatement in Providence, RI, J. Craig Swanson, Joseph Grgin and Peter von Zweck, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1537-1542.

Interactive 4D-CAD, Kathleen McKinney, Jennifer Kim, Martin Fischer and Craig Howard, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996, p383-389.

International Collaboration in the Design of Three Bounda-ry Layer Wind Tunnels, César Farell, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1061-1068.

International Space Station Payload Accommodations, Daniel W. Hartman, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

The International Walking Machine Decathlon: A Design Competition to Enhance Undergraduate Engineering Education, Gordon K. Lee, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p296–302.

Intrusion Detection by Linear Active Cameras, J.-P. DeParis, L. Duvieubourg and J.-G. Postaire, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p114-118.

Inundation Scenarios and Inundation Risk, M. P. C. Frijters and B. P. van den Bunt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p62-63.

Is No-Tension Design of Concrete or Rock Structures Al-ways Safe?—Fracture Analysis, Zdeněk P. Bažant, ST Jan. 96, p2-10.

Johnson Space Center Crew Return Vehicle Activities, Charles H. Campbell, B. Kent Joosten and Robert E. Meyerson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p392-398.

Just-In-Time Training on E-Mail, John F. Marron, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p931-936.

Juvenile Fish Separator Design, Daniel M. Katz, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1117-1122.

Knowledge-Based Parametric Design using JSpace, Par-manand V. Dharwadkar and Alton B. Cleveland, Jr., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p70-76.

Learning Flexible Concepts for the Wind Bracing Problem, Ibrahim F. Imam, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), Jorge Var p859-866.

Lessons for Rail Access to Airports, Hanan A. Kivett, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p96-105.

The Limitations of Independent Controller Design for a Multiple-link Flexible Macro-manipulator Carrying a Rigid Mini-manipulator, H. D. Stevens and Jonathan How, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p93-99.

Load Combinations and Load Factors for Construction, David V. Rosowsky, CF Nov. 96, p175-181.

Lunar Base Development Stages, Willy Z. Sadeh and Marvin E. Criswell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p912-

Lunar Neighborhoods: Architecture for Extreme Environmar Neighborhoods. Additional of the Martine Landon-ments, Milton Schwartz, Jeffrey Schwartz, John Bergquist, Carsten Keller, Preston Kelsey and Todd Stringer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1027-1031.

Managing Construction Risks, Ossama A. Abdou, AE Mar. 96, p3-10.

Mathematical Techniques & Software for Stochastic De-sign Optimization, Jean M. Parks and Chun Li, (Probabi-listic Mechanics & Structural Reliability, Dan M. Fran-

instruction of the structural reducinty, Dan M. Francisco, and Mircea D. Grigoriu, ed., 1996, pl 18-121.

Mechanical Connections in Wood Structures (M&R No. 84), Task Committee on Fasteners of the Committee on Wood of the Structural Division of the American Society of Civil Engineers, (Lawrence A. Soltis, chmn.), 1996, 0-7844-0110-1, 245pp.

Minimizing Floor Vibrations from Occupant Activities,

Sarah E. Mouring and Bruce R. Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p405-

Minimum-Time Design of a Slewing Flexible Beam, Xiao-jian Liu and David W. Begg, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1205-1214.

Mixed Optimization Technique for Large-Scale Water-Resource Systems, Marcello Niedda and Giovanni M. Sechi, WR Nov./Dec. 96, p387-393.

A Model for the Design and Control of Urban Electric Traction Systems, O. Bottauscio and G. Farina, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p39-43.

Modeling and Solving Water Resources Engineering De-Modeling and Solving Water Resources Engineering Design Problems as Stochastic Programs to Account for an Uncertain Future, D. S. Yakowitz, W. Elshorbagy and K. Lansey, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p106-117.
Montgomery C. Meigs: The Eclectic Engineer, Dean A. Herrin, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p66-73.

A Multi-Agent Architecture for Foundation Design Envi-ronments, M. R. Halfawy, N. A. B. Yehia, A. S. Bazaraa, A. Dessouki, F. C. Hadipriono and J. W. Duane, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p200-206.

Multicriterion Design of Long-Term Water Supply in Southern France, Oscar Cordeiro Netto, Éric Parent and Lucien Duckstein, WR Nov/Dec. 96, p403-413.

A Multiperiod Approach for the Solution of Groundwater Management Problems using the Outer Approximation Method, George P. Karatzas, Alexander A. Spiliotopoulos and George F. Pinder, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p129-134.

Myron Goldsmith, Structural Engineer, Architect, Dies at

77, CE Oct. 96, p78.

A National Standard for Flood-Resistant Design and Con-struction, Christopher P. Jones, Vernon K. Hagen, Chris-topher S. Hanson, Thomas C. MacAllen, David Green-wood and Clifford E. Oliver, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p339-340.

New Compression Based Design Principals for Reinforced Glulams, Daniel A. Tingley and Stephen Cegelka, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

New Guidelines for Fatigue Design of HSS Connections, A. M. van Wingerde, J. A. Packer and J. Wardenier, ST Feb. 96, p125-132.

Feb. 96, p125-132.

New Version of Manual 45 Ready, CE Dec. 96, p70.

A New, Low-Cost Ice Control Structure. Part 1: Concept Development, J. H. Lever, G. Gooch and A. Tuthill, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p617-628.

Notes on ACI 318-95 with Design Applications edited by S.J. Ghosh, David A. Fanella, and Basile G. Rabbat, AE Sept. 96, p120.

Sept. 96, p120.

Object Orientation in Hydraulic Modeling Architectures, D. P. Solomatine, CP Apr. 96, p125-135.

Object-Oriented Model for Integrating Construction Product and Process Information, Annette L. Stumpf, Ra-jaram Ganeshan, Sangyoon Chin and Liang Y. Liu, CP July 96, p204-212.

Ocean Environment Contours for Structural Response Analysis and Experiment Design, Steven R. Winterstein, Todd C. Ude, Paolo Bazzurro and C. Allin Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p592-595.

n Seismic Displacements of Rigid Retaining Walls, Yingwei Wu and Shamsher Prakash, (Analysis and De-sign of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p21-37.

omminner traxash, ed., 1996), p21-37.
An Open Graded Base to Reduce Thaw Weakening in Flexible Pavements, Maureen A. Kestler, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p878-889.
Ortimization of Committee of

Optimization of Graphical Models, Jeanine Graf, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p97-103.

Optimization of Groundwater Remediation with DES, Jae-Heung Yoon and Christine A. Shoemaker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p622-627.

Optimization of Soil Vapor Extraction System Design, Yung-Hsin Sun and William W-G. Yeh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1387-1392.

Optimized Input Shaping for a Single Flexible Robot Link, David G. Wilson, Dennis Stokes, Gregory Starr and David G. Wilson, Dennis Stokes, Gregory Starr and Rush D. Robinett, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1225-1229.

Organizing and Evaluating Uncertainty in Geotechnical Engineering, Robert V. Whitman, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1-28.

Roth, ed., 1996), p1-28.
Organizing and Managing a Finance-Design-Build Project in Turkey: Fourth Roebling Lecture, 1995, Donald K. Stager, CO Sept. 96, p199-204.
Overview of the US Army Corps of Engineers Flood Control Channels Research Program, Ronald R. Copeland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1501-1506. p1501-1506.

Partnering: Building a Stronger Design Team, Richard G. Weingardt, AE June 96, p49-54.

Pier Width and Local-Scour Depth, Robert Ettema, Bruce W. Melville and Brian Barkdoll, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p251-256.

Pipe Network Analysis and Design in Developing Regions.
Case Study: Novokuznetsk, Siberia, Dan Gessler,
Johannes Gessler and Randy Hoffman, (North American
Water and Environment Congress & Destructive Water,
Chenchayya Bathala, ed., 1996), p1255-1260.
Pipeline Crossings (M&R No. 89), Task Committee on
Pipeline Crossings of the Technical Committee on Pipeline Crossings of the Technical Committee on Pipeline Crossings of the Pipeline Division of the American
Society of Civil Engineers, (Randy Roberton, chmn.)

nne Crossings of the Pipeline Division of the American Society of Civil Engineers, (Randy Robertson, chmn.), 1996, 0-7844-0183-7, 140pp. Plants for Embassy Appear in Show, CE Nov. 96, p23. Practical Advanced Analysis for Braced Steel Frame De-sign, Seung-Eock Kim and Wai-Fah Chen, ST Nov. 96, p1266-1274

Practical Advanced Analysis for Unbraced Steel Frame Design, Seung-Eock Kim and Wai-Fah Chen, ST Nov. 96, p1259-1265.

Practical Estimation of Two-Way Slab Deflections, Kuan-Yung Chang and Shyh-Jiann Hwang, ST Feb. 96, p150-

159.
Preliminary Design of 2-Story Buildings Using a Hybrid System, Hyeong-Taek Kang, C. John Yoon and Feng-Bao Lin, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p335-340.
A Preliminary Design of a Pilot Plant for the Production of Lunar Oxygen, W. E. F. L. Moulford, A. R. Martin, P. W. Cains, P. D. Martin and G. Tan, (Engineering, Construction and Onearings in Space, Stewart W. Johnson.

struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p762-768.

Probabilistic Flood Forecast-Warning System, Roman Krzysztofowicz, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p231-

Process Modeling for Design-Build Project Management, Yan Jin, Tore Christiansen, Raymond E. Levitt and Paul Yan Jin, Tore Christiansen, Raymond L. Teichotz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p642-648.

Process Models in Enterprise Engineering - Tools for Enhancing Process Description, Lars Chr. Christensen, Tore R. Christiansen and Yan Jin, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed.,

1996), p634-641.
Providential Resurrection, CE May 96, p16.
Rainfall-Runoff Modeling for Watershed Stormwater Management, Yuan Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2066-2071. Rational Design and Operation of Packed Bed Adsorption

Reactors, Federico G. A. Vagliasindi and David W. Hen-dricks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p553-558.

Reasoning about Cases with Diagrams, Ellen Yi-Luen Do and Mark D. Gross, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

p314-320.

Recent Advances in the Development of High Performance Cement-Based Materials, J. Francis Young, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1101-1110.

Redesign of Vendor-Data Processes for Industrial Projects, H. Y. Goucha and J. T. O'Connor, ME Sept./Oct. 96,

p53-61.

p53-61. Reducing the Vulnerability of Transmission Lines in Hurricane Regions by Choosing Minimum Life Cycle Cost Designs, Peter J. Vickery and Lawrence A. Twisdale, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p245-246.
Reduction of Downstream Impacts Through Use of Variable Detention Basin Volume Requirements, Conor C. Shea, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), a1858-1863.

1996), p1858-1863.

Regionalization of Annual Precipitation Maxima in Montana, Charles Parrett, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p57-58.

Reliability Based Design of Reinforced Earth Structures, Adnan A. Basma and Ali S. Al-Harthy, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p788-791.

192

Reliability Methods for Stability of Existing Slopes, John T. Christian, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p409-418.

Reliability Procedures as a Design Tool for Structures and Mechanical Components, G. I. Schuëller, M. Gasser, J. Hartl and G. Lener, (Probabilistic Mechanics & Struc tural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p800-803.

Grigoriu, ed., 1996), p800-803.
Reliability-Based Design of Water-Distribution Systems, Rajesh Gupta and Pramod R. Bhave, EE Jan. 96, p51-54.
Reliability-Based Exit Gradient Design of Water Retaining Structures, D. V. Griffiths, Gordon A. Fenton and G. M. Paice, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p518-534. 534

Relocation of Existing Pipelines at New Highway Cross-ings, Karl J. Rubenacker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p290-297.

Results of Field Evaluations of the New Modular Inclined Fish Diversion Screen, F. C. Winchell, S. V. Amaral, E. P. Taft, T. C. Cook, A. W. Plizga, E. M. Paolini and C. W. Sullivan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p881-886.

Revised Rule for Concept of Strong-Column Weak-Girder Design, Han-Seon Lee, ST Apr. 96, p359-364.

Riprap and Concrete Armor to Prevent Pier Scour, Lisa M. Fotherby and James F. Ruff, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4178-4187.

Risk Management Principles of Transportation Facility De-sign Engineering, Andrew G. Cooley, TE May/June 96. p207-209

Rock Foundations, U.S. Army Corps of Engineers, 1996,

Rock Foundations, U.S. Army Corps of Engineers, 1996, 0.7844-0136-5, 130pp. The Role of Petri Nets Modelling in the Safety Assessment Process for Guided Transport Systems, G. Cosulich, P. Firpo, S. Savio and G. Sciutto, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p558-562.

Safety of Concrete Members Designed by ACI 318 Chapter 9 and Appendix C Load Combinations, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

p218-221

Secondary Containment Design Practices, Charles R. Tay-lor, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p547-552.

Sectional Depth of Prestressed Concrete Beams with Excess Capacity, Y. H. Chai, ST July 96, p788-793.

Seismic Performance of Cladding: Responsibility Revisit-ed, Julie Mark Cohen, CF Nov. 95, p254-270.

Senior Engineers, Defining Their Place in an Electronic Office, James D. Miller, CP Oct. 96, p263.

Serviceability System Factor for Design of Wood Floors, K. J. Fridley, D. V. Rosowsky and P. Hong, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p792-

Seven Guidelines for Managing Uncertainty in Geoenviron-mental Design, Robert B. Gilbert and Travis C. McGrath, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p774-796.

Shock and Transient Loading on Anaerobic Reactor Coup-led with Adsorber, Peter Fox and Makram T. Suidan, EE

Jan. 96, p18-24. Simple Formula for Eccentric Bolted Connection Design, Thomas W. Hartmann and Janelle K. Rohrbaugh, SC Feb. 96, p40-46.

Simplified Dean's Method for Beach-Fill Design, James R. Houston, WW May/June 96, p143-146.

Simplified Method for Design of Underpinning Piles, M. Makarchian and H. G. Poulos, GT Sept. 96, p745-751.

Single-Criteria Genetic Optimization for Design and Detailing of Concrete Structures, W. M. Kim Roddis, Warren K. Lucas and Vorathum Chunnanond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-

sky, ed., 1996), p91-96.
Siting of Grade Control Structures, Chester C. Watson, John Smith and David S. Biedenham, (North American John Smith and David S. Biedenham, (North American John Smith and David S. Biedenham, (North American John Smith Business Water) Water and Environment Congress & Destructive Water,

Chenchayya Bathala, ed., 1996), p286-291.

A Software Architecture for Concurrent Lifecycle Design and Construction, Nosa F. O. Evbuomwan and Chimay J. Anumba, (Computing in Civil Engineering, Jorge Vane-

Anumba, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p424-430.
Sorption of Water in Mortars and Concrete, Nicos S. Mar-tys and Chiara F. Ferraris, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p1129-1138.
Space Infrastructure Planning, J. Michael Snead, (Engi-neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p360-366.
Spaceborne Fourier Transform Hyperspectral Imager

Spaceborne Fourier Transform Hyperspectral Imager, Leonard John Otten, III, Andrew D. Meigs and R. Glenn Sellar, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p224-230.

Spheres of Influence: Federalism, Politics, and Engineering

Design, Todd Shallat, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Ken-non, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr.,

ed., 1996), p136-143.

Standard for Load and Resistance Factor Design (LRFD) for Engineered Wood Construction (St No. 95-016), American Society of Civil Engineers and American Forest & Paper Association, 1996, 0-7844-0041-5, 125pp.

Statistical Analysis of S-N Fatigue Data; Design Curve Based on Tolerance, C. L. Shen, P. H. Wirsching and G. T. Cashman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p470-473.

Statistical Distributions and Natural Hydrograph, Nazeer Ahmed, (North American Water and Environment Conress & Destructive Water, Chenchayya Bathala, ed.,

1996), p292-297.

Statute of Limitations on Negligence, CE Nov. 96, p28. Strategies for the Use of IT in the Construction Industry of Singapore, Krishan Mathur, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1065-1071.

Stretching Span Capability of Prestressed Concrete Bridges under AASHTO LRFD, Yohchia Chen and Alex Aswad,

BE Aug. 96, p112-120.

Structural Design Forum, SC Feb. 96, p3-8.
Structural Fire Resistance - Past, Present and Future, T. T. Lie and V. K. R. Kodur, (Building an International Com-Lie and V. K. K. Kodur, (billiann an international com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p345-351. Structuring Cases in a Case-Based Design Aid, Craig Zimr-

ing, Sonit Bafna and Ellen Do, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed.,

1996), p308-313. Successful Implementation of Grouted Boulder Grade Control Structures on Drainageways in the Denver Metropol-itan Area, John M. Pflaum, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p836-841.

Surface Bypass-Collector Concepts and Performance, Peter . Klingeman, Lisa M. Wieland, Kenneth R. Elbert and Thomas K. Lorz, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p673-678.

A Surface Collection Design Approach on the Lower Co-lumbia River, Donald R. Chambers and John H. Plump, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996). p667-672.

The Surface Extreme Environment Dwelling System (SEEDS) for Mars, Kurt Anthony Micheels, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1020-1026.

Surface Oriented Fishway and Fish Guidance Curtain, Lynn A. Reese, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p165-170. 193

Suspicious Inspection Begs ASCE Intervention, Marshall D. Collins, CE Dec. 96, p28.

System Design for Safe Robotic Handling of Nuclear Mate-rials, William Drotning, Walter Wapman, Jill Fahrenholtz, Howard Kimberly and Joel Kuhlmann, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p241-247.

System Factors for Design of Wood Structural Assemblies, Bradford K. Douglas and Philip Line, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p798-

Systems for Forecasting Flows and Their Uncertainty, Konstantine P. Georgakakos, Alexandre K. Guetter and Jason A. Sperfslage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2360-2365.

Tallest Control Tower Wins Award, CE Aug. 96, p12,14.

Techniques to Obtain Orbital Debris Encounter Speeds in the Laboratory, Lalit C. Chhabildas, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p8-12.

Technology Potential and Limitations in a Vitual Design Studio, Mary Lou Maher, (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

p8-14.

Ted Williams Tunnel Gets OCEA Plaque at Boston Cere-

mony, NE Aug. 96, p14.

Tensioned Fabric Structures: A Practical Introduction, Task Committee on Tensioned Fabric Structures of the Technical Committee on Special Structures of the Technical Administrative Committee on Metals of the Structural Division of the A.S.C.E., (R.E. Shaeffer, chmn.), 1996, 0-7844-0156-X, 80pp.

Tensioned Fabric Structures—A Practical Introduction edit-ed by R. E. Schaeffer, Frederick S. Merritt, AE Sept. 96,

Testing and Effectiveness of a New Urban BMP Stormcep-tor **, Vincent H. Berg and Graham J. Bryant, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1864-1869.

Theoretical Foundations for Computer-Supported Negotia-tion, Feniosky Peña-Mora and James Kennedy. (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p186-192.

Time for an Integrated Approach to Facility Management, Paul Scarponcini, CP Jan. 96, p3.

Towards Lessons-Learned Systems in the US Army, Corps of Engineers, Donald K. Hiteks, Jeffrey G. Kirby and E. William East, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), pl 12-117.

TQM and ISO 9000 for Architects and Designers by Charles Nelson, Frederick S. Merritt, AE June 96, p81. Traffic Congestion Leads to Innovative Funding, CE Sept.

96, p14.

Translation Methods for Integrated Building Engineering, Taha Khedro, Charles Eastman, Richard Junge and Thomas Liebich, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p579-585.

A Two-Level Approach for the Control of Freeways, A. Alessandri, A. Di Febbraro and A. Ferrara, (Applications of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p429-433.

Ultimate Strength of Steel Outstands in Compression, Han-bin Ge and Tsutomu Usami, ST May 96, p573-578.

Ultimate Transverse Strength and Reliability Analysis of Offshore Production Ships, Xiaozhi Wang and Lars M. Sørhaug, (Probabilistic Mechanics & Structural Reliabil-ity, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p146-149.

Uncertainties in Characterising Soil Properties, Suzanne Lacasse and Farrokh Nadim, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.

Roth, ed., 1996), p49-75.
Uncertainty and Risk Analyses for FEMA Alluvial-Fan Method, Bing Zhao and Larry W. Mays, HY June 96,

Uncertainty Modeling for Preliminary Design of Structures, Yung-Ching Shen and Larry J. Feeser, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p565-571.

University Arts Building Presents Structural Challenge, CE

University Arts Building Presents Surucular Characterization, Tien Nov. 96, p10.

Use of Geologic Information in Site Characterization, Tien H. Wu, Mohamed A. Abdel-Latif, Michael A. Nuhfer and B. Brandon Curry, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth,

(ed., 1996), p76-90.
Use of Recycled Aggregates for Pavement, S. Abdol Chini, Timothy J. Sergenian and Jamshid M. Armaghani, (Materials for the New Millennium, Ken P. Chong, ed.,

1996), p154-162.

Using Artificial Intelligence to Reduce High Fuel Con-sumption in Congested Cities, Ken Fox, Roy Clarke and Howard Kirby, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p520-524.

Using Ultra High Solar Flux in the Lunar Environment:

Production of Cement and Other Applications, Joseph J. O'Gallagher, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p571-

Utilities and Systems for the New U.S. South Pole Station, Amundsen-Scott Station, Antarctica, Steven Theno and Dick Armstrong, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p424-435

433.
Utilizing Geomorphic Analogs for Design of Natural Stream Channels, Scott Gillilan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2799-2804.
UV Disinfection of Wastewater: Probabilistic Approach to Design, Frank J. Loge, Jeannie L. Darby and George

Tchobanoglous, EE Dec. 96, p1078-1084.

Value Engineering Changes to the Eastside Pipeline, Antonio J. Perez, Francisco Becerra and John Vrsalovich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

De Proposition of Facility Products, Processes and Organizations, Raymond E. Levitt, Tore R. Christiansen, Geoff Cohen, Yan Jiand John C. Kunz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996).

Visual-Based Scheduling: 4D Modeling on the San Mateo County Health Center, Eric Collier and Martin Fischer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p800-805. Visualizing Global Force Distributions in Finite Element

Models, Kirk Martini, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), Jorge Va p697-703

astewater System Design and Evaluation, Leonard Bell and Troy Norris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p949-957.

Wastewater Treatment Facility Aeration Project, Gary L. Eddy, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996, p506-517. Water Control Structure Choice for Wetland Restoration/ Creation, Roger C. Smith, (North American Water and

Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p268-273.

Wave Induced Reaction Forces and Tension in TLP Tendons, John M. Niedzwecki, Dadi S. Soemantri and Orion R. Rijken, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p586-587.

White House Proposes Design-Build Regulation, Michael Charles, CE Oct. 96, p116.

White River Fish Screen Project - Hydraulic Modeling, Dennis Dorratcague, Wayne Porter and Larry Swenson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p310-315.

White River Fish Screen Project Planning and Design, Morton D. McMillen and Wayne Porter, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1123-1128. Worldwide Advances in Structural Concrete and Masonry,

A. E. Schultz, ed. and S. L. McCabe, ed., 1996, 0-7844-0164-0, 580pp. "Ethics" Credit, CE Nov. 96, p30.

Design criteria

The Analysis of the Failure of the Minte Stream Culvert, L. Ayala and E. Brown, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3018.

Bridges of the 21st Century with High Performance Steel, Wagdy G. Wassef, John M. Kulicki and Philip A. Ritchie, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p116-124.

Building Codes and Nuclear Plants, Kenneth P. Buchert, CE Mar. 96, p28. Central Artery Utility Crossings, Brian Brenner, (*Pipeline*

Crossings 1996, Lawrence F. Catalano, ed., 1996),

Common Causes of Retaining-Wall Distress: Case Study, Edred T. Marsh and Richard K. Walsh, CF Feb. 96, p35-38.

Design and Construction Criteria for Hurricanes - Preventing Your Pre-Engineered Building from Becoming a Scrap Metal Heap, Michael K. H. Yee, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p269-271.

Design and Performance Criteria for Inflatable Structures in Space, Marvin E. Criswell, Willy Z. Sadeh and Jenine Abarbanel, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1045-1051.

Design Considerations for the Use of Plastic Lumber in Structural Applications, Richard G. Lampo, Thomas J. Nosker and Richard W. Renfree, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1492-1500.

Design Criteria for Fenders at Ferry Landings, Charles T. Jahren and Ralph Jones, WW July/Aug. 96, p187-194. Design Criteria for Pseudoductile Fiber-Reinforced Composites, Christopher K. Y. Leung, EM Jan. 96, p10-18.

Design of Vibration Control System for High-Rise Residential Buildings in Consideration of Wind-Induced Response, Yukio Tamura, Kiyoshi Uesu and Takeshi Ohkuma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1244-1251.

Design Parameters of Pipeline Suspension Bridges, Ralph Alan Dusseau and Irfan Ahmed, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p112-119.

An Emerging Technology: Damping Design for Wind and Seismic Events, Robert J. McNamara, (Building an In-ternational Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1252-1260.

European Experiences in Fire Design of Structural Steel, Yngve Anderberg, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p357-364.

Mohamman, ed., 1920, p.537-508.
Evaluation of a 47-Story Building Subjected to Hurricane Alicia, Lawrence G. Griffis, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p.860-965.

Grade-Control Structures for Salt River Channelization, Dennis L. Richards and Tim Morrison, (North American Water and Environment Congress & Destructive Water,

Chenchaya Bathala, ed., 1996), p606-611.

Handrail Graspability, Donald O. Dusenberry and Howard Simpson, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p466-469.

Improving the Effectiveness of Post Earthquake Investigations, Susan K. Tubbesing, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p327-328.

Infrastructure Obsolescence and Design Service Life, Andrew C. Lemer, IS Dec. 96, p117-118. Kentucky Researchers Complete Composite Foot Bridge,

CE Dec. 96, p14-15.

On the Response of Transmission Structures to High Winds, Acir Mércio Loredo-Souza and Alan Garnett Davenport, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p272-273.

Particulate Sampler to be Carried on a High Altitude Bal-loon, Christopher Benning and Jared Whitaker, (Engi-neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1334-1338.

Pipe Plunge Pool Energy Dissipator, Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323.

Probability Based Design Requirements for Ship Struc-tures, Alaa E. Mansour, Paul H. Wirsching, Bilal M. Ayyub and Gregory J. White, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p98-101.

Probability-Based Design Requirements for Longitudinally Stiffened Panels in Ship Structures, G. J. White, B. M. Ayyub, A. E. Mansour and P. H. Wirsching, (Probabilis-tic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p110-113.

Probability-Based Design Requirements with Respect to Fatigue in Ship Structures, P. H. Wirsching, A. E. Man-sour, B. M. Ayyub and G. J. White, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p114-117.

Proposed Specification and Commentary for Composite Joists and Composite Trusses, ASCE Task Committee on

Design Criteria for Composite Structures in Steel and Concrete, ST Apr. 96, p350-358. Reducing Environmental Impacts through Non-Uniform Loading of Casks, N. Barrie McLeod, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p372-373.

Response of Base Isolated USC Hospital Building in the 1994 Northridge Earthquake, Satish Nagarajaiah and Xiaohong Sun, (Analysis and Computation, Franklin Y.

Cheng, ed., 1996), p212-223. Seismic Assessment for Offshore Pipelines, R. Bruschi, O. T. Gudmestad, F. Blaker and F. Nadim, IS Sept. 96, p145-151.

Seismic Design Criteria for Navy Wharves, J. M. Ferritto and C. S. Putcha, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p353-

Selecting Design Conditions as Part of a Watershed Ap-proach to Water Quality Control, David W. Dilks and Kathryn A. Sweet, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p1543-1548. Space Station Module Wall Hole Size and Crack Length Following Orbital Debris Penetration at 6.5 km/s, Wil-Following Orbital Deuts Fenetation at 0.5 km/s, with liam P. Schonberg and Joel E. Williamsen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1-7. Standard for Load and Resistance Factor Design (LRFD)

for Engineered Wood Construction (AF&PA/ASCE 16-95), AE Sept. 96, p121.

Strength and Reliability of Reinforced Concrete Columns with Sustained Loading, Stuart G. Reid, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p234-237.

A Strength Sensitivity Index for Assessing Climate Warming Effects on Permafrost, Branko Ladanyi, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p35-45.

Stress Limits in Prestressed Concrete Bridge Girders, Hassan H., El-Hor and Andrzej S. Nowak, (Building an In-ternational Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p460-

Structural Serviceability Review and Standard Implementa-tion, Bruce Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p436-443.

Jamshu Mohammadi, ed., 1990), p430-443.
Toward Risk-Consistent Wind Hazard Design/Mitigation Criteria Using Probabilistic Methods, Lawrence A. Twisdale, Peter J. Vickery and Andrew C. Steckley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p256-257.

Design data

Design Guidelines for Bioengineered Bank Stabilization, Dale E. Miller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3085-3090.

Evaluation of a Bi-Directional Aluminum Honeycomb Impact Limiter Design, Marvin J. Doman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p357-359.

Design events

Comparison of Hazard and Acceptable Risk Criteria, David S. Bowles, Loren R. Anderson and Terry F. Glover, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p346-366. Risk Analysis of Ship and Barge Collision Loads on Bridg-

es, Michael A. Knott, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p724-727.

Design improvements

Abstracting Lessons Learned from Design Reviews, E. William East and Michael C. Fu, CP Oct. 96, p267-275.

Blast Resistant Design of Commercial Buildings, Moham-med Ettouney, Robert Smilowitz and Tod Rittenhouse, SC Feb. 96, p31-39.

Dispersive-Flow Energy Dissipator, Shou Long Yang, HY Dec. 94, p1401-1408.

Rebound of the Bascule Bridge, Patrick A. Cassity, P.E., Vinod C. Patel, P.E. and R. Shankar Nair, P.E., CE Aug. 96, p48-50.

Design modifications

The Applicability of Neural Network Systems for Structural Damage Diagnosis, Chatmongkol Peetathawatchai and Jerome J. Connor, Jr., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p68-71.

Design and Analysis of Approach Terminal Sections Using Simulation, John D. Reid, Dean L. Sicking and Gene W.

Paulsen, TE Sept./Oct. 96, p399-405.

Dynamically Modified Linear Structures: Deterministic and Stochastic Response, Giuseppe Muscolino, EM Nov. 96, p1044-1051

Engineering Ethics, Stanley H. Goldstein, P.E and Robert A. Rubin, CE Oct. 96, p40-44.

Investigating and Repairing of Wood Bowstring Trusses, Richard J. Kristie and Arne P. Johnson, SC Feb. 96, p25-30.

p.25-30. Modification of Design Approach to Aerated Lagoons, Linvil G, Rich, EE Feb. 96, p149-153.
Radiation Hardening of Robotic Control Components Against Terrestrial Radiation, G. U. Youk, J. S. Tulenko, H. Liu and H. Zhou, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p248-254.

Simulation of Nonlinear Structures with Artificial Neural Networks, Thomas L. Paez, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p72-75.

Design standards

Beware of Flying Cranes - and Disconnected Codes, M. Russell Nester and Allan R. Porush, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p219-220.

Design Guidelines for UV Disinfection Facilities, Heba

Design Guidelines for UV Disinfection Facilities, Heba Awad, Jeff Kuo and Jamal Awad, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2999-3004. Masonry Designers' Guide - A Comprehensive Design Tool, John H. Matthys, (Worldwide Advances in Struc-tural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p322-333. Pronosed Limit States Design Provisions for Masonry.

MicCabe, ed., 1990), p322-333.
 Proposed Limit States Design Provisions for Masonry, Mark B. Hogan, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p345-354.
 Proposed Prestressed Masonry Design Provisions, Matthew J. Scolforo, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p355-364.
 Soil-Structure Interaction for Page Indust Publishers

Soil-Structure Interaction for Base-Isolated Buildings, Maria I. Todorovska, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p172-175.

The Standards Processing Framework Communication Language (SPF-CL), Han Kiliccote and James H. Garrett, Jr., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p999-1005.

and raul Chinowsky, ed., 1990, p999-1005. Understanding Current Standards Usage and Its Implication for Computer-Based Support Tools, Bongjin Choi and James H. Garrett, Jr., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1006-1012.

Design storms

Incorporation of Time-Intensity and Spatial Variability Into Probable Maximum Precipitation (PMP) Estimates, Ana Paula Barros, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p64-65.

Evaluation of Design Wave Impact Pressures, G. Müller and T. J. T. Whittaker, WW Jan./Feb. 96, p55-58.

Design wind speed

A Windstorm Damage Model for the Identification of In-surance and Reinsurance Risk, Brian E. Lee and David R. Whiting, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p197-198.

Desorption of Soil Contaminants Due to Rainwater Infiltration, Anand Prakash, HY Sept. 96, p523-525.

Enhanced Trichloroethene Desorption from Long-Term Contaminated Soil Using Triton X-100 and pH Increases, Dipak Sahoo, James A. Smith, Thomas E. Imbrigiotta and Heather M. McLellan, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1215-1220.

To Allay Brownfields "Misperceptions", Dante J. Tedaldi,

P.E., CE Oct. 96, p37.

Transport and Sorption of Organic Gases in Activated Car-bon, Tsair-Fuh Lin, John C. Little and William W. Na-zaroff, EE Mar. 96, p169-175.

Transport and Sorption of Water Vapor in Activated Car-bon, Tsair-Fuh Lin and William W. Nazaroff, EE Mar. 96, p176-182.

Detention basins

A Decision Making Approach for Stormwater Management Measures—A Case Example in the City of Waukesha, Wisconsin, James A. Bachhuber, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3981-3986.

Effective Subsurface Retention/Detention Systems, James E. Milligan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2276-2281.

Hollyhills Drain Relief for 1920's Drainage System, T. Scott Schales and Glen Drogin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4251-4256.

Optimal Estimation of Storage-Release Alternatives for Storm-Water Detention Systems, Rafael Segarra-García and Mohammad El Basha-Rivera, WR Nov./Dec. 96,

p428-436.

Reduction of Downstream Impacts Through Use of Variable Detention Basin Volume Requirements, Conor C. Shea, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1858-1863.

Searching for Optimal Combinations of Stormwater Deten-tion Basins, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2264-2269.

A Study into Effectiveness of Urban Best Management Practises, Robert G. Traver, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1852-1857.

Systematic Evaluation of Pollutant Removal by Urban Wet Detention Ponds, Jy S. Wu, Robert E. Holman and John R. Dorney, EE Nov. 96, p983-988.

The Treatment Train Detention Concept, Charles G. Boehm, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2270-2275.

Water Quality Enhancement Using Subsurface Detention, Brian C. Roberts, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3338-3342.

Maximized Detention Volume Determined by Runoff Cap-ture Ratio, James C. Y. Guo and Ben Urbonas, WR Jan./ Feb. 96, p33-39.

Assessing Corrosion on Steel Structures Using Corrosion Coulometer, Richard D. Granata, James C. Wilson and John W. Fisher, IS Sept. 96, p139-144.

Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST May 94, p1471-1488.

Comparative Analysis of Bridge Superstructure Deteriora-tion, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136.

Currents Stop Seawall Corrosion, CE May 96, p10-11.

Damage Mechanics Model for Evaluation of Bridge Deterioration, Roberto Lopez-Anido, Hota V. S. GangaRao and Raimondo Luciano, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p458-461.

A Damage Mechanics-Based Approach to Structural Deterioration, Baidurya Bhattacharya and Bruce Ellingwood, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Evaluation of Bridge Decks and Pavements at Highwa Speed using Ground Penetrating Radar, Kenneth R. Maser, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p820-828.

Evaluation of Service Load Behavior of Small Bridges Using Strain Measurement, Ben T. Yen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p667-

Freeze-Thaw Durability of Concretes With and Without Class C Fly Ash, C. Ouyang and O. J. Lane, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p939-948.

Historic Concrete Structures Assessment and Repair, Je-rome P. O'Connor, James M. Cutts and Gregory R. Yates, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1055-1062.

Measuring Dielectric Properties of Concrete over Low RF, Rami H. Haddad and Imad L. Al-Qadi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1139-1149.

Panel on Composites for Infrastructure, Srinivasa Iyer, Charles McClasky, Mark P. Henderson, Hota GangaRao and Peter Head, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p781.

Power of Prayer, Francis A. Hahn, CE Aug. 96, p31.

Premature Deterioration of Concrete Structures—Case Study, Ishtiaque Ahmed and M. Zakaria Ahmed, CF Nov. 96, p164-170.

Rehabilitation of a Concrete Bridge Using FRP Laminates, Joseph W. Tedesco, J. Michael Stallings, Mahmoud El-Mihilmy and Michael W. McCauley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p631-637.

Stress Due to Alkali-Silica Reactions in Mortars, C. F. Ferraris, E. J. Garboczi, F. L. Davis and J. R. Clifton, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1379-1387.

Validation of Rutting in the CAL/APT Program, J. Harvey, S. Shatnawi and S. Weissman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p701-710.

Appropriate Sanitation Technology Advisor: A Planner's Tool in Less Developed Countries, Larry Quinn, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2993-2998.

Civil Engineering and Disaster Responses in Developing Countries, Egon B. Westen, El Apr. 96, p89-92.

Cooperative Efforts for Earthquake Risk Management in soperative Erfors for Earthquake Risk Management in Developing Countries, Geoffrey Hoefer, Brian Tucker, Jeannette Fernández, Hugo Yepes, Jean-Luc Chatelain, Fumio Kaneko and Stephanie A. King, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p283-284.

Engineering in Context: Engineering in Developing Countries, Laura Brigitte Parsons, El Oct. 96, p170-176.

Evaluating Sustainability of Water & Sanitation Projects: Case Studies in Developing Countries, Philip Roark, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3253-3258.

Game Model Approach to Multi-Purpose/Multi-Objective Water Resources Related Environmental Protection Project Planning and Management in Developing Nations: A Nigerian Example, Azuka Benjamin Anyika, (North American Water and Environment Congress & Destruc-

tive Water, Chenchaya Bathala, ed., 1996), p1057-1062.
Impacts of Improved Water Supply and Sanitation on the Rural Population of India, Padmavathy Bogabathini, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p781.

Pipe Network Analysis and Design in Developing Regions. Case Study: Novokuznetsk, Siberia, Dan Gessler, Johannes Gessler and Randy Hoffman, (North American Water and Environment Congress & Destructive Water,

Chenchayya Bathala, ed., 1996), p1255-1260.

Recently Emphasized Objectives and Risk Analysis for Project Planning in Developing Countries, Alvin S. Goodman and Lampros E. Bourodimos, (Risk-Based De-cision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p154-168. Treating Wastewater in Developing Nations, CE Aug. 96,

Volunteer Organizations Use of Appropriate Technology in Developing Countries, Jim Horner and Tsegaye Hailu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Water Crisis in Developing World: Misconceptions about Solutions, Harald D. Frederiksen, WR Mar/Apr. 96,

Watershed Characteristics and Hydrological Parameters vs. Sediment Yield - Northern Regions of Pakistan, Muhammad Ashiq, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1669-1674.

Development

Appropriate Technology for Sustainable Development, Maurice L. Albertson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3247-3252.

Balancing Aviation, Highway, and Development Needs: Multimodal Planning at Indianapolis International Air-port, John W. Myers, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p24-33.

Chambers System Helps Developers Level Floodplain, CE

Apr. 96, p96.

Changing Conditions and Water Elections, Charles H.

Lawrance, James M. Stubchaer and Jon A. Ahlroth, WR July/Aug. 94, p458-475.

Development and Application of a Dual Drainage Model for the Wethersfield Area of the City of Hartford, Connecticut, Michael E. Hulley, C. Neil Geldof, William W. S. Gray and A. Charles Rowney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1242-1248.

Based on Logic Programming, Giovanni Felici, Giovanni Rinaldi and Klaus Truemper, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p573-577. Development of a Decentralized Traffic Control System

Durability and Long Term Performance of Cementitious Composites, A. Bentur, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1502.

Education and Research Needs for Appropriate Technology, Maurice L. Albertson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2760-2765.

The HEC NexGen Software Development Project, Darryl W. Davis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3770-3775.

The History of Coastal Engineering in South Africa, D. H. Swart, ed., (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p429-464.

Don't Believe in Change Just for the Sake of Change, Gary D. Bates, ME May/June 96, p20-24.

Joint Development Planning for Inner City Airport Capital Improvements, Orikaye G. Brown-West, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka

Seneviratne, ed., 1996), p199-211.

Lessons Learned from Planning and Developing New Denver International Airport, Norman D. Witteveen, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p45-52.

Lunar Base Development Stages, Willy Z. Sadeh and Mar-vin E. Criswell, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p912-

New Applications for Gypsum Products, Semyon Shimanovich and Christian Meyer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1687-1693.

New Materials for the 21st Century, Edward E. DiTomas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p14-22.

Recent Advances in the Development of High Performance Cement-Based Materials, J. Francis Young, (Materials for the New Millennium, Ken P. Chong, ed., 1996).

Reversibility Measures for Sustainable Decisions, Nick Fanai and Donald H. Burn, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1525-1530.

Risk as a Sustainable Development Criteria, Heidelore I. Kroeger and Slobodan P. Simonovic, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1531-1536.

Safety Analysis Requirements for Robotic Systems in DOE Nuclear Facilities, W. H. McCulloch, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p235-240.

Space Shuttle Program-Defining a Needed Paradigm for Efficient Access to Space, Lyle M. Jenkins, (Engineer-ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p426-434.

"Fifteen Years of Commercial Space in Retrospect", M. Brian Barnett, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p162-

Hydraulic Analysis of Linear Dewatering Systems, Jerzy M. Sawicki, IR Nov./Dec. 96, p348-353.

Improved Characterization of Mixing for Sludge Condition-ing, Jimmy Roland Christensen, George Lee Christensen and Jens Aage Hansen, EE Mar. 95, p236-244.

Incorporation and Rejection of Alum Sludge Flocs by an Advancing Freezing Front, Philip J. Parker, Anthony G. Collins and John P. Dempsey, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p757-768.

Modeling Coastal Ground-Water Response to Beach Dewa-tering, L. Li, D. A. Barry and C. B. Pattiaratchi, WW

Nov./Dec. 96, p273-280.

PCE in Dewatering Flows - A Case Study Risk-Based Clean-Up Action Levels, Shala L. Craig and Sri Krish-namachari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2242-2247.

Scalping Makes Biosolids Safer, Saves Money, CE May 96, p21.

Diaphragm wall

Ground Movement Prediction for Deep Excavations in Soft Clay, Youssef M. A. Hashash and Andrew J. Whittle, GT June 96, p474-486.

Diaphragms

Building Codes and Natural Disasters - 2 Case Studies, Kenneth R. Andreason, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p758-764.

Cross-Frame Diaphragms for Steel Girder Bridges Using the AASHTO LRFD Bridge Design Specifications, Den-nis R. Mettz, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p307-312.

Full-Scale Fatigue Test of the Williamsburg Bridge Orthotropic Deck, Mark R. Kaczinski, Frank E. Stokes, Peter Lugger and John W. Fisher, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p329-336.

Performance of Precast Parking Garages in the Northridge Earthquake: Lessons Learned, Sharon L. Wood, John F. Stanton and Neil M. Hawkins, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1221-1227.

Response of Building Systems with Rocking Piers and Flexible Diaphragms, Andrew C. Costley and Daniel P. Abrams, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed.,

1996), p135-140.

Seismic Behavior of Precast Parking Structure Diaphragms, R. B. Fleischman, R. Sause, A. B. Rhodes and S. Pessiki, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1139-1146.

Seismic Behavior of Structures with Flexible Diaphragms, Arturo Tena-Colunga and Daniel P. Abrams, ST Apr. 96, p439-445.

Dielectric constant

Delineation of a Dielectric Fluid LNAPL Using Discrete Sampling Methods, Michael J. Pierdinock, Spence S. Smith, Christopher L. Kingma and John Seferiadis, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p139-150.

The Dielectric Constant of Soil-NAPL Mixtures at Low requencies (100 Hz—10 kHz), Victor A. Rinaldi and Emilio R. Redolfi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p163-174.

Measuring Dielectric Properties of Concrete over Low RF, Rami H. Haddad and Imad L. Al-Qadi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1139-1149.

A Cost-Effective approach to In Situ Remediation of Soil and Groundwater at a Diesel Fuel Spill Site, David A. Nickerson and James N. Baker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1379-1386.

Interference by Natural Organics in Diesel Analyses, Paul Dworian, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p71-81.

Microbial Decontamination of Polluted Soil in a Slurry Process, M. J. Geerdink, R. H. Kleijntjens, M. C. M. van Loosdrecht and K. C. A. M. Luyben, EE Nov. 96, p975-

Petroleum Hydrocarbon Removal via Volatilization and Biodegradation at McGrath, Alaska, Paul C. Ramert and Wayne L. Eberhardt, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996).

Vertical Migration of Diesel into Silty Sand Subject to Cy clic Freeze-Thaw, K. W. Biggar and J. C. R. Neufeld, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p116-127. Differential equations

Differential equations Catastrophic Riverine Flooding: Rapid Evaluation with a Robust Numerical Model, David C. Froehlich and Mi-chael A. Ports, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p225-226. Characteristics in Evaluating Stream Functions in Ground-

Characteristics in Evaluating Stream Functions in Ground-Water Flow, G. B. Matanga, HE Jan. 96, p49-53.
Depth-Averaged Equations for Free Surface Flows, Guohong Duan and Guixian Wang. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p213-218.
Effect of Fiber Waviness on the Buckling of Composite Plates, Raouf A. Raouf, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1102-1107.

pi 102-1107

An Effective Characteristic Method for Plastic Plane Stress Problems, Zongda Yan and Xiaoming Bu, EM June 96, p502-506.

Modeling Unsteady Open-Channel Flows Having Longitu-dinally Varied Fluid Density, Chintu Lai and Tsan-Wen Wang, (North American Water and Environment Congress & Destruction 1996), p1905-1910. & Destructive Water, Chenchayya Bathala, ed.,

NPC Integrator and Its Unconditional Stability for Response Analysis of Constrained Structures, David W. Begg and Xiaojian Liu. (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1237-1244.

SpatioTemporal Stochastic Open-Dhannel Flow, Timothy K. Gates and Muhammad A. Al-Zahrani, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p346-351.

Static Analyses of Beams and Plates by Spline Collocation Method, Charles W. Bert and Youngkwang Sheu, EM Apr. 96, p375-378.

System Dynamics and Modified Cumulant Neglect Closure Schemes, H. Ugur Köylüoğlu and Søren R. K. Nielsen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Vibration Analysis of Horizontally Curved Beams with Warping Using DQM, Kijun Kang, Charles W. Bert and Alfred G. Striz, ST June 96, p657-662.

Differential settlement

Case History of Swimming Pool Foundation Failure, Ber-nard H. Hertlein, CF Feb. 96, p33-34.

Pipeline Beam Models Using Stiffness Property Deforma-tion Relations, Zhilong Zhou and D. W. Murray, TE Mar/Apr. 96, p164-172.

Diffraction Around Circular Canyon in Elastic Wedge Space by Plane SH-Waves, V. W. Lee and R. I. Sherif, EM June 96, p539-544.

Diffraction of SH-Waves by Subsurface Inclusions of Arbitrary Shape, Michael E. Manoogian and Vincent W. Lee, EM Feb. 96, p123-129.

Aeration of Reservoirs and Releases TVA Porous Hose Line Diffuser, Mark H. Mobley and W. Gary Brock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1311-1316.

Dam Foundation Erosion Study: the Design of a Sidewall Orifice for Simulation of a Free Trajectory Overtopping Jet, R. J. Wittler, S. R. Abt, T. L. Lewis, J. F. Ruff and K. Adhya, (North American Water and Environn Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p340-345.

Emergency Repair of An Ocean Outfall, Gail Lynch, John Linder and Robert Ooten, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2039-2043.

Fault Crossing Design and Seismic Considerations for the South Bay Ocean Outfall, Jon Y. Kaneshiro, Gregory E. Korbin and James D. Hart, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p477-486.

Oxygen Transfer Efficiency in Small Diffusers, Mark A. Tumeo and Tamar J. Stephens, EE Jan. 96, p55-57.

The South Bay Ocean Outfall, Frank X. Collins, Gregory W. McBain, Jon Y. Kaneshiro, Luciano Meiorin and Larry Stout, (North American Water and Environment Conress & Destructive Water, Chenchayya Bathala, ed., 1996), p2044-2049.

Advective-Diffusive Contaminant Migration in Unsaturated Sand and Gravel, R. Kerry Rowe and K. Badv, GT Dec. 96, p965-975

Analytical Solutions for Two-Dimensional Transport Equation with Time-Dependent Dispersion Coefficients, Mustafa M. Aral and Boshu Liao, HE Jan. 96, p20-32.

Boltzmann-Matano Analysis of Chloride Diffusion into Blended Cement Concrete, P. J. Tumidajski and G. W. Chan, MT Nov. 96, p195-200.

Chloride Migration through Clayey Silt Underlain by Fine Sand or Silt, R. Kerry Rowe and Kazem Badv, GT Jan. 96, p60-68.

Critical Concepts for Column Testing, Charles D. Shackelford, GT Oct. 94, p1804-1828.

Diffusive Transport of Organic Colloids from Sediment Beds, K. T. Valsaraj, S. Verma, I. Sojitra, D. D. Reible and L. J. Thibodeaux, EE Aug. 96, p722-729.

Evaporation of Petroleum Products from Contaminated Soil, Seon-Hong Kang and Charles S. Oulman, EE May 96, p384-387.

Fundamental Modeling of Chloride Diffusion in Concrete, Pankaj. Arora, B. N. Popov and R. E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Hindcast Simulations of Ocean Currents in Norwegian Coastal Waters; Part 2: Summary of the Main Results, Eivind A. Martinsen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Intraparticle Mass Transport Mechanism in Activated Car-bon Adsorption of Phenols, E. G. Furuya, H. T. Chang, Y. Miura, H. Yokomura, S. Tajima, S. Yamashita and K. E. Noll, EE Oct. 96, p909-916.

Modeling Horizontal Diffusion with Sigma Coordinate Sys-tem, Wenrui Huang and Malcolm Spaulding, HY June 96, p349-352.

Salt Transport Characteristics of Pak Phanang Estuary, Somboon Pornpinatepong and Malcolm L. Spaulding, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p92-105.

Soil Thermal Properties for the Design of Underground Structures in Cold Regions, J. E. Steinmanis, D. Parmar, H. S. Radhakrishna and A. S. Judge, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p471-482.

Solute Breakthrough Curves for Processed Kaolin at Low Flow Rates, Charles D. Shackelford and Patrick L. Redmond, GT Jan. 95, p17-32.

Stream-Aquifer Interaction Model with Diffusive Wave Routing, Samuel P. Perkins and Antonis D. Koussis, HY Apr. 96, p210-218.

Viscosity Characteristics of Rubber-Modified Asphalts, T. J. Lougheed and A. T. Papagiannakis, MT Aug. 96, p153-156.

Diffusion coefficient

Asymptotic Analysis of Intraparticle Diffusion in GAC Batch Reactors, D. A. Lyn, EE Nov. 96, p1013-1022.

Boltzmann-Matano Analysis of Chloride Diffusion into Blended Cement Concrete, P. J. Tumidajski and G. W. Chan, MT Nov. 96, p195-200.

Model for Effective Diffusivities in Aerobic Biofilms, Roger K. Hinson and Walter M. Kocher, EE Nov. 96, p1023-1030

Multi-Scale Models of the Diffusivity of Concrete, Dale P. Bentz and Edward J. Garboczi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p574-582.

Digestion Use of NaOH to Control pH for Solubilization of Waste Activated Sludge, Jih-Gaw Lin, Cheng-Nan Chang and Shih-Ling Hsu, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2468-2473.

Digital mapping
Gator Communicator Design of a Hand Held Digital Data
Mapper, John F. Alexander, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed.,
1996), p1052-1057.

Korean Gas Company Digitizes Maps, Records, CE Dec. 96, p20.

Subcatchment Parameterization for Runoff Modeling Using Digital Elevation Models, Jurgen Garbrecht, Lawrence W. Martz and David C. Goodrich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2689-2694. Supermaps Help Fight Fires, CE Dec. 96, p20.

Automated Knowledge-Based System for Stereo Video Metrology, Mohammed Taleb Obaidat and Kam W. Wong, SU May 96, p47-64.

Analysis of Damped and Undamped Systems Using DFT, Fady F. Barsoum and William F. Carroll, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p951-954.

Field Inspection Data Collection using Personal Digital Assistants and Digital Cameras, Anthony D. Songer and Eddy M. Rojas, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1047-

Uniformity Evaluation of Cohesionless Specimens Using Digital Image Analysis, Chun-Yi Kuo and J. David Frost, GT May 96, p390-396.

Digital terrain model

A DEM Based Hydrologic and Sediment Transport Model, Menghua Wang and Allen Hjelmfelt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2695-2700.

Developing Parameters for a Quasi-Distributed Runoff Model Using GIS, Thomas A. Evans and John C. Peters, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p2707-2712.
Development of a Hydrologic Model with Both Spatially Distributed and Physically Based Capabilities, Dennis L. Johnson and Arthur C. Miller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3200-3205.
Field Verification of Dem-Derived Watershed Response, Randal F. Bodnar, Mark Michelini and Rafael G. Quimero (North American Water and Environment Congress).

po, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p3206-3211.

p3206-3211.

subcatchment Parameterization for Runoff Modeling Using Digital Elevation Models, Jurgen Garbrecht, Lawrence W. Martz and David C. Goodrich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2689-2694.

Water Balance of the Niger Basin, D. R. Maidment, F. Olivera, Z. Ye, S. M. Reed and D. C. McKinney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3411-3416.

Environmental Considerations for Water Resources Devel-Environmental Considerations for Water Resources Development in Haor Areas of Northeastern Bangladesh, G. M. Akram Hossain and Ainun Nishat, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1063-1068.

Estimate the Hazards of Bank Burst in the Lower Yellow

River, Changxing Shi and Qingchao Ye, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p920.

water, Chenchayya Bathaia, ed., 1996), p920. Flood Management Strategies for the Rhine and Maas Rivers in the Netherlands, Jos Dijkman and Rob Klomp, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3021-3022.

Ice Jam Mitigation Using Setback Dykes: Coldwater River at Merritt, B.C. Spyros Beltaos and Paul F. Doyle, CR Dec. 96, p190-206.

Inundation Scenarios and Inundation Risk, M. P. C. Frijters and B. P. van den Bunt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p62-63.

1997), po2-03.
Lanfill Site Evaluation and Application of MODFLOW to simulate Hydraulically Conductive Zones in Bedrock Associated with Diabase Dikes in North Carolina, M. A. Ponti, Jr., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996).

A Large-Scale Experiment on Breaching in Sand-Dikes, Paul J. Visser, Arie W. Kraak, Wim T. Bakker, Marion J. Smit, D. Wino Snip, Henk J. Steetzel and Jan van de Graaff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p583-594.

Permafrost Formation and Aggradation in a 23-m High Ho-mogeneous Dyke: A Case-Study, J.-M. Konrad and R. Ladet, (Cold Regions Engineering: The Cold Regions In-frastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p700-711.

Protection Against Flooding: A New Delta Plan in the Netherlands, Frank P. Hallie and Richard E. Jorissen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Reliability Applied to Levee Seepage Analysis, Douglas A. Crum, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), 9946-949.

Reliability Assessment of Dike and Levee Embankments, Thomas F. Wolff, Edward C. Demsky, Jeffrey Schauer and Edward Perry, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p636-650.

Analysis of Behavior of Sand Surrounding Pile Tips, P. Simonini, GT Nov. 96, p897-905.

Influence of Axial Stress and Dilatancy on Rock Tunnel Stability, Xiao-Dong Pan and Edwin T. Brown, GT Feb. 96, p139-146.

Setup and Relaxation in Glacial Sand, Donald L. York, Walter G. Brusey, Frank M. Clemente and Stephen K. Law, GT Sept. 94, p1498-1513.

Comparison of Near-Field Dilutions Derived from In Situ Measurements and Simulated Dilutions at the Sand Island Sewage Outfall Plume, HI, A. A. Petrenko, B. H. Jones, T. D. Dickey and P. J. W. Roberts, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3886-3891.

Dilution of Dense Bottom Plumes, Ole Petersen and Torben Larsen, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p906-909.

Transport Modeling of the Coastal Waters of Oahu, Hawaii, Alan F. Blumberg and John P. Connolly, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4084-4089.

Dimensional analysis

Derivation of New Disperison Coefficient Equation for Natural Streams, Il Won Seo, Kil Seong Lee and Tae Sung Cheong, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4263-4268.

Dimensional Analysis of Bond Modulus in Fiber Pullout, Jyrki Kullaa, ST July 96, p783-787.

Dimensional Analysis of Colloid-Facilitated Ground-Water Contaminant Transport, M. Yavuz Corapcioglu and Shi-yan Jiang, HE Oct. 96, p139-143.

New Metric Guide Stresses "Preferred Numbers" to Aid in Building Construction, NE June 96, p10.

Disaster relief

1994 Alaska Flood Recovery Project Management of a Dis-aster Recovery by a General Contractor, David S. Westhaver and Alison H. Boyce, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p111-112.

ASCE and American Red Cross Sign Pact on Disaster Aid, NE Oct. 96, pl.

Benefits and Costs Associated with Flood Mitigation in the United States, Eugene A. Stallings, (Natural Disaster Re-duction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p153-154.

Biopositive City as Means for Natural Disaster Reduction, Alexandr Tetior, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p329-330

California's Response to Drought, Chester V. Bowling and Scott A. Jercich, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p869-874.

The Car as a Wind Shelter for Mobile Home Residents, Thomas W. Schmidlin and Paul S. King. (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p137-138.

Chung, ed., 1997), p137-138.
The Caribbean Disaster Mitigation Project: Introducing Disaster Mitigation in Highly Vulnerable Small Islands, Keith B. Ford and Jan C. Vermeiren, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p29-30.

Civil Engineering and Disaster Responses in Developing Countries, Egon B. Westen, El Apr. 96, p89-92.

Community Involvement in Hazard Mitigation, Subodh A. Kumar, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p282.

Community Preparedness and Disaster Response The City of Los Angeles: Community Emergency Response Team Program, Frank W. Borden, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p323-324.

Comparison of Multi-Layer Perceptron and Radial Basis Function Network as Tools for Flood Forecasting, A. W. Jayawardena and D. A. K. Fernando, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p457-458.

The Debris Management Cycle: An Overview, Robert C. Swan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p171-172.

Decision Process for Mitigating Seismically Vulnerable Water Facilities, Walter J. Bishop and Ernesto A. Avila,

(Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p209-210.

The DIMAK Scale for Disaster Magnitude Measuring in Service, Mark Klyachko and Ilia Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p76-77.

Earthquake Hazard Mitigation in Iran (Its Progress and Prospect), Mohsen Ghafory-Ashtiany, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p27-28.

Effects of Earthquakes on Highway Bridge Abutments, M. Zoghi, J. M. Hastings and D. W. Fenza. (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p193-194.

Evacuation Strategies for Public Officials, T. Michael Carter, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p109-110.

A Framework for Estimating Losses Due to Hurricane Ex-treme-Winds, Gregory L. F. Chiu, (Natural Disaster Re-duction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p287-288.

GIS Application for Miami Transportation System Hurri-cane Emergency Preparedness, Kangming Xu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p107-108.

GIS Gains Ground as Disaster Mitigation Tool, CE Sept. 96, p19-20.

Hazard Mitigation in the Built Environment, Susan Dowty, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p383.

Hurricane Disaster Mitigation Through Real-time Wind Analysis, Mark D. Powell, Samuel H. Houston and Igna-cio Ares, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p289-290.

Institutional Issues in Natural Hazard Mitigation, Daniel J. Alesch, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p367-368.

Integrated Planning Decision Support System (IPDS), Mario Meja-Navarro and Luis A. García, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), pl 89-190.

International Technology Transfer of Hydrologic Components, Eugene A. Stallings, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p325-326.

Lifeline Failure and Disaster Preparedness of Businesses, Melvin J. D'Souza, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p105-106

A Look at Technological Risk and Uncertainties in Flood Disaster Reduction, Shou-shan Fan and Nicholas C. Matalas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p253-255.

Mitigation of Windstorm Disasters, Kishor C. Mehta and Ernst W. Kiesling, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p205-

206.

Mitigation, Preparedness & Sustainable Development: Linking Research & Resources in the Global Information Infrastructure, Robert J. Coullahan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p321-322.

A Muli-Objective Analysis for Cyclone Shelter Planning in Bangladesh, Jahir U. Chowdhury, Rezaur Rahman, Fazlul Karim and David W. Watkins, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p213-214.

Natural Hazards Mitigation in South Carolina, Charles Lindbergh and Maurice R. Harlan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p86-87.

The New Madrid Earthquake: Preparing Nurses, Stephanie K. VanArsdale and Roy B. VanArsdale, (Natural Disaster Reducion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p97-98.

Optimum Risk Management with Uncertain Hazard and Vulnerability Information, Lawrence A. Twisdale and Peter J. Vickery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p88-

Overview of Drought Response Strategies, Darrell G. Fon-tane and Donald K. Frevert, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p857-862.

Peru's Program for Disaster Mitigation 1992-1995, Julio Kuroiwa and Dusan Zupka, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p84-85.

Reliability and Restoration of Water Supply Systems Following Earthquakes, Donald Ballantyne, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p203-204.

Risk Factors for Physical Injury During Earthquakes: Lessons from Previous Studies, Robin M. Wagner, Nicholas P. Jones, Gordon S. Smith and Kirsten O. Waller, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p78-79.

Toward A.D. 2000 in the IDNDR, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p285-286.

USAID Efforts in Mitigating Natural Disasters, Tej Mathur and Nathalie Valette-Silver, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p82-83.

 □ RISK Models to Mitigate Financial Impacts from Catastrophic Natural Events, Auguste Boissonnade, Peter Ulrich and Richard D. Wales, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p199-200. Use of Risk Models to Mitigate Financial Impacts from

Water and Sanitation Intervention in Flood Mitigation Programs, Bilquis A. Hoque, Bradley R. Sack, Nahid A. Ali and J. T. A. Chowdhury, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3916.

Water in the International Decade for Natural Disaster Reduction, A. J. Askew, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), pl.

Desartis, The 1994 California State University, Northridge Earthquake Experience - A Case Study, Gerry Simila, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p45.

ASCE and American Red Cross Sign Pact on Disaster Aid.

NE Oct. 96, pl.
The Car as a Wind Shelter for Mobile Home Residents. Thomas W. Schmidlin and Paul S. King, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p137-138.

Catastrophic Riverine Flooding: Rapid Evaluation with a Robust Numerical Model, David C. Froehlich and Mi-chael A. Ports, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p225-226.

Civil Engineering and Disaster Responses in Developing

Civil Engineering and Disaster Responses in Developing Countries, Egon B. Westen, El Apr. 96, p89-92.
Damage Analysis of a Water Distribution System Subject to Natural Hazards, James Bates, Matthew J. Cassaro and Michael A. Cassaro, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p357-358.

Damaging Earthquakes: A Scientific Laboratory, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p151-152

Development of a Multivariate Vulnerability Indicator, Wilbert O. Thomas, Jr., Betty Bonn and Albert V. Romano, (Natural Disaster Reduction, George W. Hous-

ner, ed. and Riley M. Chung, ed., 1997), p303-304.

Development of Flood Hazard Boundary Information, R. Cris Hughes and Gregory W. Lowe, (Natural Disaster Reduction, George W. Housner, ed. and Riley M.

Chung, ed., 1997), p365-366.

Developments in Effective Emergency Management: A
Means of Natural Disaster Cost Reduction, Gerald R. Schimke, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p37-38.

ner, ed. and Riley M. Chung, ed., 1997), p37-38.
The DIMAK Scale for Disaster Magnitude Measuring in Service, Mark Klyachko and Ilia Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p76-77.
Education: Pathway to Mitigation, James W. Russell, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p35-36.
Effects of Hurricane Luis on Structures in Antigua, Tony Gibbs (Natural Disaster Reduction, George W. Housner,

Effects of Hurricane Luis on Structures in Antigua, Tony Gibbs, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p295-296.
The Effects of Natural Hazards on Pipeline Safety, Bety Bonn, Myles Powers, Andy Chernoff, Alan Gregory, Dan Phillips and Donna Roy, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p68-69.

Experiences in Cleaning Up the Influence of Oil Spill on the Water Bodies, G. M. Barenboim, N. A. Rubanova and I. M. Saipulaev, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p2534.

An Expert System Application for Robot Assisted Urban Search and Rescue, John G. Blitch. (Robotics for Chal-lenging Environments, Laura A. Demsetz, ed., 1996), p199-205.

Extraordinary Flood Disaster in Tai Lake Basin of China in 1991, Ruiju Liang, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p48-54.

Extreme Winds as a Component of Catastrophic Risk, Gregory L. F. Chiu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p498-501.

FEMA Conference Stresses Preplanning for Natural Disasters, CE Feb. 96, p14,16.

GIS Gains Ground as Disaster Mitigation Tool, CE Sept. 96, p19-20.

The Great USA flood of 1993, Lee W. Larson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2.

Housner, "Father of Earthquake Engineering," Leads ASCE's Disaster Mitigation Conference, NE Sept. 96, p1.4.

Insurance and Damage Mitigation - Incentive or Disincentive, George R. Walker, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p195-196.

Lessons of the Recent Earthquakes in Sakhalin Region, Russia, Mark Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

Mortality and Morbidity Patterns Associated with the October 12, 1992 Egypt Earthquake, Josephine Malilay, Ibrahim Fayez Elias, David Olson, Thomas Sinks and Eric Noji, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p266-268.

Natural Disaster Losses to Conventional Construction and their Mitigation (An Insurance Company Response to Catastrophic Losses Since Hurricane Hugo), Edward M. Lantsch, Rose Geier Grant and Laird Macdonald, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p778-785.

Natural Disaster Mitigation: It Needs to Begin at Home, NE July 96, p1.

Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997, 0-7844-0153-5, 432pp.

Natural Disaster Reduction Structures Specialist of the Urban Search and Rescue Task Forces, Daniel W. Cook, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p221-222.

Natural Hazard Zonation, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p361-362.

New Educational Course "Sustainable Development Eco-City", Alexandr Tetior, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p31-32.

Offshore Platform's Failure and Repair - Case Studies, T. S. Thandavamoorthy and A. R. Santhakumar, (Natural Disaster Reduction, George W. Housner, ed. and Riley

M. Chung, ed., 1997), p181-182.

On Housing Administration and Legislation of Egypt, A. S. Elnashai and M. M. Soliman, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p280-281.

On Reliability Assessment of Infrastructure Systems under Strong Earthquake, Hitoshi Furuta and Naruhito Shiraishi, (Probabilisic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p632-635

Post-Hurricane Investigations: Quantifying Damage, Gregory L. F. Chiu, Sara Wadia-Fascetti and Mussaddeque Hossein, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p74-75.

Range of Impacts of Some Recent U.S. Disasters and The Implications for Housing Recovery, Claire B. Rubin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p168-170.

Reader Dismayed, Roy Gittings, CE Dec. 96, p30-31.

Reducing Glacial-Lake Outburst Hazards in the Khumbu Himal, Richard Kattelmann and Teiji Watanabe, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p258-259.

Seismic Sleuths: A Grades 7-12 Materials Development and Teacher Enhancement Project, M. Frank Watt Ireton, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p33-34.

Urban Disaster Vulnerability Assessment & Lessening Is a Key for Safe Development, Mark Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p11-12. The Use of Monitoring of Russian Water Objects for the Decrease of Disaster Consequences, G. M. Barenboim and G. M. Ostrovski, (North American Water and Enviment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1341.

Water in the International Decade for Natural Disaster Reduction, A. J. Askew, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), pl. Whose Fault Was It? Alice C. Dillard, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1274-1277.

'A Comprehensive Strategy for Mitigation', R. T. Severn, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p13-14.

"Elevating the Importance & Visibility of Mitigation— Promoting Public Awareness", Kenneth A. Deutsch, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p165-166.

Discharge 3D Model of Estuarine Circulation and Water Quality Induced by Surface Discharges, Wenrui Huang and Mal-colm Spaulding, HY Apr. 95, p300-311.

Accidental Pollution Simulation System and Pollutant Transboundary Transport Problems for Tura River, N. N. Shagalova, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p714.

Bacterial and Chemical Pollution of Littoral Waters of Lake Ohrid at Pogradec - Town Area, Valer Angjeli, Vasilika Petro and Ramazan Bukli, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2536.

Best Management Practices and Community Education, Richard Boon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2648-2653.

Bridge Abutment Scour in Floodplain with Backwater, Terry W. Sturm and Aftab Sadiq, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p921-930.

Comparison of General vs. Multi Sector NPDES Storm Water Permits, William H. Espey, John Whitescarver and Michael Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2810-2814.

Dam Foundation Erosion Study: the Design of a Sidewall Orifice for Simulation of a Free Trajectory Overtopping Jet, R. J. Wittler, S. R. Abt, T. L. Lewis, J. F. Ruff and K. Adhya, (North American Water and Environs Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p340-345.

Design of Microirrigation Submain Units, Yaohu Kang and Soichi Nishiyama, IR Mar./Apr. 96, p83-89.

Dynamic vs. Quasi-Static Effluent Limits, Joe Karkoski, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p643-648.

Earthquake-Initiated Hazmat Releases: An Assessment, Michael K. Lindell and Ronald W. Perry, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p237-238. Effects of Ignoring Well Losses on the Specific Capacity Function, Otto J. Helweg and Timothy Mays, (North

American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2224-2229. Flood Trends in Austria, F. Nobilis and P. Lorenz, (North

American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p917.

Formation and Propagation of Tidal Bore, Nitish C. Ma-zumder and Somnath Bose, WW May/June 95, p167-

A Framework for Sanitation and Health Risk Assessment. Charles G. Gunnerson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2390-2395.

Glacier-Generated Floods and Debris Flows, Andrew G. Fountain and Joseph S. Walder, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2449. Hydrodynamic Model and Sensitivity Analysis for San Juan Bay, P. R. Lisa J. Wolf and Gavin Gong, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p505-517.

Hydrological Analysis of High Flows and Floods in the Sava River Near Zagreb (Croatia), Dusan Trninic, Lidija Tadic and Zdenko Tadic, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p918.

Krayya Batman, ed., 1990, 1976.
Hysteresis Effect of Karst Vadose Zone in Spring Kr5, Mt. Kräuterin, Austria, Dachang Zhang, Rudolf Pavuza, Karl Mais and Hans Fischer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1754-1759.

Impact of Point and Nonpoint Discharges on the Water Quality of a Reach of the Red River of the North, Anil Peggerla and G. Padmanabhan, (North American Water d Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2504-2509.

Influence of Backwater on Headcut Advance, Kerry M. Robinson and Gregory J. Hanson, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p117-122.

Management of Stream-Aquifer Systems in the 21st Century, Babs Makinde-Odusola, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2787-2792.

Managing Border Irrigation for Near-Zero Discharge, T. S. Strelkoff and A. J. Clemmens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1711-1715.

Mitigation of Flood Hazard on Alluvial Fans, Julianne J. Miller and Richard H. French, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2324-2329.

Non-point Source Policies for Agricultural Drainage, Dennis W. Westcot, Joe Karkoski and Rudy Schnagl, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p875-880.

PCE in Dewatering Flows - A Case Study Risk-Based Clean-Up Action Levels, Shala L. Craig and Sri Krishnamachari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2242-2247.

Performance of Baffle-Sluice Modules with Changed Mod-ule Dimensions, B. Maheswara Babu, P. K. Mishra and T. Satyanarayana, IR Sept./Oct. 96, p310-313.

Pilot Testing of a Zero-Discharge Treatment Process, Pascale Lagacé, Paul R. Stuart and Ronald Zaloum, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p99-104.

Plans for Testing and Evaluating the New Autoventing Turbines at TVA's Norris Hydro Project, Paul Hopping, Patrick March, Thomas Brice and Joseph Cybularz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1299-1304.

Preparation of Notification Models Using Continuous Modeling Techniques, Mark TenBroek, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2474-2479.

Probability Distributions for Peak Stage on Rivers Affected by Ice Jams, Andrew M. Tuthill, James L. Wuebben, Steven F. Daly and Kathleen D. White, CR Mar. 96,

The Rhine Flood Events in December 1993/January 1994 and in January 1995, H. Engel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p243-244.

Risk-Equivalent Seasonal Discharge Programs for Ice-Covered Rivers, Corinne L. Wotton and Barbara J. Lence, WR May/June 95, p275-282.

The Role of Circulation Patterns on the Simulation of Constituent Transport in San Juan Bay, Puerto Rico, Gavin Gong and James D. Bowen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p518-529.

Siting Low Profile Grade Control Structures for the Muddy Creek Demonstration Stream Restoration Research Project, R. J. Wittler, D. R. Eby, S. D. Keeney, C. C. Watson and S. R. Abt, (North American Water and Environment Congress & Destructive Water, Chenchavva Bathala. ed., 1996), p105-110.

Soil-Limiting Flow from Subsurface Emitters. I: Pressure Measurements, U. Shani, S. Xue, R. Gordin-Katz and A. W. Warrick, IR Sept./Oct. 96, p291-295.

Sources and Circulation of Salt in the San Joaquin River

Basin, Leslie F. Grober, (North American Water and Environment Congress & Destructive Water, Chenchayya

Spatial Spring Runoff Modeling in a River Basin for Purpose of Forecasting, M. Sosedko and V. Manukalo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Storm Water General Industrial Permit Non-Filers Iden-tification and Outreach, L. Donald Duke and Y. Jae Chung, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2619-2624.

A Stormwater Management Plan, Diana Harvey, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2066-2065. Time of Concentration and Peak Discharge Formulas for Planes in Series, Tommy S. W. Wong, IR July/Aug, 96,

p256-258

P.2-50-258.

Transferable Discharge Permits as a Function of Fluctuating Stream Conditions, Norman J. Dudley, Michelle Coelli and John J. Pigram, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p272-293.

Treatment of Wet Weather Discharges in Columbus, Georgia, Stephen P. Hides, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p582-587.

Use of Channel Forming Discharge Concepts for Flood Control Channel Design, Brad R. Hall and Richard D. Hey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1507-1512.

Discharge coefficients

Application of the Newton Method in Valve Discharge Coefficient Relationships, Jorge A. Garcia and Antonia M. Romero, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p946-953.

Discharge Coefficient of Rectangular Side Weirs, R. Singh, D. Manivannan and T. Satyanarayana, IR July/Aug. 94,

p814-819.

Increasing Computational Accuracy of Radial Gate Flows, Brian Henning and Timothy F. Kacerek, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3592-3597.

Sprinkler Performance as Function of Nozzle Geometrical Parameters, Jiusheng Li, IR July/Aug. 96, p244-247.

Discharge measurement

Discharge Characteristics of Overshot Gates, Brian Wahlin and John Replogle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3604-3609.

ia, ed., 1996), p.504-3009.
Discharge Measurements and Predictions in Wetlands, Vassilios A. Tsihrintzis, David A. Sikkema, Marcia Levinson and Jose L. Oliveros, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.274-279.

Methods for Measuring Discharge under Ice Cover, John F. Walker, HY Nov. 94, p1327-1336.

A New Technique for Measuring Vegetation Density, Syndi J. Dudley, Steven R. Abt, Charles D. Bonham and J. Craig Fischenich, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3656-3661.

Differing Site Conditions—Industry Consensus Opposes Ruling, S. Scot Litke, ME July/Aug. 96, p14-15.

Discontinuities

Element-Embedded Localization Band Based on Regularized Displacement Discontinuity, Ragnar Larsson and Kenneth Runesson, EM May 96, p402-411.

Finite Element Analysis of Discontinuities in Concrete, Hong D. Kang and Kaspar J. Willam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1054-1057.

Analysis of Disjoint Two-Dimensional Particle Assemblies, Tuong X. Tran and Richard B. Nelson, EM Dec. 96, p1139-1148.

Application of Discrete Event Methodologies to Urban Multimodal Transportation Systems, Angela Di Febbraro and Simona Sacone, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p154-158.

Computer Modelling for a Discrete Particle System, Kofi B. Acheampong, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p731-734.

Experimental Measurement of Strain Gradient Effects in Granular Materials, Matthew R. Kuhn, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p881-885.

Flexible Boundary for Discrete Element Simulation of Granular Assemblies, Runing Zhang and Stein Sture, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Micromechanical Simulation of Geotechnical Problems using Massively Parallel Supercomputers, David W. Washington and Jap N. Meegoda, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p717-721.

Nonlinear Pile Foundation Analysis Üsing Florida-Pier, M. I. Hoit, M. McVay, C. Hays and P. W. Andrade, BE

Nov. 96, p135-142.

On the Numerical Treatment of Vorticity Diffusion from a Boundary Element in the Discrete Vortex Element Method, Fusen He and Tsung-chow Su, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p844-847.

Random Responses of Discretized Structures with Energy Dissipation Devices, C. W. S. To, M. L. Liu and J. M. Kelly, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p824-827.

Shock Compression in Granular Media Using DFEM, Abdolreza Joghataie and Jamshid Ghaboussi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p426-429.

Small-Strain Response of Random Arrays of Spheres Using Discrete Element Method, Tang-Tat Ng and Emmar Petrakis, EM Mar. 96, p239-244.

Theory and Simulations of Relaxation and Cyclic Granular Flows, Marijan Babic and William J. Bocchieri, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

A Two-Level Approach for the Control of Freeways, A. Alessandri, A. Di Febbraro and A. Ferrara, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p429-433.

Crystal Growth in Microgravity, Grant Meyer, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1295-1297.

EPA Requires Cryptosporidium Watch, CE July 96, p20.

Life Cycle Cost Analysis of a Storburn Propane Combus-tion Toilet, Paul Ritz and Herbert P. Schroeder, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p816-827.

Simulating DBP Precursor Transport in Sacramento Delta, Paul H. Hutton, Nirmala Mahadevan and Francis I. Chung, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3557-3562.

Controlling Microbial Biota Transfer in the Garrison Diversion Unit, Charles J. Moretti, David M. Kopchynski and Tia L. Cruise, WR May/June 96, p197-204. Design Guidelines for UV Disinfection Facilities, Heba Awad, Jeff Kuo and Jamal Awad, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2999-3004.

Establishing the Relative Process Risks for Chlorination and Ozonation - A Case Study Illustrates the Need to Evaluate the Process Hazard Implications of a Change in Drinking Water Disinfection Process due to D/DBP Regulations, Paul G. Beswick, Craig E. Brackbill and L. Donald Duke, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed. 1996), p1021-1025. ed., 1996), p1021-1026.

Modified Jar Test Studies for Removal of Disinfection By-Products (DBPs) and Color Compounds from Ground-water, Mark Williams, Badri Badriyha, Shih-Chieh Tu, Jamal Awad and Massoud Pirbazari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1009-1014.

Moment Analysis of Tracer Experiments, Charles N. Haas, EE Dec. 96, p1121-1123.

Numerical Modeling of Flows in Ultraviolet Disinfection Channels, D. A. Lyn, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3005-3009.

Simulation of Unsaturated Zone Virus Transport Adjacent to Municipal Wells, D. D. Adelman and M. A. Tabidian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

US/Mexico Border Drinking Water Study, Blake L. Atkins, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

UV Disinfection of Wastewater: Probabilistic Approach to Design, Frank J. Loge, Jeannie L. Darby and George Tchobanoglous, EE Dec. 96, p1078-1084.

Analytical Solutions for Two-Dimensional Transport Equa-tion with Time-Dependent Dispersion Coefficients, Mus-tafa M. Aral and Boshu Liao, HE Jan. 96, p20-32.

BAYMAP: A Simplified Embayment Flushing and Trans-port Model System, J. Craig Swanson and Daniel Men-delsohn, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p570-582.

Conservative Characteristics-Based Schemes for Mass Transport, C. W. Li and T. S. Yu, HY Sept. 94, p1089-

Field Estimation of Standard Deviations for 3D Gaussian Model, An Jin and Shoou-Yuh Chang, EE July 96, p660-662

Hydraulic Design of Subsurface Flow Wetlands, Edward L. Marsteiner, Thomas L. Theis, Anthony G. Collins and Thomas C. Young, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2421-2426.

Hydrologic Theory of Dispersion in Heterogeneous Aqui-fers, Sergio E. Serrano, HE Oct. 96, p144-151.

Modeling Low Velocity/High Dispersion Flow in Water Distribution Systems, David H. Axworthy and Bryan W. Karney, WR May/June 96, p218-221.

Moment Analysis of Tracer Experiments, Charles N. Haas, EE Dec. 96, p1121-1123.

Shear Dispersion in the Benthic Boundary Layer, C. G. Hannah, J. W. Loder and Y. Shen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p454-465.

Solute Breakthrough Curves for Processed Kaolin at Low Flow Rates, Charles D. Shackelford and Patrick L. Redmond, GT Jan. 95, p17-32.

Solution of the Advection-Dispersion Equation: Continuo Load of Finite Duration, Robert L. Runkel, EE Sept. 96, p830-832

Wind Tunnel Modeling of Atmospheric Dispersion in the Vicinity of Buildings, P. Saathoff, H. Wu and T. Statho-poulos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1131-1134.

Dispersion relations

Derivation of New Disperison Coefficient Equation for Natural Streams, Il Won Seo, Kil Seong Lee and Tac Sung Cheong, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4263-4268.

Displacement

Buckling Analysis of Curved Beams by Finite-Element Discretization, Chai H. Yoo, Young J. Kang and James S. Davidson, EM Aug. 96, p762-770.

Design of Seismic Resistant Concrete Columns for Confinement, Murat Saatcioglu, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p233-244.

Editor's Note, David Darwin, ST Oct. 96, p1127.

Effect of Ground Condition on Earthquake Damage, Mako-to Nasu, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p233-234.

Element-Embedded Localization Band Based on Regularized Displacement Discontinuity, Ragnar Larsson and Kenneth Runesson, EM May 96, p402-411.

Experimental Investigation of Cumulative Seismic Damag in Concrete Bridge Piers, Sashi K. Kunnath, Ashraf El-Bahy, William C. Stone and Andrew W. Taylor, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p381-382.

Experiments with Elasto-Plastic Oscillator, S. Randrup-Thomsen and O. Ditlevsen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-

cea D. Grigoriu, ed., 1996), p518-521

Finite-Displacement Analysis of Laminated Composite Strips with Extension-Twist Coupling, Erian A. Ar-manios, Andrew Makeev and David Hooke, AS July 96,

Influence of Axial Stress and Dilatancy on Rock Tunnel Stability, Xiao-Dong Pan and Edwin T. Brown, GT Feb. 96, p139-146.

Large-Displacement Analysis of Elastoplastic Thin-Walled Frames. I: Formulation and Implementation, B. A. Izzuddin and D. Lloyd Smith, ST Aug. 96, p905-914.

Large-Displacement Analysis of Elastoplastic Thin-Walled Frames. II: Verification and Application, B. A. Izzuddin and D. Lloyd Smith, ST Aug. 96, p915-925.

Practical Advanced Analysis for Steel Frame Design, Seung-Eock Kim and Wai-Fah Chen, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p19-30.

Rotation of Large Gravity Walls on Rigid Foundations under Seismic Loading, R. S. Steedman and X. Zeng, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), 938-56.

Seismic Response of a Block on an Inclined Plane to Vertical and Horizontal Excitation Acting Simultaneously, Liping Yan, Neven Matasovic and Edward Kavazanjian, Jr., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1110-1113.

Semianalytical Solutions to Griffith Fracture Under Varia-ble Pressure, Albert T. Yeung, EM June 96, p580-584.

Thin-Walled Curved Beams. I: Formulation of Nonlinear Equations, Young J. Kang and Chai H. Yoo, EM Oct. 94,

Thin-Walled Curved Beams. II: Analytical Solutions for Buckling of Arches, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2102-2125.

Variational Principles Developed for and Applied to Analysis of Stochastic Beams, I. Elishakoff, Y. J. Ren and M. Shinozuka, EM June 96, p559-565.

A Corotational Total Lagrangian Finite Element Analysis with Application to the Aircraft Tire, James M. Greer, Jr. and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1108-1114.

Dynamic Response of Cantilever Retaining Walls, A. S. Veletsos and A. H. Younan, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p19-20.

Earthquake Destructiveness Potential Factor and Permanent Displacements of Gravity Retaining Walls, Teresa Crespellani, Claudia Madiai and Giovanni Vannucchi, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p124-133.

In-Situ Dynamic Response of Cantilever Walls, Sreenivas Alampalli and Ahmed-W. Elgamal, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p57-76.

NPC Integrator and Its Unconditional Stability for Response Analysis of Constrained Structures, David W. Begg and Xiaojian Liu, (Engineering, Construction. and Operations in Space, Stewart W. Johnson, ed., 1996), p1237-1244.

On Seismic Displacements of Rigid Retaining Walls, Yingwei Wu and Shamsher Prakash, (Analysis and De-sign of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p21-37.

Three-Dimensional Analysis of Doubly Curved Laminated Shells, Chih-Ping Wu, Jiann-Quo Tarn and Shu-Man Chi, EM May 96, p391-401.

Building a Landfill on Mud(Available only in Geo/ Environmental Special Issue), Michael J. Byle and Anne M. Germain, CE July 96, p12A-16A.

Dispute resolution
Mediation Does Not Abrogate Arbitration, CE Oct. 96, p30.

Dissolved organic carbon

Fate of Organics during Column Studies of Soil Aquifer Treatment, David M. Quanrud, Robert G. Arnold, L. G. Wilson, Howard J. Gordon, David W. Graham and Gary L. Amy, EE Apr. 96, p314-321.

Simulating DBP Precursor Transport in Sacramento Delta, Paul H. Hutton, Nirmala Mahadevan and Francis I. Chung, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3557-3562.

Dissolved oxygen

Dependence of Water Quality and Fish Habitat on Lake Morphometry and Meteorology, Midhat Hondzo and Heinz G. Stefan, WR Sept./Oct. 96, p364-373.

Determination of Reaeration Coefficients: Whole-Lake Approach, Rakesh K. Gelda, Martin T. Auer, Steven W. Effler, Steven C. Chapra and Michelle L. Storey, EE Apr. 96, p269-275

Key Sources of Uncertainty in QUAL2E Model of Passaic River, Charles S. Melching and Chun G. Yoon, WR

Mar./Apr. 96, p105-113.

Lake Number: A Long-Term Lake Water Quality Predictor, Midhat Hondzo, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3176-3187.

Modeling of Surface Water Pumps in TVA Reservoirs, Boualem Hadjerioua, Mark H. Mobley, Gary E. Hauser and W. Gary Brock, (North American Water and Envinent Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3188-3193.

New Jersey Nearshore Hypoxia During the Summer 1976, Ross W. Hall and Mark S. Dortch, (Estuarine and Coast-al Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p608-617.

Plans for Testing and Evaluating the New Autoventing Tur-bines at TVA's Norris Hydro Project, Paul Hopping, Pa-trick March, Thomas Brice and Joseph Cybularz, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), pl 299-1304.

Postaudit of Upper Mississippi River BOD/DO Model, Wu-Seng Lung, EE May 96, p350-358.

Simulation of Dissolved Oxygen in Sacramento-San Joaquin Delta, Haridarshan L. Rajbhandari, Gerald T. Orlob and Francis I. Chung, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3545-3550.

Upper Chehalis River Pollutant Capacity and Load Allocations, Paul J. Pickett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1045-1050.

Weir Aeration: Models and Unit Energy Consumption, Ning H. Tang, N. Nirmalakhandan and R. E. Speece, EE Feb. 95, p196-199.

Dissolved solids

Dissolution of Lead Paint in Aqueous Solutions, Gregory L. Barnes and Allen P. Davis, EE July 96, p663-666.

Salinity and Hydraulic Issues at a Constructed Wetlands, W. G. Hines, J. E. Burkstaller and A. F. Gove, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1178-1183.

Use of Fluorspar in Water Fluoridation, Ching-Gang Peng, Jian Qi and Alan J. Rubin, EE Feb. 96, p132-140.

Distance measuring

Survey Distance Units: A Better Way, Larry E. Stanfel, SU Aug. 94, p130-132.

EBEF Method for Distortional Analysis of Steel Box Girder Bridges, Yao T. Hsu, C. C. Fu and David R. Schelling, ST Mar. 95, p557-566.

Lateral Distortional Buckling of Monosymmetric Beams under Point Load, Owen Hughes and Ming Ma, EM Oct. 96, p1022-1029

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Distributed processing

Communication Strategies for Distributed Traffic Systems, Norman Hunt, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p256-270.

Distributed Control for Serial Assembly in Space, Frank McQuade and Colin R. McInnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1169-1175.

Formal Specification of Concurrent Finite Element Sys-tems, Harpreet S. Chadha and John W. Baugh, Jr., (Anal-ysis and Computation, Franklin Y. Cheng, ed., 1996),

An Implementation of Finite Element Method on Distributed Workstations, Eduardo De Santiago and Kincho H. Law, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p188-199.

Mapping the Future, CE July 96, p18-19.

Metacomputing on the Horizon, CE Dec. 96, p20.

A Space Systems Testbed for Situated Agent Observability and Interaction, Sam Siewert and Gary Nutt, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p122-128

Toward a Generic Kernel for Air Traffic Management System, C. Dujardin, G. Joly, D. Hollinger and O. Palmade, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p87-91.

Effect of Sampling Variability on Hindcast and Measured Wave Heights, George Z. Forristall, John C. Heideman, Ian M. Leggett, Bram Roskam and Luc Vanderschuren, WW Sept./Oct. 96, p216-225.

Field Evaluation of Water and Solute Distribution from a Point Source, Akbar Ali Khan, Muluneh Yitayew and A. W. Warrick, IR July/Aug. 96, p221-227.

Grain-Size Distribution for Smallest Possible Void Ratio, B. Aberg, GT Jan. 96, p74-77.

Selection of Parameter-Estimation Method for LP3 Distribution, Babak Naghavi and Fang Xin Yu, IR Jan./Feb. 96, p24-30.

Void Sizes in Granular Soils, B. Aberg, GT Mar. 96, p236-239.

Distribution functions

Transforms for Runoff and Sediment Transport, Pierre Y. Julien, HE July 96, p114-122.

Wind Wave Simulation in Coastal Zone, Tatjana Talipova, Efim Pelinovsky and Eliezer Kit, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p105-115.

Distribution patterns Status Report - Task Committee on GIS Models and Dis-tributed Models of the Watershed, Rafael G. Quimpo, Paul A. DeBarry and E. James Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2915-2920.

Random Response to Periodic Excitation with Correlated Disturbances, Zhikun Hou, Yunshen Zhou, Mikhail F. Dimentherg and Mohammad Noori, EM Nov. 96, p1101-1108.

Analytical Solutions of Seepage Into Ditches From Ponded Fields, Gautam Barua and K. N. Tiwari, IR Nov./Dec. 95, p396-404.

Diversification

Business Plans Live and Grow, Jack E. Reinhard, P.E., ME Nov./Dec. 96, p3-4.

Chandler Canal Fish Screen Facilities, Arthur Glickman and Rick Christensen, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p887-892.

Lateral Diversion in the PTn Unit: Capillary-Barrier Analysis, Michael L. Wilson, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

p111-113.

Problem and Technical Solutions: The Seven Oaks Dam, Physical Elements of the Seven Oaks Dam Feature, Robert E. Koplin, (North American Water and Environ ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2177-2184.

Sediment Control at Water Intakes, Yalin Wang, A. Jacob Odgaard, Bruce W. Melville and Subhash C. Jain, HY

June 96, p353-356.

Diversion structures

A Combined Physical and Mathematical Modeling Scheme for Kapichira Hydropower Project, Malawi, K. Sivakumaran and E. Cole, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3806-3811. Controlling Microbial Biota Transfer in the Garrison Diver-

sion Unit, Charles J. Moretti, David M. Kopchynski and

Tia L. Cruise, WR May/June 96, p197-204.

Developing a Rating Table for the Central Diversion Dam Radial Gates, Michael A. Drain, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3598-3603.

Chayya Bailisai, ed., 1990, p.3598-3003.
Large River Diversion Optimization Considering the Uncertainties Involved, M. H. Afshar, A. Afshar and H. Parvazian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4347-4352.
Optimal Design of Sloping Weir, Prabhata K. Swamee, Govinda C. Mishra and Adel A. S. Salem, IR July/Aug. 96, n248-255.

96, p248-255.

Results of Field Evaluations of the New Modular Inclined Fish Diversion Screen, F. C. Winchell, S. V. Amral, E. P. Taft, T. C. Cook, A. W. Plizga, E. M. Paolini and C. W. Sullivan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p881-886.

Docks

Design Criteria for Fenders at Ferry Landings, Charles T. Jahren and Ralph Jones, WW July/Aug. 96, p187-194.

27 Years Documenting Engineering Heritage, Eric DeLony, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p162-

Bechtel Adopts New Network, CE Nov. 96, p27.

Estimating Loss of Productivity Claims, Gasan G. Kallo,

ME Nov./Dec. 96, p13-15.

Global Project Documentation and Communications Using HTML on the World Wide Web, L. Y. Liu, A. L. Stumpf and S. Y. Chin, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p15-20. OSHA May Use Administrative Subpoena, CE Dec. 96,

"Do Nothing" Title Misleading, Bruce E. Rittmann, Mi-chael C. Kavanaugh and Jacqueline A. MacDonald, CE Nov. 96, p36,38.

Dolphins, structures

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Behavior of Pile-Supported Dolphins in Marine Clay Under Lateral Loading, S. Narasimha Rao, V. G. S. T. Ramakr-ishna and G. Balarama Raju, GT Aug. 96, p607-612.

Conceptual Design of a Crater Lunar Base, Alice Eichold, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p920-927.

Dome-Shaped Space Trusses Formed by Means of Postten-sioning, G. Dehdashti and L. C. Schmidt, ST Oct. 96, p1240-1245.

Influence of Imperfections on Nonlinear Dynamic Response of Trusses, Aslam Kassimali and Khalil Rabiei, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p534-541.

Innovative Radiation Shields for Lunar Surface Operations, Milton Schwartz and Raymond S. Leonard, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p349-354.

Monitoring Systems on Historic Buildings: The Brunelleschi Dome, Gianni Bartoli, Andrea Chiarugi and Vittorio Gusella, ST June 96, p663-673.

Seattle's Kingdome Receives Rigorous Seismic Study, CE Apr. 96, p12.

Telling Florida's Water Story, David W. Landis and Blair K. Hanuschak, CE Feb. 96, p40-43.

Doppler systems

Marine Geophysical Investigation to Determine the Cause for Failure of the Yaquina Bay Jetty, Newport, Oregon, Richard E. Sylwester, Jon L. Dasler and Terry C. Sullivan, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p42-55.

Velocity and Turbulence Distribution in Unsteady Open-Channel Flows, T. Song and W. H. Graf, HY Mar. 96,

Negative Skin Friction on Piles in Layered Soil Deposits, K. S. Wong and C. I. Teh, GT June 95, p457-465.

Evaluating the Performance of Construction Equipment Operators in Egypt, Ashraf M. Elazouni and Ismail M. Basha, CO June 96, p109-114.

To Illustrate the Point, Bruce Morrison, CE June 96, p28.

Stochastic Response of Offshore Structures Excited by Drag Forces, Arvid Naess and Solomon C. S. Yim, EM May 96, p442-448.

Tilt of Stationary Capsule in Pipe, Chih-Chiang Cheng and Henry Liu, HY Feb. 96, p90-96.

Train/Vehicles Wind-Induced Hazard and Its Mitigation, Masaru Matsumoto and Tatsuo Maeda, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p131-132.

Drag coefficient

Effects of Southern California Kelp Beds on Waves, M. Hany S. Elwany, William C. O'Reilly, Robert T. Guza and Reinhard E. Flick, WW Mar./Apr. 95, p143-150. Field Measurement of Boulder Flow Drag, James C. Bath-

rieu Measurement of Bouluet Prow Drag, James C. Bair-urst, HY Mar. 96, p167-169.

Vegetation-Induced Drag: An Experimental Study, Chad Dunn, Fabián López and Marcelo García, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3824-3828.

Analytical Solutions of Seepage Into Ditches From Ponded Fields, Gautam Barua and K. N. Tiwari, IR Nov/Dec. 95, p396-404.

Applications of Soil Nailing in Residual Soil, James W. Sigourney, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p57-65.

Canal Design by Dynamic Programming, Goran Radovic, IR Jan. Feb. 96, p59-63.

Development and Application of a Dual Drainage Model for the Wethersfield Area of the City of Hartford, Con-necticut, Michael E. Hulley, C. Neil Geldof, William W. S. Gray and A. Charles Rowney, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1242-1248.

Discussion of Environmental Engineering Forum: Long-Term Effects of Wetland Treatment of Mine Drainage (November/December 1993, Vol. 119, No. 6, by Thomas M. Walski (Environmental Engineering Forum), Frederick M. Williams and Lloyd R. Stark, EE Jan. 96, p84-85.

Ditch Drainage Theories for Homogeneous Anisotropic Soil, Gautam Barua and K. N. Tiwari, IR Sept./Oct. 96,

p276-285.

Dormant Season Alfalfa Water Balance on the NIIP, Brian Boman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p231-236.

Drainage Ponds and Demonstration Wetlands, Joseph Skorupa, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p394-399.

Drainage Recirculation Project for Water Quality, Kevin Johansen and Robert Stoddard, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1105-1110.

Drop Structures in the Real World: Guidelines for Drop Structures in Grass Lined and Wetlands Channels, Wil-liam C. Taggart, William G. DeGroot, Katherine J. Chase and Peter L. Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p594-599.

Drought Experiences of Ohio and Their Applications in the DAR-JAI River Basin of Taiwan, Tiao J. Chang, Wen C. Huang and Chian M. Wu, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p628-636.

Economic Issues Regarding Water Quality Objectives in the Grassland Basin, Dennis Wichelns and Laurie Houston, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Emerging Concepts for Management of Salinity and Drain-age in Irrigated Regions, M. E. Grismer, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2126-2129.

Impacts of Sea Level Rise on Coastal Water Resources Management, Chin Y. Kuo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1822-1827.

Integrating Drainage, Water Quality, Wetlands, and Habitat in a Planned Community Development, Michael R. Galuzzi and John M. Pflaum, UP Sept. 96, p101-108.

Long-term Consequences of Recycling Drainage Water for Irrigation, S. R. Grattan and J. D. Rhoades, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1942-1947.

Neural Net for Determining DEM-Based Model Drainage Pattern, Jehng-Jung Kao, IR Mar / Apr. 96, p112-121.

An Open Graded Base to Reduce Thaw Weakening in Flex-ible Pavements, Maureen A. Kestler, (Cold Regions En-gineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p878-889.

A Regional Management Plan to Improve Water Quality in the Grassland Basin, Dennis Wichelns, Laurie Houston, Dan Nelson and Joseph McGahan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p655-660.

Scour at Culvert Outlets: Considerations Present and Fu-ture, Steven R. Abt and Phillip L. Thompson, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3927-3931.

Soil Water Chemistry of Irrigation with Drainwater, B. R. Faulkner and J. C. Guitjens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1483-1488.

Sources and Circulation of Salt in the San Joaquin River Basin, Leslie F. Grober, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p649-654.

Successful Implementation of Grouted Boulder Grade Control Structures on Drainageways in the Denver Metropol-itan Area, John M. Pflaum, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p836-841.

Use of Geosynthetics in Road and Airfield Construction in Cold Regions, Thomas C. Kinney, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p271-288.

Drainage basins

The 1995 Floods of Rhine and Meuse - How Predictable are Water Levels in the Netherlands, Bart Parmet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p249-250.

Acquisition and Restoration of a Drainage District in the Snohomish River Valley, John Engel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3950-3955.

Development of a Hydrologic Model with Both Spatially Distributed and Physically Based Capabilities, Dennis L. Johnson and Arthur C. Miller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3200-3205.

Flash Floods and Their Control in the Indian Arid Zone, K. D. Sharma, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2539.

Flood Forecasting Model for an Alpine Drainage Basin -River Drau in Austria, D. Gutknecht, W. Kugi and F. Nobilis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Identification of a General Linear Model for Reservoir Inflows Forecasting, J. Ribeiro, J. Rousselle, J. D. Salas and H. Ta Trung, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2354-2359.

Mixing Processes in the Dangava River Estuary, B. Hakansson, E. Zaharchenko and H. B. Wittgren, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3276-3277.

Reduction of Downstream Impacts Through Use of Varia-ble Detention Basin Volume Requirements, Conor C. Shea, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1858-1863.

Statistical Distributions and Natural Hydrograph, Nazeer Ahmed, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p292-297.

Drainage structures

Reliability of a Box Culvert Structure under a Levee during Project Floods, Robert C. Patev and Mary Ann Leggett. (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p118-133.

Drainage systems

Alternatives for Managing Shallow Ground Water in Arid Irrigated Areas, James E. Ayars, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p183-188.

Capillary Pressure-Saturation Relationships in Fracture, Zi-tong Ye, Bing Han, Sishen Li and Jiafa Zhang, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3869-3873.

County-Wide Drainage Study Using GIS, J. J. DeVries and T. V. Hromadka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3623-3628.

Direct Sizing of Small Stormwater Pump Stations, David C. Froehlich, (North American Water and Environ Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2072-2077.

Dune Drain Field, CE Dec. 96, p15-16.

Dune Drain Field, CE Dec. 9, 15-16.

Efficiencies of Drainage Systems and Improved Water Management, I. C. Tod and M. E. Grismer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2136-2144.

Hollyhills Drain Relief for 1920's Drainage System, T. Scott Schales and Glen Drogin, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4251-4256.

Moisture Penetration of Concrete Floor Slabs, Basement Walls, and Flat Slab Ceilings, Robert W. Day, SC Nov. 96, p104-107

New on the Web, CE June 96, p8.

Searching for Optimal Combinations of Stormwater Deten-tion Basins, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2264-2269.

Storm Drainage GIS, Modeling, and Master Planning for the City of Berkeley, H. Yee, J. Egeberg and D. Akagi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4239-4244.

Airfield Pavement Reconstruction at DFW International Airport, Dwain K. Brown and Darryl Boyd, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka

Seneviratne, ed., 1996), p140-150.

Schevitatic, ed., 1990, p. 190-190.

Siological Clogging and Rehabilitation of Drains and Well Systems and the Implications on Groundwater Quality, George Alford and D. Roy Cullimore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p34-39.

Ditch Drainage Theories for Homogeneous Anisotropic Soil, Gautam Barua and K. N. Tiwari, IR Sept./Oct. 96.

p270-203.

Draining Himalayan Glacial Lakes Before They Burst, Richard Kattelmann and Teiji Watanabe, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1978.

Effect of Recharge Duration on Water-Table Response, Subramania I. Sritharan and Henry R. Gee, IR July/Aug.

96, p228-234.

Embankment Dams in the Piedmont/Blue Ridge Province, Chuck Wilson and Ray Martin, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p27-36.

Model for Efficiency of Soil Flushing Using PVD-Enhanced System, M. A. Gabr, J. Wang and J. J. Bowders, GT Nov. 96, p914-919.
Shallow Ground Water Management with a Modified Sub-surface Drainage System, J. E. Ayars, R. A. Schoneman, F. Dale and P. Shouse, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Barbhala ed. 1096). pol 310-2136. Bathala, ed., 1996), p2130-2135.

Theories of Ditch Drainage in Layered Anisotropic Soil, G. Barua and K. N. Tiwari, IR Nov /Dec. 96, p321-330.

Effects of Ignoring Well Losses on the Specific Capacity Function, Otto J. Helweg and Timothy Mays, (North American Water and Environment Congress & Destruc tive Water, Chenchayya Bathala, ed., 1996), p2224-2229.

Mammoth Well Gurgles to Life, CE July 96, p11-12. Nonsteady-State Drawdowns in Two Coupled Aquifers, Louis H. Motz, IR Jan./Feb. 96, p19-23.

Rethinking Well Efficiency, Otto J. Helweg and Timothy Mays, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p954-959.

Sensitivity Analysis of Flow in Multilayered Leaky Aquifer Systems, Peter Indelman, Gedeon Dagan, Alexander H.-D. Cheng and Driss Ouazar, HY Jan. 96, p41-45.

Statistics of Free Surface Flow through Stochastic Earth Dam, Gordon A. Fenton and D. V. Griffiths, GT June 96, p427-436.

Drawings

Architectural Office Standards and Practices: A Practical Users Guide by Larry D. Jenkins et al. Frederick S. Mer-ritt, AE Mar. 96, p41.

Data-Centered Thinking, John G. Voeller, CP Jan. 96, p1-2. In Defense of Design Engineers, Burton A. Lewis, CE Sept. 96, p32.

Plans for Embassy Appear in Show, CE Nov. 96, p23.

Senior Engineers, Defining Their Place in an Electronic Office, James D. Miller, CP Oct. 96, p263.

Services Rendered, Payment Due, CE Sept. 96, p29.

Stress Factors Explained, Robert T. Ratay, CE Dec. 96, p27.

Dredge spoil

Building a Landfill on Mud(Available only in Geo/ Environmental Special Issue), Michael J. Byle and Anne M. Germain, CE July 96, p12A-16A.

Mitigation Measures for Eroding Muddy Shores, Ashish J. Mehta and Robert Kirby, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3728-3733.

Protecting Dredged Material Containment Levees Along the Houston Ship Channel, Deron N. Austin and Marc S. Theisen, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3121-3128.

Dredges

Fundamentals of Hydraulic Dredging, 2nd ed., Thomas M. Turner, 1996, 0-7844-0147-0, 258pp.

Dredging in the Southern Sacramento-San Joaquin Delta, Mike Mirmazaheri, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2636-2641.

Eddy Pump Dredging Demonstration at Cresta Reservoir, Larry L. Harrison and Harry P. Weinrib, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2091-2096.

Fundamentals of Hydraulic Dredging, 2nd ed., Thomas M. Turner, 1996, 0-7844-0147-0, 258pp.

Picacho Reservoir Enhancement Study for Water Recharge, Reparian Enhancement, and Water-Based Recreation Purposes, Ira Mark Artz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1413-1418.

Reliability of the Navigation Channel of the Upper Mississippi River, Vijay Tulsiani, James H. Lambert, Yacov Y. Haimes and S. K. Nanda, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p142-

Risk-Based Planning and Management of Maintenance Dredging, L. Leigh Skaggs and David A. Moser, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2403-2408.

Risk-Based Spatial Decision Support System for Mainte-nance Dredging of Navigation Channels, Samuel J. Ra-tick and Holly Morehouse Garriga, IS Mar. 96, p15-22.

Systematic Analysis of Long-Term Fate of Disposed Dredged Material, Norman W. Scheffner, WW May/June

Uncertainty Analysis of Dredge Production with Correla-tion, Said M. Easa, WW Sept./Oct. 94, p499-507. Under Way: Decontamination Pilots for Dredged Material,

CE Nov. 96, p10,12.

Venice, Italy: an Integrated Approach to Solve the Environ-mental Problems of Its Unique Collection System, Feder-ico G. A. Vagliasindi, Vincenzo Belgiorno, Rodolfo M. A. Napoli and Giorgio Conti, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1801-1806.

Water Quality Impacts of Dredging and Disposal Opera-tions in Boston Harbor, J. Craig Swanson and Daniel Mendelsohn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2642-2647.

Implications of Measured Near-Field Ground Motion on Structural Response, Wilfred D. Iwan, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1213-1220.

Computer Application of CLM Lateral Load Analysis to Piles and Drilled Shafts, Tracy Brettmann and J. Michael Duncan, GT June 96, p496-498.

Cyclic Axial Loading of Drilled Shafts in Cohesive Soil, Kevin J. McManus and Fred H. Kulhawy, GT Sept. 94,

p1481-1497.

Drilled Shaft Load Testing Los Angeles Coliseum, Paul R. Schade and Barry J. Meyer. (Building an International Community of Structural Engineers, S. K. Ghaba, ed. and Jamshid Mohammadi, ed., 1996), p574-581.

Chicago's Micropile Debut, Steven D. Scherer, William H. Walton and Ron Johnson, CE Aug. 96, p51-53.

30-Inch Gas Pipeline Crossing of the San Juan River: Open Cut Excavation in Quality Water Area, James D. Evanoff and Neil P. Stockholm, (Pipeline Crossings 1996, Law-rence F. Catalano, ed., 1996), p186-193.

Borehole UE-25 ONC #1 Drilling at Yucca Mountain, Nevada, Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Controlled Drill & Blast Excavation at AECL's Under-ground Research Laboratory, G. W. Kuzyk, D. P. Onagi and P. M. Thompson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p404-406.

Demonstrating Brine Water Wells and Toilets for Deering, Alaska, Robert H. Lundell, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p558-569.

Disposal of Drilling Wastes in Permafrost Prudhoe Bay, Alaska, Paul Hansen, Michael Snyder and Per Wangstrom, (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the gions Infrastructure—An International Imperations 21st Century, Robert F. Carlson, ed., 1996), p327-338.

Fluidized Drilling for Lunar Mining Applications, Brad R. Blair, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p813-820.

Innovative Drilling Brings Potable Water to Islanders, CE June 96, p87

Investigation of Pipeline Buckle Failure in a Horizontally Directionally Drilled Installation, Hugh W. O'Donnell, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p163-172.

Lunar Regolith, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p630-638.

Models for Estimating Core-Cycle Rate of Penetration at Yucca Mountain, Nevada, Lawrence E. Barker and Dale D. Daffern, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p468-470.

Nation's Largest Grouting Contract Under Way, CE Aug. 96, p22.

A New Direction in Remediation, Paul P. Parmentier and Ronald M. Klemovich, CE Apr. 96, p55-57.

Shear Dispersion in the Benthic Boundary Layer, C. G. Hannah, J. W. Loder and Y. Shen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p454-465.

Steel Water Pipe for Exposed and Buried Crossings, George Ruchti and Robert Card, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p105-111.

Technological Advances in the Design and Construction of Water Mains for Crossing Under Rivers and Other Barri-ers, Donald E. Eckmann and William F. Nabak, (*Pipeline* Crossing 1996, Lawrence F. Catalano, ed., 1996), p403-408

To Know or Not to Know: The Site Characterization Process and Its' Role in Horizontal Directionally Drilled Pipeline River Crossings, Charles W. Hair, III, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p56-

Versatile Variable-Node Flat-Shell Element, Chang-Koon Choi and Wan-Hoon Lee, EM May 96, p432-441.

Design Model Bias Factors for Driven Piles from Experiments at NGES-UH, Gil L. Yoon and Michael W. O'Neill, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p759-

Driven Pile Capacities in Warm Permafrost in Komi Republic, Russia, Steven R. Thompson and Rupert G. Tart, Jr., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p254-265.

Estimation of Driven Pile Resistance at an Overconsolidated Clay Site Using Geostatistical Methods, Gil L. Yoon and Michael W. O'Neill, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p950-953.

Pile Driving Records Reanalyzed Using Neural Networks, Anthony T. C. Goh, GT June 96, p492-495.

Driver behavior

The Analysis of Freeway Reconstruction Impacts on Trav-ellers, Vittorio Astarita, (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996. p460-464.

DRACULA - Microscopic, Day-to-Day Dynamic Model-ling of Traffic Assignment and Simulation, Ronghui Liu, Dirck Van Vliet and David Watling, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p444-448.

Fuzzy Drivers Make Good Models, Monica Maldonado, ET June/July 96, p1,9.

Human Factors in Highway Geometric Design, George Kanellaidis, TE Jan./Feb. 96, p59-66.

Modeling Freeway Lane Changing Behavior, Haris N. Koutsopoulos, Moshe E. Ben-Akiva, Rabi G. Mishalani and Kazi I. Ahmed, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p455-459.

Speed Is In Your Head, CE Sept. 96, p12.

Use of OMT in a Transport Human Engineering Prospect, T. Bellet and H. Tattegrain-Veste, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p363-367.

An User Behaviour Analysis in Signalized Urban Intersec-tions by Artificial Neural Network, Lorenzo Mussone, Giuseppe Reitani and Savino Rinelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p208-212.

Driver response time

Improvement of Road Network Reliability under Different Route Choice Principles, Shinji Nakagawa, Hiroshi Wak-abayashi and Yasunori lida, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

An Integrated Model for Network Traffic Management for Long Term Disruptions, Mithilesh Jha, Srinivas Peeta and Samer Madanat, (Applications of Advanced Technol-ogies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p335-340.

Drop structures

Drop Structures in the Real World: Guidelines for Dro Structures in the Real world: Guidelines for Drop Structures in Grass Lined and Wetlands Channels, Wil-liam C. Taggart, William G. DeGroot, Katherine J. Chase and Peter L. Nelson, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p594-599.

Quasi Two-Dimensional Hydraulic Analysis of Drop Struc-tures, William C. Taggart, Katherine J. Chase and Peter L. Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p600-605.

Successful Implementation of Grouted Boulder Grade Control Structures on Drainageways in the Denver Metropol-itan Area, John M. Pflaum, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p836-841.

Droughts

Adapting Water Resources of the Canadian Prairies under the impact of Climatic Warming, Thian Yew Gan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2163-2168.

Advanced Hydrologic Forecasting for Flood and Drought Mitigation, John J. Ingram, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p455.

Analyzing Drought with a Simplified Climate Model, Mi-chael L. Anderson and M. Levent Kavvas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1075-1080.

At-A-Station Temporal Variations in Flow Under Drought and Flood Conditions and Associated Sediment Problems, Muhammad Ashiq, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1881-1886.

California's Response to Drought, Chester V. Bowling and Scott A. Jercich, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), 9869-874.

in, ed., 1990, poor-5/4.
Development of a Regional Atmospheric-Hydrologic Model for the Study of Climate Change in California, ZhiQiang Chen, M. Levent Kavvas, Liqin Tan and Su-Tzai Soong, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1093-1098.

Development of an Expert System for Daily Drought Moni-toring, T. J. Chang, H. Zheng, X. A. Kleopa and C. B. Teoh, CP Jan. 96, p20-24.

Drought Experiences of Ohio and Their Applications in the DAR-JAI River Basin of Taiwan, Tiao J. Chang, Wen C. Huang and Chian M. Wu, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p628-636.

Drought in California: When Does It Begin and When Does it End? Maurice Roos, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1081-1086.

Drought Management in Northeastern Colorado, Darell D. Zimbelman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p863-868.

ett., 1990), pot3-908.

Drought Management: Crisis vs. Risk Management, Michael J. Hayes, Donald A. Wilhite, Mark D. Svoboda and Kelly Helm Smith, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p371-372.

Effect of Reservoir Hedging on Crop Yield Under Deficit Irrigation Conditions, Arathi T. Seshan and K. Sriniva-san, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4226-4232.

Value (GEV) Distribution-L-Moments Vs Conventional Moments, A. Sankarasubramanian and K. Srinivasan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p152-158

First Interactive Drought Atlas Released, CE Oct. 96,

FLODRO 2.0: A User Friendly Personal Computer Package for Flood and Drought Frequency Analyses, Jose A. Raynal-Villasenor, (North American Water and Environment Congress & Destructive Water, Chenchavva Bathala, ed., 1996), p304-309.

Implementing a Successful Conjunctive Use Program, William R. Mills, Jr., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3074-3078.

Linkages Between the El Nino-Southern Oscillation and inkages between the El Nino-Southern Oscillation and U.S. Droughts, John A. Dracup and Thomas C. Piechota, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p373-374.

Managing Great Lakes Water Levels: An International Partnership, Anthony J. Eberhardt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1317-1322

Modeling the Impact of Sea Level Rise in Delaware Bay, K. W. Kim and B. H. Johnson, (North American Water and Environment Congress & Destructive Water, Chenchayva Bathala, ed., 1996), p2737-2742.

Natural Hazard Zonation, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p361-362.

Overview of Drought Response Strategies, Darrell G. Fon-tane and Donald K. Frevert, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p857-862.

Polyethylene Piping Eases Drought, CE Nov. 96, p94.

Probability Distribution of Annual Maximum, Mean, and Minimum Streamflows in the United States, Richard M. Vogel and Ian Wilson, HE Apr. 96, p69-76.

Vogel and Ian Wilson, Ht. Apr. 99, 695-76.
The Reclamation Drought Index: Guidelines and Practical Applications, Karen Weghorst, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p637-642.
Resolution of the ACT-ACF Water dispute with a Federal-State Partnership, N. D. McClure, IV, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3417-3422.
Water Crisis in Developing World Misconceptions about

Water Crisis in Developing World: Misconceptions about Solutions, Harald D. Frederiksen, WR Mar/Apr. 96,

p79-87.

Water in the International Decade for Natural Disaster Reduction, A. J. Askew, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl.

Ductility

Brittle-Ductile Transition in Porous Rocks by Cap Model, Vlado A. Lubarda, Sreten Mastilovic and Jaroslaw Knap, EM July 96, p633-642.

Conceptual Seismic Design Methods for Railroad Bridges, Zolan Prucz, Kenneth E. Bruestle and Vinaya Sharma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p191-198.

Crossing Bridges with Ductile Iron Pipe—Update 1995, Michael S. Tucker, (Pipeline Crossings 1996, Lawrence

F. Catalano, ed., 1996), p120-129.

Design Criteria for Pseudoductile Fiber-Reinforced Com-posites, Christopher K. Y. Leung, EM Jan. 96, p10-18.

Design of Pressure Class Ductile Iron Pipe on Supports, L. Gregg Horn, (Pipeline Crossings 1996, Lawrence F. Cano, ed., 1996), p222-229.

Ductile Masonry Construction in California, Hanns U. Bau-mann, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p93-100.

Ductile Steel Beam-to-Column Connections for Seismic Resistance, Sheng-Jin Chen, C. H. Yeh and J. M. Chu, ST Nov. 96, p1292-1299.

Effect of Reinforcement Corrosion on Flexural Behavior of Concrete Slabs, Abdullah A. Almusallam, Ahmad S. Al-Gahtani, Abdur Rauf Aziz, Fahd H. Dakhil and Rasheeduzzafar, MT Aug. 96, p123-127.

Effect of Temperature and Galvanization on Cold-Formed Steel, A. B. Abdel-Rahim and D. Polyzois, MT Aug. 96,

p114-122.

Energy-Based Linear Damage Model for High-Intensity Seismic Loading, Y. H. Chai, K. M. Romstad and S. M. Bird, ST May 95, p857-864.

Experimental Results for Seismic Resistant Steel Moment Frame Connections, Charles W. Roeder and Douglas A.

Frame Connections, Charles W. Roeder and Douglas A. Foutch, ST June 96, p581-588.

High-Performance Metals for Civil and Marine Structures, John W. Fisher, Richard Sause and Robert J. Dexter, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p23-37.

Hybrid Columns of FRP and Concrete, Mohsen Shahawy,

Hybrid Columns of FRP and Concrete, Mohsen Shahawy, Amir Mirmiran and Michel Samaan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p73-82.
Improving the Ductility of High Performance Concrete Through Mortar-Aggregate Interfaces, Oral Büyüköztürk and Brian Hearing, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1337-1346.

Inelastic Local and Lateral Buckling in Design Codes, Alan R. Kemp, ST Apr. 96, p374-382.

Lateral Load Behavior of High Strength Fiber Reinforced Concrete Columns, Ramesh Nagarajah and David H. Sanders, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p396-407.

1996), p396-407.
Low Cycle Fatigue of Structural Materials, Paul Howdyshell and Kathryn Carlson, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p83-92.
Mechanical Behavior of Confined Reactive Powder Concretes, Eric Dallaire, Olivier Bonneau, Mohamed Lachemi and Pierre-Claude Aixin, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p555-563.
Nonlinear Response of Bridges under Multisupport Excitation, Giorgio Monti, Camillo Nuti and Paolo E. Pinto, ST Oct. 96, p1 147-1159.
PSD Test on Four-Story R/C Building Designed According

Oct. 96, p1147-1139. PSD Test on Four-Story R/C Building Designed According to Eurocodes, P. Negro, A. V. Pinto, G. Verzeletti and G. E. Magonette, ST Dec. 96, p1409-1417. Reactive Powder Concrete (RPC), A New Material for Pre-

stressed Concrete Bridge Girders, Scott K. Gilliland, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p125-132.

1990), p1.23-13.2.
Reliability of High-Strength Concrete Columns, Sofia M. C. Diniz and Dan M. Frangopol, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p213-222.
Seismic Design Criteria for Navy Wharves, J. M. Ferritto and C. S. Putcha, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p353-

Seismic Isolation of Industrial Tanks, Victor A. Zayas and Stanley S. Low, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

Mohammadi, ed., 1996), p1205-1212.
Seismic Performance of Confined Sill Plate Connections,
Joseph M. Bracci, Rebecca F. Stromatt and David G. Pollock, ST Nov. 96, p1357-1363.

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Smart Composite Rebars with Enhanced Ductility, A. Be-larbi, K. Chandrashekhara and S. E. Watkins, (Engineer-

ing Mechanics, Y. K. Lin and T. C. Su, 1996), p788-791. Statistical Aspects of Damages Due to the Great Hanshin Earthquake, Hitoshi Seya and Michio Sugimoto, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p186-189.

Strength and Ductility of Rectangular Concrete Columns: A Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Mar. 96, p267-274.

Structural Aspects of Pipeline Crossings, R. C. Prevost, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p449-456.

Structural Behaviour of High Strength Concrete Columns,

Robert Park, (Worldwide Advances in Structural Con-crete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p365-374.

A Unified Limit State Approach Using Deformability Fac-tors in Concrete Beams Reinforced with GFRP Bars, P. V. Vijay and H. V. S. GangaRao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p657-665.

A Unified Viscoplastic Model for the Inelastic Behavior of Ice, Jonah H. Lee and Michel Aubertin, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p828-836.

"Banding" Timber Crossties Using Composite Fabrics for Improving Their Performance, S. S. Sonti and H. V. S. GangaRao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1449-1457.

"Ductile Iron Microtunneling Pipe, Non-Traditional Instal-lation Applications", Ralph R. Carpenter and Randall C. Conner, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p312-321.

An Electrorheological Damper with Annular Duct, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan. Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1197-1204.

Pulsatile Blood Flows in Stenotic Artery, Tin-Kan Hung and Tommy M.-C. Tsai, EM Sept. 96, p890-896.

Dune sands

Dune Drain Field, CE Dec. 96, p15-16.

A Large-Scale Experiment on Breaching in Sand-Dikes, Paul J. Visser, Arie W. Kraak, Wim T. Bakker, Marion J. Smit, D. Wino Snip, Henk J. Steetzel and Jan van de Graaff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p583-594.

Simulation of Dune and Nourished Berm Erosion During Storm Surges, Jürgen Newe and Hans-H. Dette, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p850-861.

Wave Reflection and Overwash of Dunes, Nobuhisa Koba-yashi, Yukiko Tega and Mark W. Hancock, WW May/ June 96, p150-153.

Adhesion and Aerodynamic Resuspension of Fibrous Parti-cles, Nurtan A. Esmen, EE May 96, p379-383.

Air Quality at a Zinc/Lead Mine in Arctic Alaska, Charlotte MacCay and Jack Coutts, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p804-815.

Terraforming Mars, Felix Zamora, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1311-1314.

The Fabric Dyers' Use of Recycled Water, Chuck Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2666-2671.

Dynamic analysis

Computer Analysis, Vincent Thomas Bridge, Raymond W. Wolfe and Hany J. Farran, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p311-312.

Controlling Chaos to Prevent Ship Capsizing, Mingzhou Ding, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p434-437.

Coupled Nonlinear Analysis of Airport Pavements, T. E.

Fenske, K. P. Boone and D. Liu, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p435-443.

Double-Layer Grids: Review of Dynamic Analysis Methods and Special Topics, Ramesh B. Malla and Reynaud L. Serrette, ST Aug. 96, p882-892.

Dynamic Analysis of Axisymmetric Foundations on Poroe-lastic Media, Gary F. Dargush and Manoj B. Chopra, EM July 96, p623-632.

July 96, po.23-632.

Dynamic Analysis of Multi-Pool Irrigation Canal, V. M. Ruiz-C., Jorge Castillo and B. de León-M., (North American Water and Environment Congress & Destructive Water, Chenchays Bathala, ed., 1996), p818-823.

Dynamic Analysis of Prestressed Concrete Beams with Openings, Hany Abdalla and John B. Kennedy, ST July 95, p1058-1068.

Dynamic Analysis of Resilient Crosstie Track for Transit System, M. J. Fatemi, M. F. Green, T. I. Campbell and A. Moucessian, TE Mar/Apr, 96, p173-180.

Dynamic Analysis of Tall Building Using Reduced-Order Continuum Model, Michael J. Chajes, Liyang Zhang and James T. Kirby, ST Nov. 96, p1284-1291.

Dynamic and Quasi-Static Design of High-Rise Buildings Subjected to Wind Loads, Okey Onyemelukwe and Guillerm Chause. Moture Disaster Reduction, George W.

Subjected to Wind Loads, Okey Onyemetukwe and Guin-lermo Claure, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p141-142.Upnamic Effects of Sediment and Foundation on Dam Hy-drodynamic Pressure Under Vertical Ground Accelera-tions, Kuo-Chyang Chang, Tin-Kan Hung, David A. Margo and Jeen-Shang Lin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p511-514.Dynamic Response Analysis of Hieh Arch Dam-Water-

K. Lin and T. C. Su, 1996), p511-514.

Dynamic Response Analysis of High Arch Dam-Water-Foundation System, Du Xiuli, Chen Houqun and Hou Shunzai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p987-988.

Dynamic Stiffness Analysis of Lattice Structure, Eldad Levy and Moshe Eisenberger, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p526-533.

Dynamics of Highly Deformable Sandwich Frame Structures, H. Deng and L. Vu-Quoc, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1147-1150.

Energy Dissipation Devices in Bridges using Hydraulic Dampers, E. A. Delis, R. B. Malla, M. Madani and K. J. Thompson, (Building an International Community of

Thompson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1188-1196.

Energy Dissipation in Dynamic Failure Simulations, Thom as Münz, Karsten Rix and Kaspar Willam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1046-1049.

Mechanics, Y. K. Lin and T. C. Su, 1996), p1046-1049. Energy-Based Modeling of High Damping Rubber Seismic Isolators for Dynamic Analysis, Peter W. Clark and James M. Kelly, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p200-211. Evaluation of Dynamic Analysis Results using Full-Scale Lattice Tower Tests, Markus Ostendorp, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p518-626. 525

First Exit Times in Non-Linear Dynamical Systems by Advanced Monte Carlo Simulation, H. J. Pradlwarter and W. Kliemann, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p523-526.

C. Su, 1990), po23-520.
Further Application of Dynamic Poroelasticity to Geotechnical Engineering Via BEM, Jianming Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p479-482.
Guidelines and Benchmarks for Analysis of Isolated Buildings, Harry W. Shenton, III and Andrew W. Taylor, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p236-248.
June 18, 1996, p236-248.
June 18, 1996, p236-248.

Instability Analysis of an Inclined Tower in Waves, Subrata K. Chakrabarti, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p836-839.

Investigation of Nonlinear Fluid-Structure Interaction, T. E. Fenske, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p407-415.

Modal Coupling and Accuracy of Modal Strain Energy Method, Alessandra Zambrano, José A. Inaudi and James M. Kelly, EM July 96, p603-612. Model to Incorporate Architectural Walls in Structural Analyses, H. Allison Smith and Vicki L. Vance, ST Apr.

96, p431-438.

96, p431-438.
Nonlinear Static and Dynamic Analysis from Research to Practice, Filip C. Filippou, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p31-42.
Parallel Structural Analysis with Computers and Engineers, Edward L. Wilson, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p1-18.
Response of Building Systems with Rocking Piers and Flexible Diaphragms, Andrew C. Costley and Daniel P. Abrams, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p135-140.
Robust Stabilization of Systems with Time Delays, Mohammad Hosseini and Firdaus Udwadia, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p438-441.

pol, ed. and Mircea D. Grigoriu, ed., 1996), p438-441.

Seismic Behavior of Precast Parking Structure Diaphragms, R. B. Fleischman, R. Sause, A. B. Rhodes and S. Pessiki, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1139-1146.

Simplified Analysis of Rectangular Plates with Stepped Thickness, Hideo Takabatake, Takayuki Imaizumi and Kunihiro Okatomi, ST Jan. 95, p28-38.

Stochastic Integral/Calculus for Non-Gaussian Delta-Correlated Processes, Sau-Lon James Hu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p246-249.

Structural Dynamic and Viscoelastic Analysis via Electric Analogy, Roberto Scotta and Renato Vitaliani, ST Sept. 96, p1118-1121.

Use of Quadratic Transfer Functions to Predict Response of Tension Leg Platforms, Inyeol Paik and Jose M. Roesset, EM Sept. 96, p882-889.

Vibration of Thin-Walled Box-Girder Bridges Excited by

Vehicles, Dongzhou Huang, Ton-Lo Wang and Mohsen Shahawy, ST Sept. 95, p1330-1337. Wind-Induced Failure of Buildings and Structures Caused by Typhoons in Japan, Yukio Tamura, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p62-65.

Dynamic characteristics

Evaluation of Dynamic Strength of Concrete from Results of Static Tests, Iosif E. Shkolnik, EM Dec. 96, p1133-

Stochastic Prediction and Control of Uncertain Nonlinear Dynamical Systems, R. Ghanem and M. Grigoriu, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996). p277-280.

Dynamic loa

Annealing Strategy for Optimal Structural Design, Shyh-Rong Tzan and Chris P. Pantelides, ST July 96, p815-

Application of the Concurrent Finite Element Method to Solution of the Fokker-Planck Equation, W. Yi, B. F. Spencer, Jr. and L. A. Bergman, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p10-13.

Computational Aspects of Dynamic Concrete Viscoplasticity, Olubayo O. R. Famiyesin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and

Mircea D. Grigoriu, ed., 1996), p282-285.

Dynamic Analysis of Concrete Pavements Subjected to Moving Loads, Chih-Ping Wu and Pao-Anne Shen, TE Sept./Oct. 96, p367-373.

Dynamic Effects from the Space Shuttle Liftoff, Fady F. Barsoum and William F. Carroll. (Engineering. Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1190-1196.

Editor's Note, David Darwin, ST Feb. 96, p115.

Exact Solutions to A Class of Structure-Equipment Sys-tems, Genda Chen and T. T. Soong, EM Nov. 96, p1093-1100.

Formulation for Viscoelastic Response of Pavements under Moving Dynamic Loads, A. T. Papagiannakis, N. Amoah and R. Taha, TE Mar./Apr. 96, p140-145.

Influence of Imperfections on Nonlinear Dynamic Re-sponse of Trusses, Aslam Kassimali and Khalil Rabiei, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p534-541.

Measuring and Modeling Dynamic Loads Imposed by Moving Crowds, A. Ebrahimpour, A. Hamam, R. L. Sack and W. N. Patten, ST Dec. 96, p1468-1474.

Measuring Coherency of Human-Induced Rhythmic Loads Using Force Plates, A. Ebrahimpour and L. L. Fitts, ST July 96, p829-831.

Numerical Analyses of Reinforced Underground Openings Subjected to Seismic Loadings, Fei Duan and Saeed Bonabian, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p412-414.

Probabilistic Modeling of Metal Plate Connections, Robert N. Emerson and Kenneth J. Fridley, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p330-333.

Railway Bridge Loads Under Current Operating Conditions, Daniel H. Tobias, Douglas A. Foutch and John Choros, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p215-222.

Resistance of Wood Members and Connections to Dynamic Loading, Laura Brantley, Robert Emerson and Kenneth

Loading, Laura Brantley, Robert Emerson and Kennen Fridley, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p771-777.
Three-Dimensional Nonlinear Transient Dynamic Accident Analyses of Waste Packages, Scott M. Bennett, Zekai Ceylan and Thomas W. Doering, (High Level Radioactive Waste Management, Technical Program Committee, 1906), a32-384

1996), p382-384.

Tide-Induced Ground-Water Flow in Deep Confined Aqui-fer, Ko-Fei Liu, HY Feb. 96, p104-110.

Dynamic models

An Analysis of Effect of Dynamic Traffic Information Conisidering Driver's En-Route Route Switches, Yasunori lida, Nobuhiro Uno and Tetsuro Hasegawa, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p604-608.

pi, ed., 1996), p604-608.
Automatic Control of Flocculation Processes, Anders O. Wistrom and Jay A. Farrell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996, p997-1002.
DRACULA - Microscopic, Day-to-Day Dynamic Modelling of Traffic Assignment and Simulation, Ronghui Liu, Dirck Van Vilet and David Watling, (Applications of Advanced Technologies in Transportation Engineering. vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi. ed..

Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p444-448.
Flexible Dynamic Scheduling: A Major Improvement for Public Transport, Antonio Marqués, Manuel Torregrosa, Arturo Camarena, K. Darby-Dowman, Shirley Moody and James Little, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p134-138.

Flood Forecasting Model for an Alpine Drainage Basin -River Drau in Austria, D. Gutknecht, W. Kugi and F. Nobilis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Flow Propagation Description in Dynamic Network Load-ing Models, Vittorio Astarita, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p599-603.

A Framework for Dynamic Network Traffic Simulation on Distributed Systems, Mithilesh Jha, Anupam Joshi and Distributed systems, Minimens Irial, Ampbail Joshi and Kumares Sinha, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p388-393. An Integrated Model for Network Traffic Management for

Long Term Disruptions, Mithilesh Jha, Srinivas Peeta and Samer Madanat, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p335-340. LP Tu

Type Dynamic On-Ramp Traffic Control Model for Urban Expressway, Yasuo Asakura, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p434-438.

An LPI Numerical Implicit Solution for Unsteady Mixed-Flow Simulation, D. L. Fread, Ming Jin and Janice M. Lewis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3222-327.

Modeling and Control of Excavator Dynamics during Dig-ging Operation, A. J. Koivo, M. Thoma, E. Kocaoglan and J. Andrade-Cetto, AS Jan. 96, p10-18.

Numerical Methods for Modeling Water Quality in Distri-bution Systems: A Comparison, Lewis A. Rossman and Paul F. Boulos, WR Mar./Apr. 96, p137-146.

Object-Oriented Analysis of South Florida Hydrologic Sys-tems, Todd S. Tisdale, CP Oct. 96, p318-326.

The Use of Artificial Neural Networks in Advanced Traveler Information and Traffic Management Systems, Gac-tano Fusco and Stefano Gori, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p341-345

Dynamic programming

Autoregressive Decision Rule in Aggregated Reservoir Operation, Qingfu Liang, Lynn E. Johnson and S. Mohan, WR Nov/Dec. 96, p438-440.

Bridge Corrosion Cost Model Implementation and Coating Maintenance Model Using Dynamic Programming, C. K. Tam and S. F. Stiemer, CF May 96, p57-66.

Canal Design by Dynamic Programming, Goran Radovic, IR Jan./Feb. 96, p59-63.

Constraint-Based Reasoning for Optimal Concrete Design and Detailing, Warren K. Lucas and W. M. Kim Roddis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p154-165.

Deriving a General Operating Policy for Reservoirs Using Neural Network, H. Raman and V. Chandramouli, WR

Sept./Oct. 96, p342-347

Dynamic Programming Approach to Scheduling of Non-serial Linear Project, Ahmed B. Senouci and Neil N. El-din, CP Apr. 96, p106-114.

Framework for PMS Using Mechanistic Distress Submodels, David K. H. Chua, TE Jan./Feb. 96, p29-40.

Reservoir Targets for Urban Water Supply Systems, B. J. C. Perera and Gary P. Codner, WR July/Aug. 96, p270-

Use of SALQR Optimization in Large Aquifer Cleanup, Christopher M. Mansfield and Christine A. Shoemaker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p135-139.

Dynamic properties

Comparison of Static and Dynamic Performance of Poly-carbonate Filled and Unfilled Gears, V. P. Gosavi and P. P. Chikate, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p338-347.

Dynamic Properties of Piedmont Residual Soils, Roy H. Borden, Lisheng Shao and Ayushman Gupta, GT Oct.

96, p813-821.

Dynamic Sub-Structure Method in Time Domain Using Analytical Representation of Dynamic Stiffness of Soil, Nagayuki Yoshida, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p184-187.

Effect of Degree of Weathering on Dynamic Properties of Residual Soils, Emir José Macari and Laureano Hoyos,

Jr., GT Dec. 96, p988-997.

Inference of Dynamic Shear Modulus from Lotung Downhole Data, C.-Y. Chang, Chin Man Mok and H.-T. Tang, GT Aug. 96, p657-665

Pulsatile Flow Circuitry for Dynamic Study of a Volume Plethysmograph, Alex A. Yu, Jeff Raines and Ned H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p204-207.

A Review of Dynamic Behavior of Sector Plates and Curved Bridge Decks, H. R. Molaghasemi and I. E. Harik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p993-996.

Dynamic response

3-D Elastodynamic Green's Functions of Laminated Plates J. Zhu and A. H. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1159-1162.

Active Vibration Control of Machine Foundation, Mohamed Abdel-Rohman and Hasan Al-Sanad, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996).

Analysis of Damped and Undamped Systems Using DFT, Fady F. Barsoum and William F. Carroll, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p951-954.

Analysis of Disjoint Two-Dimensional Particle Assemblies, Tuong X. Tran and Richard B. Nelson, EM Dec. 96, p1139-1148. Characterization of Granular Material by Low Strain Dynamic Excitation and ANN, Salome Romero and Sibel Pamukcu, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996).

Computer Analysis, Vincent Thomas Bridge, Raymond W. Wolfe and Hany J. Farran, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p311-312.

Control of Floor Vibrations, Linda Morley Hanagan, Cheryl Rottmann and Thomas M. Murray, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p428-

Control of Mega-Sub Building Against Wind Loads, Win-ston Chai and Maria Q. Feng, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p486-489.

Convex Models for Impulsive Response of Structures, Shyh-Rong Tzan and Chris P. Pantelides, EM June 96,

p521-529.

Criteria for Initiation of Slide, Rock, and Slide-Rock Rigid-Body Modes, Harry W. Shenton, III, EM July 96, p690-693.

m-Foundation Rock Interaction Effects in Earthquake Response of Arch Dams, Hanchen Tan and Anil K. Chopra, ST May 96, p528-538.

Design Live Loads for Crowds in Motion, A. Ebrahimpour and R. L. Sack, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p420-427.

Dynamic Analysis of Concrete Pavements Subjected to Moving Loads, Chih-Ping Wu and Pao-Anne Shen, TE Sept./Oct. 96, p367-373.

Dynamic Behavior of Continuous and Cantilever Thin-Walled Box Girder Bridges, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, BE May 96, p67-75.

Dynamic Behavior of Glued Laminated Timber Girder Bridges, Terry J. Wipf, Michael A. Ritter and Douglas L. Wood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p260-267.

Dynamic Behaviour of Masonry Church Bell Towers, Alan R. Selby and John M. Wilson, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p188-199.

Dynamic Influence of Flexible Payloads on Space Shuttle RMS, Walter L. Peart, AS Apr. 96, p39-44.

Dynamic Interaction Between Embedded Foundations by the Substructure Deletion Method, Raimondo Betti, Euclides de Mesquita Neto and Edivaldo Romanini, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), p314-317.

Dynamic Response Analysis of Slab-Type Bridges, Jag-mohan L. Humar and Ahmed H. Kashif, ST Jan. 95,

Dynamic Response of Box Tubes to Combined Shear and Torsion, Y. L. Mo and R. Y. Yang, ST Jan. 96, p47-54.

Dynamic Response of Cantilever Retaining Walls, A. S. Veletsos and A. H. Younan, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p19-20.

Dynamic Response of Compliant Offshore Structures, R. Adrezin, P. Bar-Avi and H. Benaroya, AS Oct. 96, p114-131.

Dynamic Response of Flexible Retaining Walls, A. H. Younan and A. S. Veletsos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p310-313.

Dynamic Response of Hagia Sophia, A. S. Cakmak, C. L. Mullen and M. N. Natsis, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p200-210.

Dynamic Response of Rectangular Flexible Fluid Con-tainers, Jae Kwan Kim, Hyun Moo Koh and Im Jong

Kwahk, EM Sept. 96, 9807-817.
Dynamic Responses of Shallow-Buried Flexible Plates Subjected to Impact Loading, Hung-Liang (Roger) Chen and Shen-En Chen, ST Jan. 96, p35-60.

Dynamic Service Actions for Floor Systems - Human Activity, Per-Erik Eriksson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p413-419.

Dynamic Stability of Viscoelastic Structures under Sto-chastic Loading, S. T. Ariaratnam and G. Amaniampong, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p542-545

Editor's Note, David Darwin, ST Dec. 96, p1393.

Elastic Response of Columns After Sudden Loss of Brac-ing, Raymond H. Plaut and Rae-Hak Yoo, EM Apr. 96, p383-384.

Evaluation of Bridge Strengthening Measures Using Forced Vibration Tests, Kosal Krishnan, Frieder Seible and Gerald Pardoen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p845-852.

First Passage Time of Nonlinear Ship Rolling in Nonsta-tionary Random Seas, C. W. S. To and Z. Chen, (*Proba-*bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p250-253.

Flood Protection Using Inflatable Dams, R. H. Plaut, S. Liapis and D. P. Telionis, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p264-265.

Flow-Induced Dynamic Response of Olmsted Physical Models, Mostafiz R. Chowdhury and Robert L. Hall, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Ground Motion Estimation and Nonlinear Seismic Analysis, David B. McCallen and Lawrence J. Hutchings, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p416-427.

Ground Response of Circular Tunnel in Poorly Consolidated Rock, Yarlong Wang, GT Sept. 96, p703-708.

Guidelines and Benchmarks for Analysis of Isolated Build-ings. Harry W. Shenton, III and Andrew W. Taylor, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p236-245.

Hybrid Control of Seismic Response Using Nonlinear Out-put Feedback, A. K. Agrawal and J. N. Yang, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p339-

The Importance of Maintaining Smooth Airport Pavements, Tony Gerardi, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p295-305.

In-Situ Dynamic Response of Cantilever Walls, Sreenivas Alampalli and Ahmed-W. Elgamal, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p57-76.

J. W. van de Lindt and J. M. Niedzwecki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p582-585.

Influence of Imperfections on Nonlinear Dynamic Re-sponse of Trusses, Aslam Kassimali and Khalil Rabiei, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p534-541.

Minimizing Floor Vibrations from Occupant Activities, Sarah E. Mouring and Bruce R. Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p405-

Modal Analysis of Linear Dynamic Systems: Physical In-terpretation, Anil K. Chopra, ST May 96, p517-527.

Modeling the Dynamic Nonlinear Response of Single Piles, Deepak Badoni and Nicos Makris. (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1091-1098.

Neural-Network Modeling of CPT Seismic Liquefaction Data, Anthony T. C. Goh, GT Jan. 96, p70-73.

Nonlinear Control Strategies for Limiting Dynamic Response Extremes, D. P. Tomasula, B. F. Spencer, Jr. and M. K. Sain, EM Mar. 96, p218-229.

Numerical Simulation of Internal Kelvin Waves with Zlevel and Sigma Level Models, David J. Schwab, Dmitry Beletsky, William P. O'Connor and David E. Dietrich, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p298-312.

On the Development of a Selective Algorithm in Advanced

Monte Carlo Simulation, Helmut J. Pradlwarter, Napat Harnpornchai and Gerhart I. Schuëller, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p14-17.

On the Response of Transmission Structures to High Winds, Acir Mércio Loredo-Souza and Alan Garnett Davenport, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p272-273.

Passive Structural Control with Sequential Coupling, Paul Weidlinger, ST Sept. 96, p1072-1080.

Performance of San Fernando Dams During 1994 Northridge Earthquake, J. P. Bardet and C. A. Davis, GT July 96, p554-564

Performance of Two Reservoirs during 1994 Northridge Earthquake, C. A. Davis and J. P. Bardet, GT Aug. 96, p613-622.

Plane Waves and Pore Pressure in a Saturated Sand, R.

Staroszczyk and L. W. Morland, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p943-946. Reliability of Jackets: Beyond-Static-Capacity, D. G. Schmucker and C. A. Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p578-581.

Response Cumulants of Nonlinear Systems Subject to Ex-ternal and Multiplicative Excitations, C. Papadimitriou, L. S. Katafygiotis and L. D. Lutes, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed.

Response to Arbitrarily Time-Varying Forces Using Convex Model, Chris P. Pantelides and Shyk-Rong Tzan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1252-1258.

Stewart W. Johnson, ed., 1996), p1252-1258.
Seismic Liquefaction Potential Assessed by Neural Networks, Anthony T. C. Goh, GT Sept. 94, p1467-1480.
Seismic Motion Incoherency Effects on Dynamic Response, Dan M. Ghiocel, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p624-627.
Shaking Table Tests of Rigid, Semirigid, and Flexible Steel Frames, Marwan N. Nader and Abolhassan Astaneh-Asl, ST June 96, p580-569.

ST June 96, p589-596.

St Julie 96, 259-259.
Stochastic Response of Offshore Structures Excited by Drag Forces, Arvid Naess and Solomon C. S. Yim, EM May 96, 442-448.
Structural Control with Electrorheological Dampers: Visco-

plastic Behavior and Anticipation, Scott A. Burton and Nicos Makris, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1261-1268.

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94,

Wave Induced Reaction Forces and Tension in TLP Tendons, John M. Niedzwecki, Dadi S. Soemantri and Oriol R. Rijken, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p586-587.

Dynamic stability

Bending Instability of Composite Tubes, Long-yuan Li, AS Apr. 96, p58-61.

Dynamic Stability of Conducting Beam-Plates in Transverse Magnetic Fields, J. S. Lee, EM Feb. 96, p89-94. Multiphase Flow in Deforming Porous Media by the Finite

Element Method, Pedro Arduino and Emir J. Macari, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p420-425.

Dynamic structural analysis
Doubly Symmetric Tube Structures. II: Dynamic Analysis,
Hideo Takabatake, Hisao Mukai and Tadato Hirano, ST July 93, p2002-2016.

Dynamic Through-the Soil Interaction of Adjacent Surface or Buried Structures, D. C. Rizos and D. L. Karabalis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Dynamic tests

Comparison of Static and Dynamic Test Results for Driven omparison of statute and cylindric terms are stated pipe Piles in Highly Saline Permafrost, Kelly S. Merrill and Richard E. Riker, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p238-253.

Dynamic Properties of Cohesive Soils Treated with Lime, K. Fahoum, M. S. Aggour and F. Amini, GT May 96,

p382-389.

Full-Scale Resonance Tests of a Railway Bridge, E. Mara-gakis, B. M. Douglas, S. Haque and V. Sharma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p183-190.

Modal Identification of a Cable-Stayed Bridge, W-H. P. Yen, T. T. Baber and F. W. Barton, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p600-603.

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94, p2437-2450.

Time Effects on Pile Skin Resistance, Juan M. Antorena and G. Thomas McDaniel, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p582-589.

The 'Dynamics of Beaches' Project, P. Prinos, A. S. Arcilla, N. Christiansen, J. van de Graaf, M. Hogedal, A. Lewis, B. O'Connor, F. Rivero and J. de Rouck, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582.

Animation Techniques for Visualizing Coastal Flow Dy-namics, Brian King, Patrick Collins, Duncan Galloway and Eric Wolanski, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Application of Chaotic Dynamics to Stochastic Resonance, Marek Franaszek and Emil Simiu, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p86-89.

Diffusion Wave Modeling of Distributed Catchment Dy-namics, Stefano Orlandini and Renzo Rosso, HE July 96, p103-113.

Dynamic Characteristics of Post-Tensioned Girders with Web Openings, Nabil F. Grace and Brian Ross, ST June 96, p643-650.

Dynamic Modeling and Response of Soil-Wall Systems, Anestis S. Veletsos and Adel H. Younan, GT Dec. 94, p2155-2179.

Dynamics of Multi-DOF Stochastic Nonlinear Systems, Timothy M. Whalen, (*Probabilistic Mechanics & Struc-*tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p82-85.

Dynamics of River Ice Jam Release, Hung Tao Shen and Shunan Lu, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p594-605.

Dynamics of Sand Bars in Coastal Zones, B. Boczar-Karakiewicz, J. L. Bona, A. Naguszewski and W. Romańczyk, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p862-867.

Effects of Pier and Foundation Stiffness for Bridges Subjected to Nonstationary Seismic Input, Gongkang Fu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Equations of Motion for Mechanical Systems, Firdaus E. Udwadia and Robert E. Kalaba, AS July 96, p64-69.

Feasibility of Modeling Phosphorus Dynamics in Stormwa-ter Wetlands, Karina T. Lopez Ivich, William James, Iso-bel W. Heathcote and John Fitzgibbon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p524-529.

Hybrid Inverse Mode Problems for FEM-Shear Models, Izuru Takewaki and Tsuneyoshi Nakamura, EM Aug. 95, p873-880.

Impact of Weight Falling onto the Ground, Jose M. Roesset, Eduardo Kausel, Vicente Cuellar, Jose L. Monte and Julian Valerio, GT Aug. 94, p1394-1412.

LATWAK: Impact Test to Obtain Pile Lateral Static Stiffness, Jean-Louis Briaud and Marc Ballouz, GT June 96, p437-444.

Lift Off and Entrainment of Sediments, J. M. Redondo, M. A. Sánchez and R. Castilla, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p700-719.

Mathematical Modelling of Coastal Morphodynamics Near a Tidal Inlet System, Jan S. Ribberink, Eelco H. Negen and Gerrit Hartsuiker, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p915-926.

Maximum Structural Response Using Convex Models, Yakov Ben-Haim, Genda Chen and T. T. Soong, EM Apr. 96, p325-333.

A Melnikov Theoretic Bound on Probability of Escape from a Potential Well, Michael R. Frey, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p510-513.

Method of Non-Linear Stochastic Dynamics - A Comparative Discussion, G. I. Schueller and H. J. Pradlwarter, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p966-969.

NEHRP Provisions for 1994 for Nonstructural Components, Richard M. Drake and Robert E. Bachman, AE Mar. 96, p26-31.

Nonlinear Dynamics of Unidirectional, Fiber-Reinforced Tori, Raouf A. Raouf and Anthony N. Palazotto, EM Mar. 96, p271-276.

Nonlinear Performance of Offshore Platforms in Extreme Storm Waves, R. G. Bea, WW Mar./Apr. 96, p68-74.

Ordinary Operating Conditions of Large Channels of Moscow's Sewerage Network, Yuri A. Ermolin, IR May/ June 96, p145-148.

Oscillations of Bridge Stay Cables Induced by Periodic Motions of Deck and/or Towers, A. Pinto da Costa, J. A. C. Martins, F. Branco and J. L. Lilien, EM July 96, p613-622.

Particle Dynamics in the Sound Between Denmark and Sweden, Jens R. Valeur, Morten Pejrup and Anders Jensen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p951-962.

Performance of Multiple Mass Dampers Under Random Loading, Ahsan Kareem and Samuel Kline, ST Feb. 95, p348-361.

Random Fields and Airplane Loads, Ludomir M. Laudanski, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p684-687.

Rate Dependent Damage Model for Concrete in Dynamics, Jean-François Dubé, Gilles Pijaudier-Cabot and Christian La Borderie, EM Oct. 96, p939-947.

Resonances in Nonlinear Stochastic Systems, Agnessa Kovaleva, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p736-739.

Response Spectral Densities of Stochastically Excited Nonlinear Systems, G. Q. Cai and Y. K. Lin, (Probabilistic Mechanics & Structural Reliability, Dan M., Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p732-735.

Role of Moment Exponent in Stochastic Bifurcation, S. T. Ariaratnam, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p554-557.

Simplified Response-Spectrum Seismic Analysis of Nonlinear Structures, Roberto Villaverde, EM Mar. 96, p282-285

Statistical Dynamics of Pipe-Line with One-Side Contact Supports Under Turbulence of Cross-Wind Loads, Anatoly I. Menyailov and Christian G. Bucher. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996, p986-998.

Stochastic Integral/Calculus for Non-Gaussian Delta-Correlated Processes, Sau-Lon James Hu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p246-249. System Dynamics and Modified Cumulant Neglect Closure Schemes, H. Uğur Köylüoğlu and Søren R. K. Nielsen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p380-383.

System Identification and Its Application to Estimating Soil Properties, Steven Glaser, GT July 95, p553-560.

Time-Delay Linear Systems with Gaussian White Noise Input, M. Grigoriu, T. T. Soong and A. Reinhorn, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p422-425.

Two-Dimensional Modeling of River Dynamics for the Expansion of Clover Island, Kennewick, Washington, Thomas S, Wang, David P, Simpson and Raymond Walton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), n2861-2866.

Earth pressure

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Analysis and Design of Retaining Structures Against Earthquakes, Geotechnical Special Publication No. 60, Shamsher Prakash, ed., 1996, 0-7844-0206-X, 144pp.

Dynamic Modeling and Response of Soil-Wall Systems, Anestis S. Veletsos and Adel H. Younan, GT Dec. 94, p2155-2179.

Dynamic Response of Cantilever Retaining Walls, A. S. Veletsos and A. H. Younan, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p19-20.

Generalized Coulomb Active Earth Pressure for a Distanced Surcharge, Ernesto Motta, GT June 94, p1072-1079.

Lateral Earth Pressures on Deep Braced Walls, Daniel O. Wong, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p746-758.

One-Dimensional Compression of Sands at High Pressures, Jerry A. Yamamuro, Paul A. Bopp and Poul V. Lade, GT Feb. 96, p147-154.

Red River U-Frame Lock No. 1 Backfill-Structure-Foundation Interaction, Robert M. Ebeling and Reed L. Mosher, GT Mar. 96, p216-225.

Vertical Uplift Capacity of Horizontal Anchors, Kanakapura S. Subba Rao and Jyant Kumar, GT July 94, p1134-1147.

Earth reinforcement

Bearing Capacity of Rectangular Footings on Geogrid-Reinforced Sand, Temel Yetimoglu, Jonathan T. H. Wu and Ahmet Saglamer, GT Dec. 94, p2083-2099.

Earth Reinforcement and Soil Structures, Co-publisher: Thomas-Telford, ISBN: 0-7277-2525-4, Colin J. F. P. Jones, 1996, 0-7844-0194-2, 380pp.

Formation of Shear Zones in Reinforced Sand, Scott E. Shewbridge and Nicholas Sitar, GT Nov. 96, p873-885.

Reliability Based Design of Reinforced Earth Structures, Adnan A. Basma and Ali S. Al-Harthy, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p788-791.

Slope Stabilization Using Old Rubber Tires and Geotextiles, Paul S. H. Poh and Bengt B. Broms, CF Feb. 95, p76-79.

Soft Ground Improvement in Lowland and Other Environments, D. T. Bergado, L. R. Anderson, N. Miura and A. S. Balasubramaniam, 1996, 0-7844-0151-9, 433pp.

Earth structures

Earth Reinforcement and Soil Structures, Co-publisher: Thomas-Telford, ISBN: 0-7277-2525-4, Colin J. F. P. Jones, 1996, 0-7844-0194-2, 380pp.

Jones, 1996, 0-7844-0194-2, 380pp.
Earth Spillway Design Using SITES Software, Darrel M. Temple, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1930-1935.

Reliability Based Design of Reinforced Earth Structures, Adnan A. Basma and Ali S. Al-Harthy, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p788-791. Soil Creep and Creep Testing of Highly Weathered Tropi-cal Soils, Peter G. Nicholson, Philip W. Russell and Clint F. Fujii, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p195-213.

Adaptive Self-Tuning Control of Excavators, A. J. Koivo and Allen D. Nease, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p220-226.

Controlled Excavation Along a Prescribed Path, Eugeniusz Budny and Witold Gutkowski, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p227-234.

Evaluating the Performance of Construction Equipment Operators in Egypt, Ashraf M. Elazouni and Ismail M. Basha, CO June 96, p109-114.

A Neural Network Impedance Learning Control Model for a Robotic Excavator, Xiaodong Huang, Leonhard Ber-nold and Gordon Lee, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p213-219.

Optimizing Haul Unit Size and Number Based on Loading Facility Characteristics, Douglas D. Gransberg, CO Sept.

96, p248-253.

Vibratory Excavation and Anchoring Tools for the Lunar Surface, J. Ledlie Klosky, Stein Sture, Hon-Yim Ko and Frank Barnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p903-

Earthquake damage

Earthquake damage The 1994 California State University, Northridge Earthquake Experience - A Case Study, Gerry Simila, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p45.

Beware of Flying Cranes - and Disconnected Codes, M. Russell Nester and Allan R. Porush, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p219-220.

Communication Breakdown, Felix S. Wong and Jeremy Isenberg, CE Jan. 96, p52-54.

Comprehensive Evaluation Method on Earthquake Damage Using Fuzzy Theory, Bo Song, S. Hao, Suminao Mu-rakami and Satoru Sadohara, UP Mar. 96, p1-17.

Damage due to Northridge Earthquake Induced Movement of Landslide Debris, Robert W. Day and Dennis M. Po-

land, CF Aug. 96, p96-108.

Damage Evaluation in Steel Box Columns by Cyclic Loading Tests, Satish Kumar and Tsutomu Usami, ST June 96, p626-634.

Damage Evaluation in Steel Box Columns by Pseudodynamic Tests, Tsutomu Usami and Satish Kumar, ST June 96, p635-642.

Damaging Earthquakes: A Scientific Laboratory, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p151-152.

Development of Integrated Inventory Databases and Earthquake Damage and Loss Estimation Methodologies for Structures in Utah, Christopher Rojahn, Stephanie A. King, Roger E. Scholl, Anne S. Kiremidjian, Lawrence D. Reaveley and Robert F. Wilson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p7-8.

ed., 1997), p7-8.

Development of Probabilistic Earthqake Damage Estimation Models, D. Mirfendereski and C. Scawthorn, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p243-244.

The DIMAK Scale for Disaster Magnitude Measuring in Service, Mark Kiyachko and Ilia Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p76-77.

Drilled Shaft Load Testing Los Angeles Coliseum, Paul R. Schade and Barry J. Meyer, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p574-581.

Earthquake Destructiveness Potential Factor and Permanent Displacements of Gravity Retaining Walls, Teresa Crespellani, Claudia Madiai and Giovanni Vannucchi, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p124-133.

Earthquake Hazard Assessment Through Geographic Information Systems, Stephanie A. King, Anne S. Kiremidjian and Kincho H. Law, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p123-124.

Earthquake-Induced Ground Settlements of Bridge Abut-ment Fills, Raj V. Siddharthan and Mahmoud El-Gamal, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996, p100-123.

Earthquake-Induced Landsliding Analyzed and Predicted With a Geographic Information System, James McCalpin, (Natural Disaster Reduction, George Housner, ed. and Riley M. Chung, ed., 1997), p3-4.

Earthquake-Initiated Hazmat Releases: An Assessment, Michael K. Lindell and Ronald W. Perry, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p237-238.

Chung, ed., 1997), pc37-c30.
Effect of Ground Condition on Earthquake Damage, Makoto Nasu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p233-234.

Effects of Earthquakes on Highway Bridge Abutments, M. Zoghi, J. M. Hastings and D. W. Fenza, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p193-194.

Evaluation of Structural Integrity of Damaged Masonry Building, Sherif A. Mourad and Farouk A. El-Hakim, CF

May 96, p73-78.

Experimental Investigation of Cumulative Seismic Damage in Concrete Bridge Piers, Sashi K. Kunnath, Ashraf El-Bahy, William C. Stone and Andrew W. Taylor, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p381-382.

The Federal Government's Existing Building Inventory, Ann Bieniawski, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p161-

FEMA-NIBS Earthquake Loss Estimation Methodology, Robert V. Whitman, Henry J. Lagorio and Philip J. Schneider, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p113-114.

Furthering Local Knowledge of Earthquake Related Disas-ters, Experiences Learned from the Kobe Earthquake of January 17, 1995, David B. Swanson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p90-91.

Fuzziness of the Modified Mercalli Intensity as a Measure of Damage, Nozar G. Kishi and Timothy H-J. Yao, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p247-248.

Gain-Scheduled Adaptive Control of a Hybrid Structure, Moises A. Abraham, James R. Morgan and Alexander G. Parlos, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p260-261.

Geographic Information Systems for Emergency Response Management of Transportation Systems, Anne Kirem-idjian, Nesrin Basoz, Kincho Law and Stephanie King, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p355-356

Housing Losses, Mary C. Comerio, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p167.

"Father of Earthquake Engineering," Leads ASCE's Disaster Mitigation Conference, NE Sept. 96,

Hyogo-Ken Nanbu Earthquake of January 17, 1995: A Post-Earthquake Reconnaissance of Port Facilities, Dickenson, Vice-Chairman, Committee on Ports and Harbors Lifelines of the Technical Council on Lifeline Earthquake Engineering of ASCE, (Stuart D. Werner, chmn.), 1996, 0-7844-0161-6, 111pp.

Improving the Effectiveness of Post Earthquake Investiga-tions, Susan K. Tubbesing, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p327-328.

Incorporation of Fuzzy Damage States in Seismic Fragility Analysis, Jun-Rong Huo and Howard H. M. Hwang, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangool, ed. and Mircea D. Grigoriu, ed., 1996), p318-321.

A Knowledge Based System for the Evaluation of Earth-A Knowledge Based System for the Evaluation on Earth-quake Damaged Structures, John A. Kuprenas and John Manios, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p742-749.

The Kobe Earthquake: Ground Shaking, Damage and Loss,

Charles A. Kircher, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p908-916.

Jamshid Mohammadi, ed., 1990, pous-90. 916.
The Kobe Earthquake: Performance of Engineered Buildings, David R. Bonneville, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p917-925.
Loss of Capacity of Concrete Shear Walls, Hassan Sassi and Richard Ranous, (Natural Disaster Reduction,

George W. Housner, ed. and Riley M. Chung, ed., 1997), p80-81.

Mexico Earthquake Causes Casualties and Damage, CE

Jan. 96, p24.

Jan. 39, p.24.
The New Madrid Earthquake: Preparing Nurses, Stephanie K. VanArsdale and Roy B. VanArsdale, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p97-98.

Performance of Bridges during the Hanshin-Awaji Earth-quake, Eiichi Watanabe and Kunitomo Sugiura, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p926-933.

Performance of Single Family House Foundations During Northridge Earthquake, Robert W. Day, SC May 96,

p85-88.

Preparing for the Big One - Risk Assessment and Mitigation of a Major Earthquake, David L. Pratt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p207-208.

A Program for the Reduction of Seismic Hazards Posed by Welded Steel Moment Frame Structures, Stephen A. Mahin, Ronald O. Hamburger and James O. Malley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p157-158.

Railroad Bridge Behavior during Past Earthquakes, William G. Byers, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

Mohammadi, ed., 1996), p175-182.

Reliability and Restoration of Water Supply Systems Following Earthquakes, Donald Ballantyne, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p203-204.

Repair and Retrofit of Reinforced Concrete Columns, Riyad S. Aboutaha, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p313-

Roosevelt Dam Reaches a New Height of Safety, CE May

Seismic Design Criteria for Navy Wharves, J. M. Ferritto and C. S. Putcha, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p353-

Seismic Design Issues of Water Pipelines at the Hayward Fault Crossing, Luke Cheng and Lota D. Nuguid, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p147-154.

Seismic Microzonation and Development of an Earthquake Damage Scenario for Istanbul, Turkey, Mustafa Erdik and Jennifer N. Swift-Avci, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p341-342.

Seismic Solutions for Steel Frame Buildings, Virginia Fair-

weather, CE Mar. 96, p40-43.

Seismic Vulnerability and Repair Cost of the University of Memphis Buildings, Howard H. M. Hwang, Min Xu and Jun-Rong Huo, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p143-144.

Shake, Rattle and Map, Stephanie A. King and Anne S. Kiremidjian, CE June 96, p50-52.

Shear-wall Retrofit, Mark Jokerst, CE Feb. 96, p36-39. A Simulator to Study the Effects of Earthquakes on Seg-mental Paving, John Clifford, Rob Avenall and Don Brown, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p1-2.

Spotlight on Steel Moment Frames, W. F. Chen and E. Yamaguchi, CE Mar. 96, p44-46.

Statistical Aspects of Damages Due to the Great Hanshin Earthquake, Hitoshi Seya and Michio Sugimoto, (Proba-Larunquake, rinoshi Seya and Michio Sugimoto, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p186-189.

Strong Ground Motion Characteristics and Damage Distribution of Housings by an Epicentral Region Earthquake of Mag.7.2 in KOBE, Japan of 1995, Yoshinori Iwasaki, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p147-148.

Two Recent Russian Far East Destructive Earthquakes. Case Studies and Post-Disaster Analysis, J. M. Eisenberg and A. M. Melentyev, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p235-236.

U.S. Engineers See the Before and After in Kobe a Year after the Big Earthquake, NE June 96, p8. U.S. Firm Builds Shake Table for Japan, John Casey, ET

Aug/Sept. 96, p1,8. Use of a National Loss Estimation Methodology for Risk Management, Thalia Anagnos, Scott Lawson, Jawhar Bouabid and Mourad Bouhafs, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p249-250.

Use of a Technical Clearinghouse during Emergencies, Carl E. Mortensen, Richard K. Eisner, James F. Davis and Michael S. Reichle, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p309-310.

Vulnerability of Pacific Northwest Port-Related Lifeline Structures Based on Observations from the Kobe Earth-quake of January 17, 1995, David B. Swanson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p9-10.

Earthquake engineering

Accelerations and Time Histories for Earthquakes Affecting Kentucky's Bridges, I. E. Harik, R. Street, Z.

Allecting Reflucky S Bridges, L. E. Harik, R. Street, Z. Wang and D. L. Allen, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p464-471.

Class of Masing Models for Plastic Hysteresis in Structures, James L. Beck and Paramsothy Jayakumar, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), 21032–1032. p1083-1090.

Collapse Analysis of Steel Frame Structures Under Earthquake Loading, Scott C. Martin and Roberto Villaverde, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Comparison of LQR and H_ Algorithms for Vibration Con-trol of Structures in Seismic Zones, H. Allison Smith and J. Geoffrey Chase, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1164-1171.

Criteria for Initiation of Slide, Rock, and Slide-Rock Rigid-Body Modes, Harry W. Shenton, III, EM July 96,

p690-693

Design and Implementation of Nonlinear Control Strategies, T. T. Soong and Z. Wu, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), pl 147-1154.

Dynamic Effects of Sediment and Foundation on Dam Hydrodynamic Pressure Under Vertical Ground Accelerations, Kuo-Chyang Chang, Tin-Kan Hung, David A. Margo and Jeen-Shang Lin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p511-514.

Dynamic Response Analysis of High Arch Dam-Water-Foundation System, Du Xiuli, Chen Houqun and Hou Shunzai, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p987-988.

Dynamic Response of Flexible Retaining Walls, A. H. Younan and A. S. Veletsos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p310-313.

Dynamics of Structures: Theory and Applications to Earth-quake Engineering by Anil K. Chopra, T. Igusa, EM Feb. 96, p183.

Effect of Soil-Structure Interaction on Structural Response, Y. Yong, R. C. Zhang and J. Yu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1098-1101.

Experimental Implementation of Hybrid Control, J. Pandya, Experimental Implementation of Hybrid Control, J. Pandya, Z. Akbay, M. Uras and H. Aktan, 'Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1172-1179. Housner, "Father of Earthquake Engineering," Leads ASCE's Disaster Mitigation Conference, NE Sept. 96,

p1,4.

Insight into the Inelastic Response to a Fully Nonstationary Earthquake Ground Motion Model, Bor-Feng Peng and Joel P. Conte, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p269-272.

Modified Bang-Bang Control Law for Structural Control Implementation, Z. Wu and T. T. Soong, EM Aug. 96, p771-777.

A New Semi-Active Control Device for Seismic Response Reduction, S. J. Dyke, B. F. Spencer, Jr., M. K. Sain and J. D. Carlson, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p886-889.

Recent Developments in Stochastic Mechanics Relevant to Earthquake Engineering, M. Shinozuka, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol,

ed. and Mircea D. Grigoriu, ed., 1996), p1-1. Reduction of Structural Response by Energy Dissipation Devices Modelled on Shape Memory Materials, C. W. S. To and J. M. Kelly, (Engineering Mechanics, Y. K. Lin

and T. C. Su, 1996), p491-494. Seismic Active Control by a Heuristic-Based Algorithm, Yu Tang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p232-235.

St. (1990), p.225.
Seismic Behavior of Precast Parking Structure Diaphragms,
R. B. Fleischman, R. Sause, A. B. Rhodes and S. Pessiki,
(Building an International Community of Structural Engineers,
S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1139-1146.

Seismic Response of a Block on an Inclined Plane to Verti-cal and Horizontal Excitation Acting Simultaneously, Liping Yan, Neven Matasovic and Edward Kavazanjian, Ir., (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p1110-1113.

Stability of Actively Controlled Civil Engineering Structures with Actuator Saturation, Anil K. Agrawal, Ashish Das and Jann N. Yang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p756-759.

A Strategy for Active Control of Tall Civil Structures Using Regenerative Electric Actuators, A. C. Nerves and R. Krishnan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p503-506.

Vibration Control of Structures Utilizing Architectural Walls, H. Allison Smith, Luciana R. Barroso and Vicki L. Vance, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p495-498.

Design of Supplemental Dampers for Control of Structures, N. Gluck, A. M. Reinhorn, J. Gluck and R. Levy, ST Dec. 96, p1394-1399.

Dynamic Response of Cantilever Retaining Walls, A. S. Veletsos and A. H. Younan, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p19-20.

Effect of Soil-Structure Interaction on Structural Response, Y. Yong, R. C. Zhang and J. Yu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1098-1101.

Experimental Investigation of Tuned Liquid Dampers, Dorothy A. Reed, Harry Yeh, Jinkyu Yu and Sigurdar Gar-darsson, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p215-216.

Experimental Verifications of H., and Sliding Mode Control for Seismically Excited Buildings, J. N. Yang, J. C. Wu, A. M. Reinhorn, M. Riley, W. E. Schmittendorf and F. Jabbari, S.T. Jan. 96, p69-75.

Influence of Support Stiffness for Cantilever Beams Subjected to Modulated Filtered White Noise, Gongkang Fu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p689-692.

inear Optimal Structural Control Including the External Excitation, G. F. Panariello, R. Betti and R. W. Longman, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p760-763.

Response of Long-Span Bridges to Spatially Varying Ground Motion, Ronald S. Harichandran, Ahmad Hawwari and Basheer N. Sweidan, ST May 96, p476-

Seismic Response of a Block on an Inclined Plane to Verti-cal and Horizontal Excitation Acting Simultaneously, Liping Yan, Neven Matasovic and Edward Kavazanjian, Ir., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1110-1113.

1990, p110-1113.
Simulating Seismic Response Behavior of Telecommunications Equipment, Ronald Ziemian, Derek Mostoller and Kenneth Philogene, ST Oct. 96, p1247-1249.
Simulation of Multi-Dimensional, Multi-Variate, Non-Gaussian, Homogeneous Stochastic Fields with Applications to Statistics and Park Property George Pro-Gaussian, Hollogeneous Sicchastic Freier with Applica-tions to Soil Liquefaction, Radu Popescu, George Deo-datis and Jean H. Prevost, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p808-811.

A Simulation Procedure for First Passage Problems of Non-linear Structures, Veit Bayer and Christian Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Some Computational Issues in the Control of Distributed Systems, Weiming Xu, Sami F. Masri and Bingen Yang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Spectral Relative Motion of Two Structures due to Seismic Travel Waves, Van Jeng and Kazuhiko Kasai, ST Oct.

96, p1128-1135.

System Identification and Its Application to Estimating Soil Properties, Steven Glaser, GT July 95, p553-560.

Three-Dimensional Simulation of Structural Pounding Dur-ing Earthquakes, M. Papadrakakis, C. Apostolopoulou, A. Zacharopoulos and S. Bitzarakis, EM May 96, p423-

Vibration Control of Cable-Stayed Bridges: Analytical Development, Armin G. Schemmann and H. Allison Smith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Vibration Control of Cable-Stayed Bridges: Control System Development and Experimental Results, Rahmat A. Shoureshi and Mark J. Bell, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p902-905.

Beware of Flying Cranes - and Disconnected Codes, M. Russell Nester and Allan R. Porush, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p.219-220.

Collapse Analysis of Steel Frame Structures Under Earth-quake Loading, Scott C. Martin and Roberto Villaverde, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Combining Snow and Earthquake Loads for Limit States Design, Bruce Ellingwood and David Rosowsky, ST

Design, Blue Enlingwood and Existing Masonry Nov. 96, p1364-1368. Composite Materials Reinforcement of Existing Masonry Walls, J. Bradley Christensen, Jeremy Gilstrap and Charles W. Dolan, AE June 96, p63-70.

Dynamic Response of Hagia Sophia, A. S. Cakmak, C. L. Mullen and M. N. Natsis, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p200-210.

Effect of Uncertainty on an Active Mass Damper System, H. S. Deoskar, R. V. Tappeta and B. F. Spencer, Jr., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Effects of Pier and Foundation Stiffness for Bridges Subjected to Nonstationary Seismic Input, Gongkang Fu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Minimum Design Loads for Buildings and Other Struc-tures, Revision of ANSI/ASCE 7-93 (St No. 95-007), Society of Civil Engineers,

0-7844-0092-X, 220pp.

Minimum Design Loads for Buildings and Other Structures: American Society of Civil Engineers Standard 7-95, Frederick S. Merritt, AE June 96, p80-81. Mode Search Algorithm for System Reliability under Earthquake Load, Hideki Idota and Tetsuro Ono, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p978-981.

Optimum Reliability-Based Design Earthquake Load, Jun Kanda and Khaled A. Ahmed, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p194-197.

Probabilistic Diagnosis of Seismic Design Load-To Harobabilistic Diagnosis of Seismic Design Load—10 Har-monize Seismic Design Codes of Various Engineering Structures, Tsuyoshi Takada, (*Probabilistic Mechanics* & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p190-193.

Reduced-Order Sand Model for Ground Response Analy-

Reduced-Order Sand Model for Ground Response Analysis, X. S. Li, EM Sept. 96, p872-881.
Rotation of Large Gravity Walls on Rigid Foundations under Seismic Loading, R. S. Steedman and X. Zeng, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p38-56.

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-1849.

Softening-Induced Dynamic Localization Instability: Seismic Damage in Frames, Zdeněk P. Bažant and Milan Jirásek, EM Dec. 96, p1149-1158.

Soil-Structure Interaction for Base-Isolated Buildings, Maria I. Todorovska, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p172-175.

Threshold Accelerations for Rotation or Sliding of Bridge Abutments, Rowland Richards, Jr., Kenneth L. Fishman and Randall C. Divito, GT Sept. 96, p752-759.

Earthquake magnitude scale

The DIMAK Scale for Disaster Magnitude Measuring in Service, Mark Klyachko and Ilia Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p76-77.

Hazard Assessment of Extreme Earthquakes and Floods Using the Theory of Outstanding Values, Reza Noubary, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p66-67.

Magnitude Scaling Factors for Soil Liquefaction Evalua-tions, Ignacio Arango, GT Nov. 96, p929-936.

Seismic Hazard Analysis Without the Gutenberg-Richter assmic riazard Analysis Without the Gutenberg-Richter Relationship, David Speidel, Peter Mattson and Bon Sy, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p129-130.

Earthquake prediction

Earthquake Predictions Shaky, CE Mar. 96, p8.

Hazard Assessment of Extreme Earthquakes and Floods Using the Theory of Outstanding Values, Reza Noubary, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p66-67.

The Research of the Relationship Between Earthquakes and the 30 Years of Intensive Geological Surveys in Xin Feng River, China, Ru-Qi Lu, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p388.

Seismic Hazard Analysis Without the Gutenberg-Richter Relationship, David Speidel, Peter Mattson and Bon Sy, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p129-130.

Seismic Risk Analysis for Vrancea Zone, Felicia Olariu and Ioan Olariu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p21-22.

Earthquake resistant structures

Analysis Requirements for Performance-Based Design of Beam-Column Joints, John F. Bonacci, (Worldwide Advances in Structural Concrete and Masonry, A Schultz, ed. and S. L. McCabe, ed., 1996), p257-265.

Assessments of Lateral and Torsional Structural Responses Induced by Incoherent Ground Motions, G. D. Hahn and X. Liu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p188-191.

Behavior of High-Strength Concrete Beam-Column Joints, Michael E. Kreger and Elias I. Saqan, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p420-430.

Behavior of Reinforced Concrete Buildings: Deformations & Deformation Compatibility, John W. Wallace, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p245-256.

A Critical Evaluation of Current Approaches to Earthquake Resistant Design, Christopher Rojahn and Andrew Whit-taker, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p331-332.

Design of Seismic Resistant Concrete Columns for Confinement, Murat Saatcioglu, (Worldwide Advances in S. L. McCabe, ed., 1996), p233-244.

The Development of New Structural Systems in the After-math of the Kobe Earthquake, Mark P. Sarkisian, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p934-943.

Ductile Steel Beam-to-Column Connections for Seismic Resistance, Sheng-Jin Chen, C. H. Yeh and J. M. Chu, ST Nov. 96, p1292-1299.

Earthquake Resistance Assessment of Some Selected Exist-ing Buildings, M. Nazih Eilouch and Taleb Omran, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p145-146.

Earthquake Response of Structure-Elevator System, F. Se-gal, A. Rutenberg and R. Levy, ST June 96, p607-616.

Feds Study Seismic Guidelines, CE Dec. 96, p8.

Hybrid Moment Resisting Precast Beam-Column Connections, John Stanton, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p266-277.

Implications Derived from Recent Research in Mexico on Confined Masonry Structures, Sergio M. Alcocer, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p82-92.

Measured Seismic Behavior of a Two-Story Masonry Building, Gregory R. Kingsley, Guido Magenes and G. Michele Calvi, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. crete and Masonry, A. E. McCabe, ed., 1996), p123-134.

NEHRP Provisions for 1994 for Nonstructural Components, Richard M. Drake and Robert E. Bachman. AE

Mar. 96, p26-31.

Performance Evaluation of Dual-Level Versus Current Design Using 1994 Northridge Earthquake Records, K. J. Elwood and Y. K. Wen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p796-799.

Performance of Bridges during the Hanshin-Awaji Earth-quake, Eiichi Watanabe and Kunitomo Sugiura. (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996).

p926-933.

Welded Steel Moment Frame Structures, Stephen A. Mahin, Ronald O. Hamburger and James O. Malley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p157-158.

Quake Proofing a Palace, John Casey, CE Aug. 96, p32-35. Quality Control in Seismic Design and Construction, G. G.

Schierle, CF Aug. 96, p90-95.

Seismic Design Doubles Lateral Resistance (Available only in Structures special issue), James O. Malley, CE Sept.

96, p14A-16A.

Seismic Education Needs of the Building Trades and Code Enforcement Personnel, Cynthia Hoover, Marjorie Greene and James Russell, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p101-102.

Seismic Isolation of Bridges in New York City, Jagtar S. Khinda and Feng-Bao Lin. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p24-32.

Seismic Isolation of Bridges Using Elastomeric Isolation Systems, Ronald L. Mayes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p33-40.

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Seismic Isolation of Bridges Using Sliding Isolation Sys-tems, Paul F. Bradford and Ronald J. Watson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p41-47.

Seismic Isolation Retrofit of Large Historic Building, Anoop S. Mokha, Navinchandra Amin, Michael C. Constantinou and Victor Zayas, ST Mar. 96, p298-308.

Seismic Resistance of Partially-Grouted Masonry Shear Walls, Arturo E. Schultz, (Worldwide Advances in Struc-tural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p211-222.

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST

Sept. 94, p2583-2601.

Seismic Strengthening of Low Rise Buildings, Theodore A. Pruess and John C. Theiss, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p397-404.

Simplified Response-Spectrum Seismic Analysis of Nonlin-ear Structures, Roberto Villaverde, EM Mar. 96, p282-

Soil-Structure Interaction for Base-Isolated Buildings, Maria I. Todorovska, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p172-175.

Earthquake simulation models

Response of Building Systems with Rocking Piers and Flexible Diaphragms, Andrew C. Costley and Daniel P. Abrams, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p135-140.

Start-Ups, CE May 96, p8.

System Identification Study of a 1:10 Scale Steel Model using Earthquake Simulator, Satish Nagarajaiah and Xiaojiang Ma, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p764-767.

U.S. Firm Builds Shake Table for Japan, John Casey, ET Aug./Sept. 96, p1.8.

Analysis and Design of Retaining Structures Against Earth-quakes, Geotechnical Special Publication No. 60, Shamsher Prakash, ed., 1996, 0-7844-0206-X, 144pp.

Analysis of Free Vibrations of Tall Buildings, Qiusheng Li, Hong Cao and Guiqing Li, EM Sept. 94, p1861-1876.

Analysis of the Nonlinear Hysteretic Response of an RC Building, Sarwidi and Apostolos S. Papageorgiou, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1099-1106.

Applications of Space Technology to Aid in Identification of Seismic Hazards, Ronald Blom, Robert Crippen, Andrea Donnellan, Gilles Peltzer and Paul Rosen, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p305-306.

Approach Philosophy and Risk Considerations for Seismic Design and Evaluation of Railroad Bridges, Kenneth L. Wammel, James R. Beran and Zolan Prucz, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p167-

Assessing the Local Geologic Component of the Earth-quake Hazard in the Portland Metropolitan Area, Mat-thew A. Mabey and Ian P. Madin. (Natural Disaster Re-duction. George W. Housner, ed. and Riley M. Chung, ed., 1997), p177-178.

Berkeley Fights Fire with Salt Water, CE Dec. 96, p18. Biopositive City as Means for Natural Disaster Reduction, Alexandr Tetior, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p329-

330.

Building Collapse Rescue Engineering, Sólveig Thorvald, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p41-42.

Building Seismic Safety Council Project '97, James E. Beavers and R. Joe Hunt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p335-336.

Capacity and Stiffness of Bridge Abutments During Earth-quakes, Rakesh K. Goel, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p239-240.

Communication Breakdown, Felix S. Wong and Jeremy Isenberg, CE Jan. 96, p52-54.

Community Preparedness and Disaster Response The City of Los Angeles: Community Emergency Response Team Program, Frank W. Borden, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p323-324.

Complete Three Dimensional Analysis of Pressures on a Vertical Cylinder by Earthquakes Including Fluid-Structure Interaction, Bang-Fuh Chen, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p519-522.

A Comprehensive Relational Database of Structural Dam ing Data, Sandeep Khare and Nicholas P. Jones, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1236-1243.

Computer Analysis, Vincent Thomas Bridge, Raymond W. Wolfe and Hany J. Farran, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p311-312.

Conceptual Seismic Design Methods for Railroad Bridges, Zolan Prucz, Kenneth E. Bruestle and Vinaya Sharma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p191-198.

Considering Uncertainty in Earthquake Response Spectra, Sara Wadia-Fascetti and Burcu Vuran Gunes, (Natural Disaster Reduction, George W. Housner, ed. and Riley

M. Chung, ed., 1997), p211-212.

A Continuing Education Program Involving A Partnership Among Building Designers, Constructors, and Code Enforcers, Michael A. Cassaro, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p92-96.

Cooperative Efforts for Earthquake Risk Management in Developing Countries, Geoffrey Hoefer, Brian Tucker, Jeannette Fernández, Hugo Yepes, Jean-Luc Chatelain, Fumio Kaneko and Stephanie A. King, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p283-284.

Creating of a Data Base of Small Earth Dam for Natural Disaster Reduction, Shigeru Tani, Kenichi Ushikubo and Souji Harima, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p72-73.

Dam-Foundation Rock Interaction Effects in Earthquake Response of Arch Dams, Hanchen Tan and Anil K. Chopra, ST May 96, p528-538.

Damage due to Northridge Earthquake Induced Movement of Landslide Debris, Robert W. Day and Dennis M. Poland, CF Aug. 96, p96-108.

Design of Energy Dissipation Devices Based on Concept of Damage Control, K. L. Shen and T. T. Soong, ST Jan. 96, p76-82.

Development of the Deterministic Caltrans Seismic Hazard Map of California, Lalliana Mualchin, (Natural Disaste Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p297-298.

Developments in Effective Emergency Management: A Means of Natural Disaster Cost Reduction, Gerald R. Schimke, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p37-38.

Dynamic Analysis of Tall Building Using Reduced-Order Continuum Model, Michael J. Chajes, Liyang Zhang and James T. Kirby, ST Nov. 96, p1284-1291.

Dynamic Modeling and Response of Soil-Wall Systems, Anestis S. Veletsos and Adel H. Younan, GT Dec. 94,

Earthquake Fault Rupture Propagation Through Soil, Jonathan D. Bray, Raymond B. Seed, Lloyd S. Cluff and H. Bolton Seed, GT Mar. 94, p543-561.

Earthquake Hazard Assessment of Iran, Behrooz Tavakoli and Mohsen Ghafory Ashtiany, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p301-302.

Earthquake Resistance Assessment of Some Selected Exist-ing Buildings, M. Nazih Eilouch and Taleb Omran, (Nat-ural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p145-146.

Earthquake Response of Gravity Dams Including Effects of Porous Sediments, José Domínguez and Rafael Gallego, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p649-652

Earthquake Response of Structures by Structural Mixture Theory, Mohammed S. Al-Ansari, O. M. Kirkely and Gregory Gillette, ST Oct. 96, pl 198-1207.

Education: Pathway to Mitigation, James W. Russell, (Nat-ural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p35-36.

Energy-Based Linear Damage Model for High-Intensity Seismic Loading, Y. H. Chai, K. M. Romstad and S. M. Bird, ST May 95, p857-864.

Evaluation and Upgrade of Major Transmission Lines Crossing Active Faults, Robert W. Lau, David D. Lee, David L. Pratt and Marilyn L. Miller, (*Pipeline Cross*ings 1996, Lawrence F. Catalano, ed., 1996), p418-425.

Evaluation of Soil Liquefaction by Energy Principles, J. Ludwig Figueroa, Adel S. Saada, Liqun Liang and Nitin M. Dahisaria, GT Sept. 94, p1554-1569.

Exact Solutions to A Class of Structure-Equipment Sys-tems, Genda Chen and T. T. Soong, EM Nov. 96,

p1093-1100.

Examples of Structural Identification from Measured Earthquake Response: Buildings, Bridges, and Dams, G. L. Fenves, E. Safak and M. Raghavendrachar, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p659-666

Experimental Results for Seismic Resistant Steel Moment rame Connections, Charles W. Roeder and Douglas A. Foutch, ST June 96, p581-588.

Failure of Tapo Canyon Tailings Dam, Leslie F. Harder, Jr. and Jonathan P. Stewart, CF Aug. 96, p109-114.

Fire Reliability at Earthquake Occasions, Mamoru Kohno, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p198-201

Flood Hazard Zonation in a Multihazard Environment, James E. Beavers and Frank H. Thomas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p345-346.

Forced Vibration of Full-Scale Wall-Backfill System, Ahmed-W. Elgamal, Sreenivas Alampalli and Paul Van

Laak, GT Oct. 96, p849-858.

Generation of Ground Motion Time Histories as Non-Stationary Vector Processes: Response Spectrum Com-patible Seismograms, George Deodatis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p616-619.

Heuristic-Based Algorithm for Active Control, Yu Tang, EM Aug. 96, p801-803.

Hyogo-Ken Nanbu Earthquake of January 17, 1995: A Post-Earthquake Reconnaissance of Port Facilities, Stephen E. Dickenson, Vice-Chairman, Committee on Ports and Harbors Lifelines of the Technical Council on Lifeline Earthquake Engineering of ASCE, (Stuart D. Werner, chmn.), 1996, 0-7844-0161-6, 111pp.

In-Situ Dynamic Response of Cantilever Walls, Sreenivas Alampalli and Ahmed-W. Elgamal, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p57-76.

Inelastic Behavior of Steel Frames with Added Viscoelastic Dampers, K. C. Chang, S. J. Chen and M. L. Lai, ST Oct. 96, p1178-1186.

Institutional Issues in Natural Hazard Mitigation, Daniel J. Alesch, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p367-368.

Laterally Excited Flexible Tanks with Nonuniform Density Liquid, Yu Tang, EM Oct. 96, p948-956.

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Lessons of the Recent Earthquakes in Sakhalin Region, Russia, Mark Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p5-6.

Liquefaction of Reclaimed Island in Kobe, Japan, Ahmed-W. Elgamal, Mourad Zeghal and Ender Parra, GT Jan. 96, p39-49.

Magnitude-Distance Contours for Probabilistic Seismic Hazard Analysis, P. Bazzurro, S. R. Winterstein, T. C. Ude and C. A. Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p202-205.

Major New Seismic Provisions Proposed for the 1997 UBC, Robert Bachman, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p333-334.

Measuring Absorbed Cyclic Energy in Reinforced Concrete Beams, Ken Gaver and Sophia Hassiotis, ST Sept. 96, p1110-1113.

Modal Analysis of Linear Dynamic Systems: Physical Interpretation, Anil K. Chopra, ST May 96, p517-527.

Model to Incorporate Architectural Walls in Structural Analyses, H. Allison Smith and Vicki L. Vance, ST Apr. 96, p431-438.

Mortality and Morbidity Patterns Associated with the October 12, 1992 Egypt Earthquake, Josephine Malilay, Ibrahim Fayez Elias, David Olson, Thomas Sinks and Eric Noji, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p266-268.

Housner, ed. and Kney M. Chung, ed., 1997), p.206-206.
Nationally Applicable Guidelines for the Seismic Rehabilitation of Existing Buildings, Christopher Rojahn, Daniel Shapiro, Lawrence D. Reaveley, William T. Holmes, Jack P. Moehle, James R. Smith and Ugo Morelli, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p276-277.

Natural Hazard Zonation, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p361-362.

Natural Hazards Mitigation in South Carolina, Charles Lindbergh and Maurice R. Harlan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p86-87.

New Algorithm for Active Structural Control, Yu Tang, ST Sept. 96, p1081-1088.

New USGS Seismic Hazard Maps for the United States, A. Frankel, C. Mueller, D. Perkins, T. Barnhard, E. Leyen-decker, E. Safak, S. Hanson, N. Dickman and M. Hop-

decker, E. Safak, S. Hanson, N. Dickman and M. Frupper, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p173-174.
 Nonlinear Pounding of Bridges in Earthquakes, Xian Ma and Chris P. Pantelides, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1180-1187.

Nonlinear Soil Response—1994 Northridge, California, Earthquake, M. D. Trifunac and M. I. Todorovska, GT Sept. 96, p725-735.

On Reliability Assessment of Infrastructure Systems under Strong Earthquake, Hitoshi Furuta and Naruhito Shiraishi, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p632-635.

Optimal Polynomial Control of Seismically Excited Linear Structures, Anil K. Agrawal and Jann N. Yang, EM Aug.

96, p753-761

Passive Control Systems for Mitigation of Near-Field Earthquake Ground Motions, Peter W. Clark and James M. Kelly, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p217-218.

Performance of Precast Parking Garages in the Northridge Earthquake: Lessons Learned, Sharon L. Wood, John F. Stanton and Neil M. Hawkins, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1221-1227.

Performance of San Fernando Dams During 1994 North-ridge Earthquake, J. P. Bardet and C. A. Davis, GT July

96, p554-564

Performance of Single Family House Foundations During Northridge Earthquake, Robert W. Day, SC May 96, p85-88.

Performance of Two Reservoirs during 1994 Northridge Earthquake, C. A. Davis and J. P. Bardet, GT Aug. 96, p613-622.

Performance-Based Seismic Design of Building Structures, Kevin R. Collins, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p792-795.

Permanent Deformation on Preexisting Sliding Surfaces in Dams, George Gazetas and Nasim Uddin, GT Nov. 94. p2041-2061

Peru's Program for Disaster Mitigation 1992-1995, Julio Kuroiwa and Dusan Zupka, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p84-85.

Prediction of Observed Response of Base-Isolated Struc-ture, Nicos Makris and Himanshu S. Deoskar, ST May 96, p485-493.

Probabilistic Seismic Hazard and Sensitivity Analysis: A Case Study from Southern California, Mehrdad Mahdviar, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p299-300.

Public Policy and Building Safety, Marjorie Greene and Chris D. Poland, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p155-156

Quantitative Approach to Rapid Seismic Evaluation of Slab-on-Girder Steel Highway Bridges, Murat Dicleli and Michel Bruneau, ST Oct. 96, p1160-1168.

Range of Impacts of Some Recent U.S. Disasters and The Implications for Housing Recovery, Claire B. Rubin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p168-170.

Reconsideration of Initiation of Liquefaction in Sandy Soils, Catherine E. Fear and Edward C. McRoberts, GT Mar. 95, p249-261.

Research on Semiactive Dampers Makes Headway, Monica Maldonado, ET Aug./Sept. 96, p6-7.

Residential Vulnerability Functions and Their Variability Based on Claims Data, Ben Lashkari and Ronald Wardrop, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p307-308.

Resistance of Wood Members and Connections to Dynamic Loading, Laura Brantley, Robert Emerson and Kenneth Fridley, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p771-777.

Response of Long-Span Bridges to Spatially Varying Ground Motion, Ronald S. Harichandran, Ahmad Hawwari and Basheer N. Sweidan, ST May 96, p476-

Response of Pile Embedded in Stochastic Ground Media, Makoto Suzuki and Tsuyoshi Takada, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p612-615.

A Review (and Comparison) of DSHA and PSHA, Russell A. Green and William J. Hall, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p125-126.

Risk Factors for Physical Injury During Earthquakes: Lessons from Previous Studies, Robin M. Wagner, Nicholas P. Jones, Gordon S. Smith and Kirsten O. Waller, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p78-79.

Screening Hospitals and Fire Stations for Seismic Potentials in City of Tehran, F. Nateghi-A, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p349-350.

Seismic Analysis and Model Studies of Bridge Abutments, K. L. Fishman and R. Richards, Jr., (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p77-99.

Seismic Assessment for Offshore Pipelines, R. Bruschi, O. T. Gudmestad, F. Blaker and F. Nadim, IS Sept. 96,

Seismic Behavior of Structures with Flexible Diaphragms, Arturo Tena-Colunga and Daniel P. Abrams, ST Apr. 96, Seismic Evaluation and Retrofitting of U.S. Long-Span Suspension Bridges—Issues and Solutions, Subcommittee on Seismic Performance of Bridges, Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p56-90.

Seismic Isolation of Industrial Tanks, Victor A. Zayas and Stanley S. Low, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1205-1212.

Seismic Liquefaction Potential Assessed by Neural Net-works, Anthony T. C. Goh, GT Sept. 94, p1467-1480.

Seismic Motion Incoherency Effects on Dynamic Response, Dan M. Ghiocel, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p624-627.

Seismic Pressures Against Rigid Walls, Guoxi Wu and W. D. Liam Finn, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed.,

1996), p1-18.

Seismic Rehabilitation of a Non-Ductile Concrete Frame Seismic Rehabilitation of a Non-Ductine Concrete France
Building Using Shearwalls, Paul A. Murray and James
H. Parker, (Building an International Community of
Structural Engineers, S. K. Ghosh, ed. and Jamshid
Mohammadi, ed., 1996), p373-380.
Seismic Risk Analysis for Vrancea Zone, Felicia Olariu and
Ioan Olariu, (Natural Disaster Reduction, George W.

Housner, ed. and Riley M. Chung, ed., 1997), p21-22. Seismic Sleuths: A Grades 7-12 Materials Development and Teacher Enhancement Project, M. Frank Watt Ireton, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p33-34.

Seismotectonic and Seismic Hazard in Southern Bulgaria, Tosho Stoyanov, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p175-176.

Shake, Rattle and Map, Stephanie A. King and Anne S. Kiremidjian, CE June 96, p50-52.

Shaking Table Tests of Rigid, Semirigid, and Flexible Steel mes, Marwan N. Nader and Abolhassan Astaneh-Asl, ST June 96, p589-596.

Shear-wall Retrofit, Mark Jokerst, CE Feb. 96, p36-39. Statistical Seismic Responses of Structures using Response Spectrum Matching Technique, Ruichong Zhang and Masanobu Shinozuka, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p527-530.

Strain Level and Uncertainty of Liquefaction Related Index Tests, D. Roy, R. G. Campanella, P. M. Byrne and J. M. O. Hughes, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1149-1162

Strong Ground Motion Characteristics and Damage Distribution of Housings by an Epicentral Region Earthquake of Mag.7.2 in KOBE, Japan of 1995, Yoshinori Iwasaki, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p147-148.

System Identification Using Earthquake Acceleration Records, A.-W. Elgamal, M. Zeghal, H. T. Tang and J. C. Stepp, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p335-338.

Three-Dimensional Simulation of Structural Pounding During Earthquakes, M. Papadrakakis, C. Apostolopoulou, A. Zacharopoulos and S. Bitzarakis, EM May 96, p423-

Tobin Preaches 'Covenant' for Seismic Safety, NE July 96,

Torsion in Symmetric Structures due to Ground-Motion Spatial Variation, Ernesto Heredia-Zavoni and Federico Barranco, EM Sept. 96, p834-843

Bartanco, Esti Sept. 30, 1937-1932.
Toward A.D. 2000 in the IDNDR, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p285-286.

Training for the Big One - A Proactive Approach, Andrew M. Hui and David R. Putnam, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p43-44.

U.S. Engineers See the Before and After in Kobe a Year after the Big Earthquake, NE June 96, p8.
U.S. Firm Builds Shake Table for Japan, John Casey, ET

Aug./Sept. 96, p1,8.

Upgrading of Braced Frames for Potential Local Failures, Hae In Kim and Subhash C. Goel, ST May 96, p470-475.

Utilizing Communications Strategies to Educate the Public on a Major Program, David L. Pratt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p99-100.

Variability in Site-Specific Seismic Ground-Motion Design Predictions, C. J. Roblee, W. J. Silva, G. R. Toro and N. Abrahamson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1113-1133.

Vertical Seismic Forces on Elevated Concrete Slabs, M. N. Palaskas, Limin He and Michael Chegini, SC Aug. 96,

Vibration Control of Tall Buildings under Seismic and Wind Loads, Lih-Shing Fur, Henry T. Y. Yang and Seshasayee Ankireddi, ST Aug. 96, p948-957.

Vulnerability Assessment within BMS, Edgar P. Small and

Vulnerability Assessment within BMS, Edgar P. Small and Steven B. Chase, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p446-449.
Welded Steel Moment Frame Joint Testing Programs, Thomas A. Sabol and Michael D. Engelhardt, (Building on International Community of Structural Facilities.) an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi. ed., 1996). p1228-1235.

'A Comprehensive Strategy for Mitigation', R. T. Severn, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p13-14.

Anchoring a Landfill Expansion, Max Kroschel, Michael S. Snow and Thomas A. Williamson, CE May 96, p64-66. Contractor is Due Payment, CE Feb. 96, p24.

Grading Design of Side Slopes Fitting Roadside Topogra-phy, George Kanellaidis, TE Jan./Feb. 96, p87-90.

Landform Grading and Slope Evolution, Horst J. Schor and Donald H. Gray, GT Oct. 95, p729-734.

Optimal Land Grading Based on Genetic Algorithms, Srinivasa L. Reddy, IR July/Aug. 96, p183-188. Repair of Damaged Slab-on-Grade Foundations, Robert W. Day, SC May 96, p69-73.

Eccentric bracing

Seismic Design Doubles Lateral Resistance (Available only in Structures special issue), James O. Malley, CE Sept. 96, p14A-16A.

Eccentric loading
Finite Element Modelling of Deep Rolled Wide Flange
Beam Subject to Localized Edge Loading - A Case
Study, M. Arif Fazil and Celal N. Kostem, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p874-880.

Simple Formula for Eccentric Bolted Connection Design, Thomas W. Hartmann and Janelle K. Rohrbaugh, SC

Feb. 96, p40-46.

Eccentric loads

Photoelastic Determination of Contact Stresses of Founda-tions, G. U. Müller, GT Aug. 96, p692-696.

Explicit Stresses under Rectangular Footings, R. Irles and F. Irles, GT Feb. 94, p444-450.

Lateral Capacity of Helical Piles in Clays, Yenumula V. S. N. Prasad and S. Narasimha Rao, GT Nov. 96, p938-941.

Seismic Torsional Provisions: Influence on Element Energy Dissipation, Adrian M. Chandler, Joseph C. Correnza and Graham L. Hutchinson, ST May 96, p494-500.

Ecology

Alternative Urban Flood Control, Parviz Monadjemi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p2540.

Assessment of the Surface-Water Pollution and Measures To Emergency Stations Warning in the Republic of Uz-bekistan, T. Ososkova, V. Talskikh and O. Smolkova, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), Concept Ecology Integrated Project Engineering and Envi-ronment; Relating a Project to the Surroundings, David S. Reutter, Roger J. Menendez, Peter J. Bottone and Robert L. Whitman, Ir., (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p753-758.

Critical Evaluation of Risk Assessment: A Look from the Inside Out, Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996),

p419-421.

Ecological and Biological Considerations in River Restora-tion, Dudley W. Reiser, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2601-2606.

Fuzzy Arithmetic for Ecological Risk Management, Jacques Ganoulis, Iraklis Bimbas, Lucien Duckstein and Istvan Bogardi, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p401-415

Integrated Hydrological/Ecological/Economic Modeling for Examining the Vulnerability of Water Resources to Climate Change, John P. Kochendorfer and Jorge A. Ramirez, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p2157-2162.

Modeling the Ecological Impacts of Flaming Gorge Dam Operations, S. C. L. Yin, K. E. LaGory, J. W. Hayse, I. Hlohowskyj, R. A. Van Lonkhuyzen and H. E. Cho, (North American Water and Environment Congress) & Destructive Water, Chenchayya Bathala, ed., 1996),

New Educational Course "Sustainable Development Eco-City", Alexandr Tetior, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p31-32.

Non-Growing Season Water Budgets for a Shortgrass Steppe, Shusen Wang, William J. Parton and Gigi A. Richard, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p237-242.

The Part of Precipitation in Some Ecological Problems of the Dnister Basin, L. Gueiko, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2447-2448.

Sanitary Engineers in American Cities: Changing Roles from the Age of Miasmas to the Age of Ecology, Martin V. Melosi, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p108-122.

Economic analysis

Economic Comparison between Drywall and Conventional Partitions, Ronie Navon, David Carmel and Arnon Bentur, AE Dec. 96, p129-134.

Economic Evaluation of Design Codes—Case of Seismic Design, A. Warszawski, J. Gluck and D. Segal, ST Dec.

96, p1400-1408

An Economy and Risk Analysis of Installed Capacity Exn exonomy and Risk Analysis of Installed Capacity Ex-pansion at the Three Gorges Power Plant, Liping Wang, Nianhua Xue and Changming Ji, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathaia, ed., 1996), p3874-3879, Sterior Cladding Methods A. Tachesonomic Analysis

Exterior Cladding Methods: A Technoeconomic Analysis, Igal M. Shohet and Alexander Laufer, CO Sept. 96, p242-247.

Fully Automated Rebar CAD/CAM System: Economic Evaluation and Field Implementation, Ronie Navon, Ya'acov Rubinovitz and Mendi Coffler, CO June 96,

Integration of Water Resources Planning and Environmen-tal Regulation, William Whipple, Jr., WR May/June 96, p189-196.

Louis Berger, Who Built Large Firm, Dies at 82, CE Oct.

Risk-Equivalent Seasonal Discharge Programs for Ice-Covered Rivers, Corinne L. Wotton and Barbara J. Lence, WR May/June 95, p275-282. Viewpoint, George Seaden, IS Sept. 96, p103-107.

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Economic conditions

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Water Use "Recession" in San Diego Region, James Zhou, Kenneth A. Steele and Richard C. Pyle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2958-2963.

Economic development

Accessing Atlantic City, Paul Regenscheid, CE Mar. 96, p62-63.

ASCE Mourns Loss of Industry Leaders in Plane Crash, CE May 96, p71.

ASCE Mourns Loss of Industry Leaders in Plane Crash, NE May 96, p15.

Editorial, Patrick K. Takahashi, EY Dec. 96, p75-77.

Fuzzy Rule-Based Modeling of Reservoir Operation, Bijaya P. Shrestha, Lucien Duckstein and Eugene Z. Stakhiv, WR July/Aug. 96, p262-269.

John Scoville, Killed in Croatia Plane Crash, Headed Harza Engineering in Chicago, NE May 96, p15.

Los Angeles' Gateway Opens, CE Jan. 96, p20,22.

Project Blue Revolution, Patrick K. Takahashi, EY Dec. 96, p114-124.

TDA Profiles Opportunities in European Market, CE July 96, p8.

Traditional People and a Modern Mining Company Working Towards Sustainability in Indonesia, Bruce E. Marsh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2982-2992.

Urban Knowledge Parks and Economic and Social Development Strategies, George Bugliarello, UP June 96, p33-45.

Economic factors

Acquisition and Restoration of a Drainage District in the Snohomish River Valley, John Engel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3950-3955.

Acquisition and Use of Coastal-Storm Related Data for Zoning Purposes, Andrew W. Garcia. (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p393-394.

Appropriate Sanitation Technology Advisor: A Planner's Tool in Less Developed Countries, Larry Quinn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2993-2998.

Consensus as the Measure of Sustainability, Michael J. Bender and Slobodan P. Simonovic, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4148-4153.

Critical Needs for Sustainable Water Resources: Bridging the Gap Between Science and Implementation, B. A. Miller and M. J. Sale, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1297-1298.

Beonomic Efficiency of Regulations for Allocation and Control of Surface Water Withdrawals in Humid Regions. J. Wayland Eheart and Kenneth W. Harrison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2713-2718.

Economic Risk Analysis as a Research Directing Paradigm, Ken Young, Stuart Stein, David Pearson and Roy Trent, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2775-2780

Efficiencies of Drainage Systems and Improved Water Management, I. C. Tod and M. E. Grismer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2136-2144.

Evaluating Sustainability of Water & Sanitation Projects: Case Studies in Developing Countries, Philip Roark, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3253-3258.

Green Light for Whom? Hermann Zutraun, P.E., CE Sept. 96, p38.

Integrated Hydrological/Ecological/Economic Modeling for Examining the Vulnerability of Water Resources to Climate Change, John P. Kochendorfer and Jorge A. Ramirez, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2157-2162.

Life-Cycle Cost Analysis with Natural Hazard Risk, Stephanie E. Chang and Masanobu Shinozuka, IS Sept. 96,

p118-126.
Lunar Sample Return: A Near-Term Marketing Opportunity? Brad R. Blair, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p194-199.

New Orleans Rolls the Dice (Available only in *Structures* Special Issue), Richard G. Weingardt and John F. Davis, CE May 96, p3A-7A.

Privatization and Water Supply/Treatment Projects, Brantley Liddle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4136-4141.

Small Business in the Construction Industry, Howard H. Bashford, SC Aug. 96, p71-73.

A System to Improve Water-Related Sustainability Characteristics of International Development Programs/Projects, Larry Quinn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3259-3264.

Upper Mississippi River System Environmental Management Program (EMP), Doyle W. McCully, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3320-3325.

Economic forecasting

Forecaster Makes Concrete Prognostication, CE Apr. 96, p20,22,24.

Economic growth

A Boom in Thailand, Charles R. Heidengren, CE Nov. 96, p64-67.

Chicago Returns Traffic to Pedestrian Mall, CE June 96, p14.

Going Global: A CEO's Perspective, Vincent A. Rocco, ME Mar./Apr. 96, p21-24.

Parsons Brinckerhoff Set to Double in Size, CE Nov. 96, p27.

Small Businesses Fuel Economic Growth, Innovation, and Job Creation, Garold D. Oberlender, SC Aug. 96, p76-27

Feanamic impac

Benefits and Costs Associated with Flood Mitigation in the United States, Eugene A. Stallings, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p153-154.

Bid Competition a Sign of the Times, James W. Johnson, CE Jan. 96, p28.

Economic Impact of Managing Sea Water Intrusion, Douglas D. Parker and Tracy Hart, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4317-4322.

Editorial, Victor C. Li, MT Nov. 96, p183.

Identification of Regional (Third Party) Impacts Associated with the Truckee River Operating Agreement, Charles Borda, Tom MacDiarmid, Rangessan Narayanan, Thomas Harris, Karl MacArthur and Shawn Stoddard, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4036-4041.

Improving the Effectiveness of Post Earthquake Investigations, Susan K. Tubbesing, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p327-328.

Lifeline Failure and Disaster Preparedness of Businesses, Melvin J. D'Souza, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p105-106.

A Look at Technological Risk and Uncertainties in Flood Disaster Reduction, Shou-shan Fan and Nicholas C. Matalas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p253-255. Mitigation, Preparedness & Sustainable Development: Linking Research & Resources in the Global Information Infrastructure, Robert J. Coullahan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M.

Reduction, George W. Housner, ed. and Kney M. Chung, ed., 1997), p321-322. Modeling Climate Change Impacts on Water Resources, Brian Hurd, Paul Kirshen and Mac Callaway, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1834-1839.

Paris Spreads Its Western Wing, CE Apr. 96, p18.20.

Range of Impacts of Some Recent U.S. Disasters and The Implications for Housing Recovery, Claire B. Rubin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p168-170.

and Rifey M. Chung, ed., 1997), p106-17.
Regional Economic Impacts of a Land Fallowing Program

— The Palo Verde Test Land Fallowing Program Case
Study, Fadi Z. Kamand, (North American Water and Environment Congress & Destructive Water, Chenchayya
Bathala, ed., 1996), p4030-4035.

Seismotectonic and Seismic Hazard in Southern Bulgaria, Tosho Stoyanov, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p175-176

Tornadoes and Severe Storms in Russia, Nikolay A. Popov, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p133-134.

U.S. Engineers See the Before and After in Kobe a Year after the Big Earthquake, NE June 96, p8.

vulnerability of Water Resources to Global Climate Change in the Agricultural Midwest- Ecological, Eco-nomic, and Regulatory Aspects, J. Wayland Eheart and Edwin E. Herricks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2145-2150.

Economic models

Cost-Performance Criteria for Seismic Retrofitting, Alberto L. Guzmán, Ali Saffar and Leandro Rodríguez Agrait, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p902-905.

Economics

Commercial Mining Activities for the Space Frontier, David M. Neil, Russell J. Miller, David S. McKay and Brad R. Blair, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p800-

Design of Multistage Pumping Main, Prabhata K. Swamee, TE Jan./Feb. 96, p1-4.

TE Jan./Feb. 96, p1-4. Economic Preliminary Design of Bridges with Prestressed I-Girders, Sami M. Fereig, BE Feb. 96, p18-25. The Economics of Space Solar Power, Carissa Bryce Christensen, Douglas A. Comstock and John C. Mankins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p260-268.

Environmental Engineering Forum, Steven I. Safferman, Vivek P. Utgikar and Sarwan S. Sandhu, EE Sept. 96,

Metacomputing on the Horizon, CE Dec. 96, p20.

Planning Biosolids Land Application Rates for Agricultural Systems, David M. Crohn, EE Dec. 96, p1058-1066.

Predicting Contractor Failure Using Stochastic Dynamics of Economic and Financial Variables, Jeffrey S. Russell and Huaming Zhai, CO June 96, p183-191.

Recently Emphasized Objectives and Risk Analysis for Project Planning in Developing Countries, Alvin S. Goodman and Lampros E. Bourodimos, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p154-168.

Risk as a Sustainable Development Criteria, Heidelore I. Kroeger and Slobodan P. Simonovic, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1531-1536.

Should Conversion to SI System Continue to be Debated? Autar K. Kaw and Melissa Daniels, El Apr. 96, p69-72.

Use of the Metric System in Water Resources, Jan van Schilfgaarde, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3690-3695.

Ecosystems
Accidental Situations: Application of Surface-Water Moni-

Accidental Situations: Application of Surface-Water Moni-toring Data, P. Berg and T. Vasiljeva, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1338-1339.

Buying Wetlands, CE Aug. 96, p20.

Comparative Simulation of Oil Weathering, Hector R.

Fuentes, Rudolf Jaffé, Vassilios A. Tsihrintzis and Rahul

V. Shrotriya, (North American Water and Environment

Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p559-564.

Design Guidance - Ipstream and Rank Restoration Struc-

ed., 1990), p539-564.
Design Guidance - Instream and Bank Restoration Structures, J. Craig Fischenich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3079-3084.
Design of a Multi-Generational, Interstellar Ship, Divya

Design of a Multi-Obercational, intersector Ship, Divide Chander, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p311-320. Ecosystem Management in the State of Florida, Ernest L. Barnett and Jim Lewis, (North American Water and Environment Congress & Destructive Water, Chenchayya Berbale, ed. 1006) 2006, 2009. Bathala, ed., 1996), p3586-3591.

Evaluation of the Nitrogen Cycle in a Tidal Flat, Kyoko Hata, Iwao Oshima, Takcaki Kuramoto and Kisaburo Hata, Iwao Camma, Iatezak Kuramio and Kasolum L. Nakata, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p542-554. Innovative Effluent Management for Sustainability. Dan Bruinsma, Mary Ellen Dick, Eric Rosenblum and David

Tucker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1614-1619.

n Integrated Lunar/Martian-Engineering Controlled Ecosystem, Willy Z. Sadeh, (Engineering, Victoria in Space, Stewart W. Integrated Lunar/Martian-Engineered

Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1083-1089. Modeling Combined Stresses on Aquatic Ecosystems, Jamie D. Anderson, Ian P. King and Gerald T. Orlob, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3998-4003.

Invervaler, Americanyya Batmaia, ed., 1996), p3998-4003.
Numerical Modeling on the Ofunato Bay Ecosystem Including the Oyster Farming, Tomohiko Terasawa, Kisaburo Nakata and Koichi Taguchi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p530-541.

River Meander Zones and Floodplain Reconnection, David A. Bella, Peter C. Klingeman and Hiram W. Li, (North American Water and Environment Congress & Destruc-

American water and Environment Congress & Destruc-tive Water, Chenchaya Bathala, ed. 1996), p2613-2618. Some Thoughts About Ecosystems: Management, Control, and Uncertainty, Daniel E. Willard, (Risk-Based Deci-sion Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p191-206.

South Florida Water Management District: Reconstructing the Everglades Ecosystem, James Phillip Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1190-1196.

nve water, cnenchayya Bathaia, ed., 1996), p1190-1196. Vulnerability of Water Resources to Global Climate Change in the Agricultural Midwest- Ecological, Eco-nomic, and Regulatory Aspects, J. Wayland Eheart and Edwin E. Herricks, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2145-2150.

Web Tour: Antonio Baptista, ET June/July 96, p10-11.

Cooperative Efforts for Earthquake Risk Management in Developing Countries, Geoffrey Hoefer, Brian Tucker, Jeannette Fernández, Hugo Yepes, Jean-Luc Chatelain, Fumio Kaneko and Stephanie A. King, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p283-284.

ominant Eddy Simulation in Turbulent Flow, J.-B. Zhang and V. H. Chu, (*Engineering Mechanics*, Y. K. Lin and T. C. Su, 1996), p438-441. Domi

C. Su, 1996, pp.36-441.
 Modelling Eddy Formation in Coastal Waters: A Comparison between Model Capabilities, Duncan Galloway, Eric Wolanski and Brian King, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p13-25.

Vorticity and Eddies in the Surf Zone, D. Howell Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p460-464.

ow Over Vortex Ripples: Models and Experiments, Lewis A. W., E. Hitching, G. Perrier, E. Asp Hansen, H. Earnshaw, K. Eidsvik, C. Greated, M. Sumer and A. Temperville, (Coastal Dynamics '95, William R. Dally, Flow Over ed. and Ryszard B. Zeidler, ed., 1996), p686-697

The Influence of Turbulence Closure Strategy on Numeri-cal Modeling of Shallow Water Tides, Roger R. Grenier, Jr. and Richard A. Luettich, Jr., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng,

1996), p143-155

The Modelling of Plunging Breakers by the Introduction of a K-I Turbulence Closure Model, Michele Drago and Luigi lovenitti, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p317-328.

Physical and Numerical Study of Wave Induced Currents in Wave Basins of Various Sizes, Peyman Badiei and J. William Kamphuis, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p377-388.

A Quasi-3D Model of Longshore Currents, A. F. Garcez Faria, E. Thornton and T. Stanton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p389-400.

Edge effect

Spatial and Temporal Fluctuations of Nearshore Currents Induced by Directional Random Waves, Yoshimi Goda and Tetsuya Mizusawa, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p269-280

Subharmonic Edge Waves. Stability Analysis, Antonio Lechuga, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p281-292

Vorticity and Eddies in the Surf Zone, D. Howell Peregrine. (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p460-464.

The Art of the Structural Engineer by Bill Addis, Wolfgang Schueller, AE Dec. 96, p145-146. ASCE Task Group Lays Foundation for Structural Institute,

Eric Rasmussen, NÉ June 96, p14. Business Degrees Three Times That of Engineering De-

grees, ME July/Aug. 96, p5.

CAD and Visualization in Architectural Design Education -CAD and Visualization in Architectural Design Education - A View from Germany, Undine Kunze, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p927-930.

CELL - A Vertically Integrated Learning Resource, Michael Bertz and Nelson C. Baker, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p348-354.

CII offers "Framework" for Supervisors, Education ME

CII offers "Framework" for Supervisory Education, ME Sept./Oct. 96, p6.

Sept./Oct. 90, po.
Computer-Based Undergraduate Integrated Civil Engineering Curricula at WPI, Guillermo F. Salazar, Leonard D. Albano, Roberto Pietroforte and P. Jayachandran, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p140-146.
Continuing Education Program Involving A Partnership

A Continuing Education Program Involving A Partnership Among Building Designers, Constructors, and Code En-forcers, Michael A. Cassaro, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p92-96.

1997), p92-96.
Design/Construction Integration through Multimedia Animation, Bob McCullouch, Duley Abraham and Phillip Knickrehm, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p760-766.
A Distributed Engineering Problem Generator, Martin C. Boyd and Nelson C. Baker, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p466-472.
Earle T. Andrews, ASCE's 98th President, Dies at 94, NE Sent 96, p15.

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Editor's Note, Thomas L. Theis, EE Aug. 96, p675.

Editorial, Mark R. Wiesner and Thomas L. Theis, EE Feb. 96, p89-90.

Editorial, Bruce Logan, EE Mar. 96, p167.

Education and Research Needs for Appropriate Technology, Maurice L. Albertson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2760-2765.

Education: Pathway to Mitigation, James W. Russell, (Nat-ural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p35-36.

The Educational Ozone Researcher: A University Satellite, Linden H. McClure and Ellen L. Riddle, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1327-1333.

GIS and CAD-based Design Software in CE Education, Randy Dymond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p501-507.

Guest Editorial, Harlan J. Onsrud, SU Feb. 96, p1-2. Harnessing the Internet for Civil Engineering Course Delivery, Rafael G. Quimpo, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p355-361.

Just-In-Time Training on E-Mail, John F. Marron, (Com puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p931-936.

Larew, Richard E. Ashraf S. Barsoum and Fabian C. Hadipriono, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p906-912.

Lightning Safety: A Risk Management Approach, Richard Kithil, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p17-18.

Lunar Base Scenario for Middle School with RC Rover, Louise Fayette, Ruth M. Fruland and Carolyn Evans McDonald, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p317-322.

Minnesota Intelligent Transportation Systems' Laboratory, Lowell A. Benson, Dennis L. Foderberg and Yorgos Stephanedes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p\$25-534.

Multi-Site Cross-Disciplinary A/E/C Project Based Learn-ing, Renate Fruchter, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Multimedia-Based Instruction of Building Construction, Diego Echeverry, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p972-977

Need to Understand Foreign Education in Evaluating for P.E. Licensure, Joe O. Akinmusuru and Bosede O. Akin-

musuru, El Jan. 96, p26-30.

New Educational Course "Sustainable Development Eco-City", Alexandr Tetior, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p31-32

New Faces in Familiar Places, NE Nov. 96, p15.

The New Madrid Earthquake: Preparing Nurses, Stephanie K. VanArsdale and Roy B. VanArsdale, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. ter Reduction, George W. Chung, ed., 1997), p97-98.

New on the Web, CE Apr. 96, p8.

On the Shoulders of Giants-Part II, Francis E. Griggs, Jr., El Jan. 96, p17-25.

Part-Time Graduate Education: Obstacles, Conflicts, and Suggestions, Allen P. Davis and Richard H. McCuen, EI Apr. 95, p108-113.

Professional Associations Offer Design Resources for Civil Engineers, Ben Northcutt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3343-3348.

Rethinking Training in the 1990s, John V. Farr and James F. Sullivan, Jr., ME May/June 96, p29-33.

Seismic Education Needs of the Building Trades and Code Enforcement Personnel, Cynthia Hoover, Marjorie Greene and James Russell, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p101-102. Seismic Sleuths: A Grades 7-12 Materials Development

and Teacher Enhancement Project, M. Frank Watt Ireton, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p33-34.

Solving Aviation and Intermodal Transportation Related Issues — "A New Prototype for the 21st Century", Clifford Bragdon and Carl Berkowitz, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p212-222.

Training as a Potential Profit Center, Matt O'Connell, ME Sept./Oct. 96, p25-27.

Sept/Oct. 96, p25-27.
Trial Applications of Multimedia Instructional Aids in a Building Construction Curriculum, David R. Riley and Clark Pace, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p362-368.
Two Social Concerns of an ASCE Subcommittee, Mario Salvadori, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p30-34.
History Codition Plans to Revitalize Neighborhood, CF.

Unique Coalition Plans to Revitalize Neighborhood, CE

Nov. 96, p12-13.

Using Virtual Reality to Avoid Construction Falls, Diah R. Soedarmono, Fabian C. Hadipriono and Richard E. Larew, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p899-905.

Utilizing Communications Strategies to Educate the Public on a Major Program, David L. Pratt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p99-100.

Utilizing Information Technologies to Better Educate Engineers of Tomorrow, Abbas Aminmansour, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p965-971.

WWW and Multimedia in Undergraduate Civil Engineering, Randy Dymond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p341-347

Education-practice interchange Partnerships for Diversity in Water Resources Education, Neil S. Grigg, (North American Water and Environment Chencharan Bathala Destructive Water, Chenchayya Bathala, ed., 1996), p4016-4020.

Effective length

Editor's Note, David Darwin, ST Oct. 96, p1127 Editor's Note, David Darwin, ST Nov. 96, p1257.

Effective Length Factor for Columns in Unbraced Frames, Lian Duan and Wai-Fah Chen, ST Jan. 89, p149-165.

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Restraint Demand Factors and Effective Lengths of Braced Columns, Jostein Hellesland and Reidar Bjorhovde, ST Oct. 96, p1216-1224.

Effective stress

Consolidation Characteristics of Phosphatic Clays, A. Naser Abu-Hejleh, Dobroslav Znidarcic and Bobby L. Barnes, GT Apr. 96, p295-301.

Strength of Struts and Nodes in Strut-Tie Model, Young

Mook Yun and Julio A. Ramirez, ST Jan. 96, p20-29.

Efficiencies of Drainage Systems and Improved Water Management, I. C. Tod and M. E. Grismer, (North Amer-ican Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2136-2144.

Efficiency

BMP for Control of Agricultural Nonpoint Source Flow, E. K. O'Brien and J. C. Guitjens, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1489-1494.

Computer Optimization of a Groundwater Treatment Facili-ty, Denis M. O'Carroll and Thomas L. Theis, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2492-2497.

The Financial-Economic Evaluation of ATT Systems in Road Freight Transport, Ferdinand Ballhaus, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p465-469.

Modeling Microtopography in Basin Irrigation, E. Płayán, J. M. Faci and A. Serreta, IR Nov/Dec. 96, p339-347. Parametric Study on Performance of Cross-Flow Turbine, C. B. Joshi, V. Seshadri and S. N. Singh, EY Apr. 95,

p28-45.

Rethinking Well Efficiency, Otto J. Helweg and Timothy Mays, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p934-959.

Emuent depth Near Field Modeling, Philip J. W. Roberts, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3892-3897.

Effluent reus

Titusville Cleans Up, CE Aug. 96, p18,20.

Effluents

Automatic Control of Flocculation Processes, Anders O. Wistrom and Jay A. Farrell, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p997-1002.

Chayya Balman, ed., 1990, 1997-1002.

Biological Serendipity from an Ocean Outfall Maintenance Inspection, Tom Gerlinger, George Robertson and Don Maurer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2050-2055.

Comparison of Worst-Case and Probabilistic Approaches to Ocean Outfall Mixing Zone Analysis, Hening Huang and Robert E. Fergen, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3674-3679.

Critical Concepts for Column Testing, Charles D. Shackel-

ford, GT Oct. 94, p1804-1828.

Cumulants-Based Analysis of Concentration Data from Soil-Column Studies for System Identification, Rao S. Govindaraju, Bhabani S. Das and Gerard J. Kluitenberg,

HE Jan. 96, p41-48.

Derivation of New Disperison Coefficient Equation for Natural Streams, Il Won Seo, Kil Seong Lee and Tae Sung Cheong, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p4263-4268.

Dune Drain Field, CE Dec. 96, p15-16.

Dynamic vs. Quasi-Static Effluent Limits, Joe Karkoski, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p643-648.

Effects of Sewage Effluent Irrigation on Paddy, S. Krishnamoorthi, K. Shyamala and P. Govindan, (North Amerinamoortini, s. Snyamaia and r. Govinidan, (Norin American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2372-2377. Fate of Organics during Column Studies of Soil Aquifer Treatment, David M. Quanrud, Robert G. Arnold, L. G. Wilson, Howard J. Gordon, David W. Graham and Gary L. Amy, EE Apr. 96, p314-321.

Fluidized Bed Denitrification of Secondary Effluent During Wastewater Reclamation in Southern California, Roger w. Babcock, Jr., Kapal Madireddi and Michael K. Stenstrom, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p788-793.

Hazardous Soil Remediation: A Cooperative Effort Be-tween Industry and Government, Wendy L. Cohen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1203-1208.

p1203-1208. Identifying Potential Trophic Relationships and Bioaccumulation Pathways Between Fish and Invertebrates, Mike Moore, Don Maurer, George Robertson, Hai Nguyen and Tom Gerlinger, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1699-1704. Impact of Point and Nonpoint Discharges on the Water Quality of a Reach of the Red River of the North, Anil Property and G. Pydmanayhan, (North American Water).

Quanty of a Reach of the Red River of the Folia, Ann. Peggerla and G. Padmanabhan, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2504-2509.

Innovative Effluent Management for Sustainability, Dan Bruinsma, Mary Ellen Dick, Eric Rosenblum and David Tucker, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1614-1619.

Membrane Technology Helps Shopping Center Clean Wastewater, CE Dec. 96, p89.

Modification of Design Approach to Aerated Lagoons, Lin-vil G. Rich, EE Feb. 96, p149-153.

On Conductivity of Soils with Preferential Flow Paths, R. S. Govindaraju and J. Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1730-1735.

ORP Measurement in Anaerobic Systems Using Flow-Through Cell, Munish Gupta, Ashutosh Gupta, Makram T. Suidan, Gregory D. Sayles and Joseph R. V. Flora, EE Nov/Dec. 94, p1639-1645.

Pilot Testing of a Zero-Discharge Treatment Process, Pas-cale Lagacé, Paul R. Stuart and Ronald Zaloum, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p99-104.

Rational Design and Operation of Packed Bed Adsorption Reactors, Federico G. A. Vagliasindi and David W. Hendricks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p553-558.

Salinity and Hydraulic Issues at a Constructed Wetlands, W. G. Hines, J. E. Burkstaller and A. F. Gove, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1178-1183.

Tunneling Under Pressure, Stephen J. Navin, Jon Y. Kaneshiro, Larry J. Stout and Gregory E. Korbin, CE Feb. 96, p64-67.

Challenges and Opportunities in Egypt's Integrated Water Resources Strategy, Mona El-Kady, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1051-1056.

Mortality and Morbidity Patterns Associated with the October 12, 1992 Egypt Earthquake, Josephine Malilay, Ibrahim Fayez Elias, David Olson, Thomas Sinks and Eric Noji, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p266-268.

On Housing Administration and Legislation of Egypt, A. S. Elnashai and M. M. Soliman, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p280-281.

Pyramid Power, Vladimir Novokshchenov, CE Nov. 96, p50-53

School Children as Pedestrians in Cairo: Proxies for Improving Road Safety, Khaled A. Abbas, Ibrahim Mabrouk and Khaled A. El-Araby, TE July/Aug. 96, p291-299

Eigenvalues

Analysis of Eigenvalue Variability for 2D Stochastic Structural Systems Using Variability Response Functions, George Deodatis and Lori Graham, (Probabilistic Mecs & Structural Reliability, Dan M. Frangopol, ed. nd Mircea D. Grigoriu, ed., 1996), p600-603.

Buckling Modes at Coincident Singularities of Stiffness Matrix, Igor Raskin and John Roorda, EM Aug. 96,

p804-806

Effect of Fiber Waviness on the Buckling of Composite Plates, Raouf A. Raouf, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pi 102-1107.

Eigenproperties of Massive Rigid Body on Elastic Half-Space, Z. Sienkiewicz, GT June 96, p488-491.

Hybrid Inverse Mode Problems for FEM-Shear Models, Izuru Takewaki and Tsuneyoshi Nakamura, EM Aug. 95,

Parallel Eigenvalue Algorithms for Large-Scale Control-Optimization Problems, A. Saleh and H. Adeli, AS July 96, p70-79.

A Probabilistic Formulation of Damage Detection, Loukas Papadopoulos and Ephrahim Garcia, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p350-353.

Stability Analysis of Axisymmetric Thin Shells, Ashutosh Bagchi and V. Paramasivam, EM Mar. 96, p278-281.

Eigenproperties of Massive Rigid Body on Elastic Half-Space, Z. Sienkiewicz, GT June 96, p488-491.

Elastic analysis

Nondestructive Evaluation of Elastic Constants and Crack Depth in Concrete Using Transient Elastic Waves, T.-T. Wu and J.-S. Fang, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p861-868.

Practical Advanced Analysis for Steel Frame Design, Seung-Eock Kim and Wai-Fah Chen, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p19-30.

Random Elastic Response Characteristics of Bar Structures by Monte Carlo Simulation, Michael Koutsoukis and Edmund S. Melerski, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p812-815.

Stiffness Formulation for Nonprismatic Beam Elements, Arturo Tena-Colunga, ST Dec. 96, p1484-1489.

Updates on Steel Moment Frames, David Bonowitz, CE Aug. 96, p30.

Elastic foundations

Closed-Form Back-Calculation of Rigid-Pavement Parame-ters, Li Shuo, T. F. Fwa and K. H. Tan, TE Jan./Feb. 96, p5-11.

EBEF Method for Distortional Analysis of Steel Box Gird-er Bridges, Yao T. Hsu, C. C. Fu and David R. Schelling, ST Mar. 95, p557-566.

Rectangular Plates Resting on Tensionless Elastic Founda-tion: Some New Results, Ramesh C. Mishra and Sekhar K. Chakrabarti, EM Apr. 96, p385-387.

Stability of Beams in an Elastic Foundation, Fady F. Barsoum and William F. Carroll, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1143-1146.

Y. K. Lin and T. C. Su, 1990), p1143-1140. Structural Analysis Model for Mat Foundations, Gin-Show Liou and S. C. Lai, ST Sept. 96, p1114-1117.

Vibrations of Clamped Rectangular Plates on Elastic Foun dations Subjected to Uniform Compressive Forces, S. Sacit Tameroğlu, EM Aug. 96, p714-718.

Compression of Bonded Blocks of Soft Elastic Material: Variational Solution, Katerina-D. Papoulia and James M. Kelly, EM Feb. 96, p163-170.

Consolidation of Elastic Porous Media Saturated by Two Immiscible Fluids, Kagan Tuncay and M. Yavuz Corap-cioglu, EM Nov. 96, p1077-1085.

Diffraction Around Circular Canyon in Elastic Wedge Space by Plane SH-Waves, V. W. Lee and R. I. Sherif, EM June 96, p539-544

Seepage Stoppers, V. J. Hebert, P.E., Juan Lelito, P.E. and A. Naudts, CE Oct. 96, p68-70.

Seismic Pressures Against Rigid Walls, Guoxi Wu and W. D. Liam Finn, (Analysis and Design of Retaining Struc-tures Against Earthquakes, Shamsher Prakash, ed., 1996), pl-18.

Elastic moduli

Inhomogeneous Interfacial Transition Zone Model for the Elastic Moduli of Concrete, Melanie P. Lutz, Paulo J. M. Elastic Stoduli of Concrete, Stefanic F. Lutz, Paulo J. A. Monteiro and Robert W. Zimmerman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), pl 246-1255. Pavement Evaluation with Seismic Tomographic Imaging, S. Nazarian, D. Yuan, D. Doser and K. Dhanasekharan,

(Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p56-72.

Elastic properties

The Development of New Structural Systems in the After-math of the Kobe Earthquake, Mark P. Sarkisian, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

Thin-Walled Curved Beams. I: Formulation of Nonlinear Equations, Young J. Kang and Chai H. Yoo, EM Oct. 94,

hin-Walled Curved Beams. II: Analytical Solutions for Buckling of Arches, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2102-2125.

Elastic restraints

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Elastica

Looping Behavior and Strength of Prestressed Arches, Zefang Xu and Amir Mirmiran, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p366-369.

Analysis of a Long Thick Orthotropic Circular Cylindrical Shell Panel, K. Chandrashekhara and K. S. Nanjunda Rao, EM June 96, p575-579.

Cracks in Poroelastic Materials with a Highly Anisotropic Fluid Response, C. Atkinson and R. V. Craster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p212-215.

Design of Round Reinforced-Concrete Columns, A. Tayem and A. Najmi, ST Sept. 96, p1062-1071. Direct Solutions of The Saint Venant Problems, Wan-Xie

Elastic Moduli of a Bond Model for Reinforced Concrete, lance (Tongrand Varies).

James V. Cox, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p84-87.

Elastic Properties of Soils, Pierre-Yves Hicher, GT Aug. 96, p641-648.

Elastic Stability of Composite Plates with Wavy Fibers, Raouf A. Raouf, (Engineering Mechanics, Y. K. Lin and

T. C. Su, 1996), p1167-1170.

A Finite Element Model for the Aeroelasticity Analysis of Hypersonic Panels, Part II: Determination of Flutter Boundary, Ji Y. Shen and Lonnie Sharpe, Jr., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1148-1154.

Fluid Pressure Polarization and Effective Response of Fluid-Saturated Materials with Cavities of Various Shapes, Mark Kachanov and Boris Shafiro, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p487-490.
Fundamental Solutions for Bimaterials with Inextensible

Interface, Z. Q. Yue and Y. H. Yin, EM Nov. 96, p1052-

Influence of Imperfections on Nonlinear Dynamic Response of Trusses, Aslam Kassimali and Khalil Rabiei, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed.,

1996), p534-541.

A New Method for Solving Large Deformation Problems, Xiangjun Qiu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p242-245.

Optimum Smoothing Filter for Geophysical Tomography by the Extended Bayesian Method, Yusuke Honjo, Toshiaki Yamaue and Nobuaki Kudo, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p942-945.

and Mircea D. Grigoriu, ed., 1996), p942-945. Quartic Formulation for Elastic Beam-Columns Subject to Thermal Effects, B. A. Izzuddin, EM Sept. 96, p861-871. Reliability Analysis of Pipeline on Elastic Seafloor, H. Y. Yeh and Hengyun Li, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p752-755. Seismic Isolation of Industrial Tanks, Victor A. Zayas and Stanley S. Low. (Buildine an International Community of

Seismic Isolation of Industrial International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1205-1212.
Steady-State Thermal Bending of Thick Rectangular Plates, Published Sec., 2512-520.

Isamu A. Okumura, EM June 96, p512-520.

Three-Dimensional Analysis of Doubly Curved Laminated Shells, Chih-Ping Wu, Jiann-Quo Tarn and Shu-Man Chi, EM May 96, p391-401.

Chi, EM May 90, p391-401.

Two Classical Elasticity Problems Revisited by a Quasistatic Poroelastic BEM Implementation, João C. B. de Campos and Euclides de Mesquita Neto, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1078-1081.

Variability Response Functions for Plane Elasticity Problems with Multiple Stochastic Material/Geometric Prop

erties, Lori Graham and George Deodatis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p174-177.

Extension and Compression of Elastomeric Butt Joint Seals, Stephen A. Ketcham, Jan M. Niemiec and Grego-ry B. McKenna, EM July 96, p669-677.

Seismic Isolation of Bridges Using Elastomeric Isolation Systems, Ronald L. Mayes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p33-40.

Analytical Study and Verification of a Coupled Theory of Mixtures for Application in Cone Penetration and Tunnel Boring in Soils, George Z. Voyiadjis, Murad Y. Abu-Farsakh and Mehmet T. Tumay, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p543-546.

Approximations for Elasto-Plastic Oscillations with Gaussian White Noise Excitation, Roger Pettersson, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p506-509.

Boolean Modeling and Analysis of Smart Material Properties, S. Dobson, M. Noori and A. Crespo, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p838-841.

Constitutive Models for Concrete Penetration Analysis, Vladimir M. Gold, George C. Vradis and James C. Pear-son, EM Mar. 96, p230-238.

Effective Moment of Inertia of Elasto-Plastic Beams, Barry T. Rosson and Ronald K. Faller, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p254-257.

Elastic Moduli of a Bond Model for Reinforced Concrete, James V. Cox, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p84-87.

Elasto-Plasticity of Sand Deformation, Eqramul Hoque and Fumio Tatsuoka, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p547-550.

Element-Embedded Localization Band Based on Regularized Displacement Discontinuity, Ragnar Larsson and Kenneth Runesson, EM May 96, p402-411.

Equivalent Strength of Porous Fractured Rock, William G. Pariseau, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p216-219.

Experiments with Elasto-Plastic Oscillator, S. Randrup-Thomsen and O. Ditlevsen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-

cea D. Grigoriu, ed., 1996), p518-521.

Finite Element Analysis of Discontinuities in Concrete, Hong D. Kang and Kaspar J. Willam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1054-1057.

Improving Robustness of Algorithms to Implement HiSS models in FEM, G. W. Wathugala and S. Pal, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p144-147.

Inelastic Strains of Porous Saturated Media, Victor N. Ni-kolaevskiy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p927-930.

Large-Displacement Analysis of Elastoplastic Thin-Walled Frames. I: Formulation and Implementation, B. A. Izzud-din and D. Lloyd Smith, ST Aug. 96, p905-914.

Large-Displacement Analysis of Elastoplastic Thin-Walled Frames. II: Verification and Application, B. A. Izzuddin and D. Lloyd Smith, ST Aug. 96, p915-925.

Localization of Inelastic Deformation in Elasto-Plastic Pore Solids Saturated by Liquid, Igor A. Garagash, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p931-934.

Nonlinear Finite Element Reliability Analysis of Concrete, Dan M. Frangopol, Yong-Hak Lee and Kaspar J. Willam, EM Dec. 96, p1174-1182.

Optimal Rehabilitation of Locally Damaged Structures Using the Pseudo Distortion Method, Prafulla V. Makode, Ross B. Corotis and Martin R. Ramirez, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p606-612.

A Refined Numerical Approach for the Limit-Load Analysis of 3-D Steel Rod Structures, Norbert Gebbeken, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

A Stochastic Model for Elastic-Plastic Fracture of Cracked Pipes, Sharif Rahman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p764-767

Strength Growth as Chemo-Plastic Hardening in Early Age Concrete, Franz-Josef Ulm and Olivier Coussy, EM Dec. 96, p1123-1132.

A Unified Description of Soil Behavior, Juan M. Pestana, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p281-284

Electric power demand

Concept for a Permanent Lunar Utilities System, David G. Schrunk, Bonnie L. Cooper and Burt L. Sharpe, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p935-941.

Construction System for Lunar Base, Shinji Matsumoto, Nobuo Isome, Koji Oishi, Hiroshi Kanamori, Kenji Takagi, Yoshiro Kai, Michiya Suzuki and Satoru Suzuki, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p140-144.

Sample Returns to Enable Asteroid Mining, Alan J. Willoughby, Alan L. Friedlander, Darla J. German, Mark K. Jacobs, Jeffrey A. George and Kurt J. Hack, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p840-846.

Electric power plants Alfalfa Power, CE Nov. 96, p8.

Boiler Emissions Drop, CE Nov. 96, p21.

California Unveils Fuel Cell Plant, CE Nov. 96, p20-21.

Cold-Related Electric Power System Considerations, John Aspnes and James Cote, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996). p436-446.

Review of the Solar Power Satellite, James McSpadden and Kai Chang, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p254-259.

Electric power transmission

Analysis of Fatalities and Injuries Due to Powerline Con-tacts, Jimmie Hinze and David Bren, CO June 96, p177-182

Electric Vehicle Charging Sites Surveyed, CE Mar. 96, p8. Environmental Concerns for High-Voltage Transmission Lines in UNIPEDE Countries, E. C. Kalkani and L. G. Boussiakou, EE Nov. 96, p1042-1045.

New Transmission Line Lets Power Come Cheaper, CE

Aug. 96, p14,16.

Resonance Induced Steel Cross-Arm Fatigue Failures, Markus Ostendorp, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p983-986.

World and Lunar Solar Power Systems Costs, David R. Criswell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p293-301.

Electrical conductivity

Air Sparging Experiments on a Two Dimensional Sand Box with DNAPLs: Multiphase Investigation with Electrical Impedance Tomography, Jong Soo Cho, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: As-sessment and Remediation, Lakshmi N. Reddi, ed., 1996), p369-380.

1996), p369-380.

Delineating Subsurface Contamination Using Geostatistical and Non-Intrusive Geophysical Methodologies, Sandra Bowling, Wayne Woldt and Dennis Schulte, (North American Water and Environment Congress & Destructive Water, Chenchaya Bathala, ed., 1996), p2230-2235.

Dynamic Stability of Conducting Beam-Plates in Transverse Magnetic Fields, J. S. Lee, EM Feb. 96, p89-94.

Polarization and Conduction of Clay-Water-Electrolyte Systems, J. Q. Shang, K. Y. Lo and I. I. Inculet, GT Mar. 95, p243-248.

Sealing Leaks in Geomembrane Liners Using Electrophore-sis, Glenn T. Darilek, M. Yavuz Corapcioglu and Albert T. Yeung, EE June 96, p540-544. Structural Dynamic and Viscoelastic Analysis via Electric

Analogy, Roberto Scotta and Renato Vitaliani, ST Sept. 96, p1118-1121.

Study of Clay-Cement Slurries with Mechanical and Elec-tromagnetic Waves, M. A. Fam and J. C. Santamarina,

GT May 96, p365-373.

The Use of Direct Push Technologies in Expedited Site Characterization, Greg A. Stenback, Bruce H. Kjartanson, Al Bevolo and David Wonder, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p180-194.

Variation of Fabric Anisotropy of Kaolinite in Triaxial Loading, A. Anandarajah, N. Kuganenthira and D. Zhao, GT Aug. 96, p633-640.

Electrical equipment

Advanced Control Systems for Integrated Transportation by LIM Devices, R. Di Stefano, G. Gentile, S. Meo, N. Rotondale and M. Scarano, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p49-53

Corrections, CE Nov. 96, p41.

Design Tools for Public Cars Transportation Systems, Chafik Allal, François Dumontet and Michel Parent, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p6-18.

EMC Issues in Electric Railway Traction Systems, M. Mazzucchelli, P. Pozzobon and G. Sciutto, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p44-48.

A Model for the Design and Control of Urban Electric Traction Systems, O. Bottauscio and G. Farina, (Applica-tions of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p39-43.

Performance of Electric Irrigation Pumping Plants Using Variable Frequency Drives, B. Hanson, C. Weigand and S. Orloff, IR May/June 96, p179-182.

S. Orlon, IR May/June 90, 1979-162.
S. Probabilistic Modeling of Radiation Damage in Charge-Coupled Devices, D. H. Ebbeler, L. E. Newlin and N. R. Moore, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p776-779.

Vision Technique for Platoon Driving, Michel Parent, Pas-cal Daviet and Sofiane Abdou, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p666-675.

Electrical measurement

Combining Geophysical and Well Data for Identifying Best Well Locations, Geza Pesti, William E. Kelly, Istvan Bo-gardi and Robert J. Kalinski, WR Mar./Apr. 96, p97-104.

gardi and Robert J. Railinski, wit Mila Jap. 36, 197-104.
Ground and Airborne Magnetic and Electromagnetic Surveys at a Hazardous Waste Site, Jonathan E. Nyquist, Les P. Beard and Don Johnson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p1-

Electrical resistivity

Electrical Resistivity of Compacted Clays, Zeyad S. Abu-Hassanein, Craig H. Benson and Lisa R. Blotz, GT May 96, p397-406.

Electrical Tagging of Fiber Reinforced Cement Composites, Jong Seh Lee and Gordon Batson, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p887-896.

Polarization and Conduction of Clay-Water-Electrolyte Systems, J. Q. Shang, K. Y. Lo and I. I. Inculet, GT Mar. 95, p243-248

Electrification

Amtrak Breaks Ground on High-Speed Rail, CE Aug. 96,

Computer Modelling and Simulation for High Speed Rail-way Applications, C. Ianniello, S. Savio and G. Sciutto, (Applications of Advanced Technologies in Transporta-(Applications of Advances Technologies in Fransporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p54-58.

Electrode Placement for Subsurface Electric Field Genera-

tion, William O. Rasmussen and Muniram Budhu, EE

Aug. 96, p764-768.

Electrokinetic Remediation. I: Pilot-Scale Tests with Lead-Spiked Kaolinite, Yalçın B. Acar and Akram N. Alshawabkeh, GT Mar. 96, p173-185.

Electrokinetic Remediation: II: Theoretical Model, Akram N. Alshawabkeh and Yalçın B. Acar, GT Mar. 96, p186-

Electromigration of Nitrates in Soil, George Cairo, Dennis Larson and Donald Slack, IR Sept./Oct. 96, p286-290.

Electrophoretic Mobility of Cryptosporidium Oocysts and Giardia Cysts, Jerry E. Ongerth and Julie Proctor Pecoraro, EE Mar. 96, p228-231.

Improvement of Soft Clays by High-Voltage Electrokinet-ics, Julie Q. Shang and Wayne A. Dunlap, GT Apr. 96, p274-280

Electrolysis

Model of Electrodialysis Process Associated with Organic Adsorption, Thawach Chatchupong and Robert J. Murphy, EE Feb. 96, p154-161.

Modeling Concentration-Polarization in Reverse Osmosis Spiral-Wound Elements, Benito J. Mariñas and Richard I. Urama, EE Apr. 96, p292-298.

Electronic equipm

LINCTONIC equipment
Advanced Control Systems for Integrated Transportation by
LIM Devices, R. Di Stefano, G. Gentile, S. Meo, N. Rotondale and M. Scarano, (Applications of Advanced
Technologies in Transportation Engineering, Yorgos J.
Stephanedes, ed. and Francesco Filippi, ed., 1996), p49-53

Coils Could Put ITS on Right Track, ET Apr./May 96, p1,7.

Electronic Coin, CE Sept. 96, p11.

Electronic Signatures Are Revolutionizing Highway Programs, Michael J. Vecchietti and Lawrence I. Neff, CP Oct. 96, p264-266.

Interactive Lessons for Instrumentation and Control, E. J. Mastascusa and Maurice F. Aburdene, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p303-309.

Probabilistic Fatigue Life Analysis of High Density Electronics Packaging, N. R. Moore, E. A. Kolawa, S. Sutharshana, L. E. Newlin and M. Creager, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p886-889.

Radiation Hardening of Robotic Control Components Against Terrestrial Radiation, G. U. Youk, J. S. Tulenko, H. Liu and H. Zhou, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p248-254.

menus, Laura A. Demsetz, ed., 1996), p248-254.
The Role of Petri Nets Modelling in the Safety Assessment Process for Guided Transport Systems, G. Cosulich, P. Firpo, S. Savio and G. Sciutto, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p558-562.

Simultaneous Measurement of Strain and Temperature Using Fiber Grating Sensors, Faramarz Farahi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p351-354.

Technology Standards and Deployment of Advanced Transportation Technologies: A Comparative Case Study of Electronic Toll and Traffic Management (ETTM) in the United States and France, Jonathan L. Gifford and Jean-Luc Ygnace, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p535-541.

Electroosmosis

Coefficient of Permeability from AC Electroosmosis Ex-periments. I: Theory, J. Yin, R. J. Finno, J. R. Feldkamp and K. Chung, GT May 96, p346-354.

Coefficient of Permeability from AC Electroosmosis Ex-periments. II: Results, R. J. Finno, K. Chung, J. Yin and J. R. Feldkamp, GT May 96, p355-364.

EDTA-Enhanced Electrokinetic Extraction of Lead, Albert T. Yeung, Cheng-non Hsu and Rajendra M. Menon, GT Aug. 96, p666-673.

Electrokinetic Remediation. I: Pilot-Scale Tests with Lead-Spiked Kaolinite, Yalçın B. Acar and Akram N. Alshawabkeh, GT Mar. 96, p173-185.

Electrokinetic Remediation: II: Theoretical Model, Akram N. Alshawabkeh and Yalçın B. Acar, GT Mar. 96, p186-

Electromigration of Nitrates in Soil, George Cairo, Dennis Larson and Donald Slack, IR Sept./Oct. 96, p286-290.

Impact of System Chemistry on Electroosmosis in Contam-inated Soil, Gerald R. Eykholk and David E. Daniel, GT May 94, p797-815.

Surfactant Enhanced Electrokinetic Remediation of Gaso-line Contaminated Soils, Sujan K. Bhattacharya, David H. Foster and J. Mohan Reddy, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p311-

Electroplating
Corrosion and Hydrogen Permeation Inhibition by Thin
Layer Zn-Ni Alloy Electrodeposition, D. H. Coleman, B.
N. Popov and R. E. White, (Materials for the New Miln, Ken P. Chong, ed., 1996), p1281-1287.

Elevated structures

An Elevated Train Rises Again, CE Nov. 96, p10.

Elevation

Effects of Bed Discordance on Flow Dynamics at Open Channel Confluences, Pascale Biron, James L. Best and André G. Roy, HY Dec. 96, p676-682

Empirical Simulation Technique Based Storm Surge Fre-quency Analyses, Norman W. Scheffner, Leon E. Borgman and David J. Mark, WW Mar./Apr. 96, p93-101.

Filling of Pipelines with Undulating Elevation Profiles, Chyr Pyng Liou and William A. Hunt, HY Oct. 96, p534-539.

Flood Damage Estimates Using GIS Spatial Analysis, Craig R. Wilkening, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3405-3410.

Elevators

Earthquake Response of Structure-Elevator System, F. Se-gal, A. Rutenberg and R. Levy, ST June 96, p607-616. Going Down, CE July 96, p14.

Elstner, Richard C. (Honorary Member, ASCE) Richard Elstner, 72, Was Failures Expert, CE Nov. 96. p75-76.

Embankment stability

The Analysis of the Failure of the Minte Stream Culvert, L. Ayala and E. Brown, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), 93018.

Failure of Desert View Drive Embankment, Robert W. Day, CF Feb. 96, p11-14.

Failure of Tapo Canyon Tailings Dam, Leslie F. Harder, Jr. and Jonathan P. Stewart, CF Aug. 96, p109-114.

Performance of Two Reservoirs during 1994 Northridge Earthquake, C. A. Davis and J. P. Bardet, GT Aug. 96, p613-622.

Seismic Stability Procedures for Solid-Waste Landfills, Jonathan D. Bray, Anthony J. Augello, Gerald A. Leo-nards, Pedro C. Repetto and R. John Byrne, GT Feb. 95, p139-151.

State of the Art: Limit Equilibrium and Finite-Element Analysis of Slopes, J. Michael Duncan, GT July 96, p577-596.

Air Convection Embankments for Roadway Construction in Permafrost Zones, Douglas J. Goering, (Cold Regions Engineering: The Cold Regions Infrastructure—An In-ternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p1-12.

Arching in Piled Embankments, B. K. Low, S. K. Tang and V. Choa, GT Nov. 94, p1917-1938.

Bike Trail Gets Lift, CE Nov. 96, p23-24.

Effect of Ground Condition on Earthquake Damage, Mako-to Nasu, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p233-234. Failure of Desert View Drive Embankment, Robert W.

Day, CF Feb. 96, p11-14.

Fly Ash and Tire Chips for Highway Embankments, M. Basheer, C. Vipulanandan and M. W. O'Neill, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Iron(II) Amine Complex Soil Stabilization, David A. Hem-street and Ted S. Vinson, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p447-458. Mitigating Losses in Bangladesh's Active Floodplains, Paul Thompson and Ian Tod, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p23-24.

Permanent Deformation on Preexisting Sliding Surfaces in Dams, George Gazetas and Nasim Uddin, GT Nov. 94,

p2041-2061

Probabilistic Risk Assessment for Tailings Impoundment Founded on Paleokarst, Dirk Van Zyl, Ian Miller, Victor Milligan and W. James Tilson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. ackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.

Roth, ed., 1996), p563-585.

Reliability Assessment of Dike and Levee Embankments, Thomas F. Wolff, Edward C. Demsky, Jeffrey Schauer and Edward Perry, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed.,

1996), p636-650.
Risk in Geotechnical Engineering for Embankment Dams,
Gil M. Lawton and Michael P. Forrest, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and

Mary J. S. Roth, ed., 1996), p550-562

Road and Airfield Design for Permafrost Conditions, David C. Esch, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p121-150.

Slope Instability from Ground-Water Seepage, Muniram Budhu and Roger Gobin, HY July 96, p415-417.

Temporary Snow and Ice Pavement Structures, Robert L. Scher, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p87-120.

Toe-Scour Estimation in Stabilized Bendways, Stephen T.

Maynord, HY Aug. 96, p460-464.

Wind-Induced Accidents of Train/Vehicles and their Countermeasures, Tatsuo Maeda, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p70-73.

Embedded foundations

Dynamic Interaction Between Embedded Foundations by the Substructure Deletion Method, Raimondo Betti, Euclides de Mesquita Neto and Edivaldo Romanini, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p314-317

Response of Pile Embedded in Stochastic Ground Media, Makoto Suzuki and Tsuyoshi Takada, (*Probabilistic Me-*chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p612-615

Stability of Beams in an Elastic Foundation, Fady F. Bar-

soum and William F. Carroll, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1143-1146.
Static Stiffness of Unbounded Soil by Finite-Element Method, John P. Wolf and Chongmin Song, GT Apr. 96, p267-273

Embedment

Element-Embedded Localization Band Based on Regular-

Evaluation of Grout Materials for Anchor Embedments in Hardened Concrete, Willie E. McDonald, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p958-967.

Emergency services 1994 Alaska Flood Recovery Project Management of a Disaster Recovery by a General Contractor, David S. Westhaver and Alison H. Boyce, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung,

ed., 1997), p111-112.

Assessment of the Surface-Water Pollution and Measures for Emergency Stations Warning in the Republic of Uz-bekistan, T. Ososkova, V. Talskikh and O. Smolkova, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Community Involvement in Hazard Mitigation, Subodh A. Kumar, (Natural Disaster Reduction, George ner, ed. and Riley M. Chung, ed., 1997), p282.

Community Preparedness and Disaster Response The City of Los Angeles: Community Emergency Response Team Program, Frank W. Borden, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p323-324.

Developments in Effective Emergency Management: A Means of Natural Disaster Cost Reduction, Gerald R. Schimke, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p37-38.

Drought Management: Crisis vs. Risk Management, Mi-chael J. Hayes, Donald A. Wilhite, Mark D. Svoboda and Kelly Helm Smith, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p371-372.

Earthquake-Initiated Hazmat Releases: An Assessment, Michael K. Lindell and Ronald W. Perry. (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p237-238.

Embedded Sensors for Improved Early-Warning Emergency Response to Damaged Structures, Peter L. Fuhr, Dryver R. Huston and Edward Von Turkovich, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p39-40.

Emergency Repair of An Ocean Outfall, Gail Lynch, John Linder and Robert Ooten, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2039-2043.

Evacuation Strategies for Public Officials, T. Michael Carter. (Natural Disaster Reduction, George W. Housner,

ed. and Riley M. Chung, ed., 1997), p109-110 The FEMA Program of Seismic Safety of Buildings, Ugo Morelli, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p159-160.

FEMA-NIBS Earthquake Loss Estimation Methodology, Robert V. Whitman, Henry J. Lagorio and Philip J. Schneider, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p113-114.

Geographic Information Systems for Emergency Response cographic Information Systems for Energetary Response Management of Transportation Systems, Anne Kirem-idjian, Nesrin Basoz, Kincho Law and Stephanie King, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p355-356.

GIS Application for Miami Transportation System Hurri-cane Emergency Preparedness, Kangming Xu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p107-108.

Houston Transtar: Total Traffic Control, CE July 96, p12.

Hurricanes Erin, Marilyn and Opal, Kishor C. Mehta, James R. McDonald and Douglas A. Smith, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p46-47.

Medical Service Routing and Location Analysis for Free-way Emergency Needs, Kevin P. Hwang, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p281-285.

Natural Disaster Mitigation: It Needs to Begin at Home, NE July 96, p1.

Natural Disaster Reduction Structures Specialist of the Urban Search and Rescue Task Forces, Daniel W. Cook, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p221-222.

Overview of Drought Response Strategies, Darrell G. Fontane and Donald K. Frevert, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p857-862.

The Reclamation Drought Index: Guidelines and Practical Applications, Karen Weghorst, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p637-642.

Roanoke Valley Flood Hazard Mitigation, Edward G. Beadenkopf, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1976-1977.

San Diego County Water Authority's Emergency Storage Project: A Major Planning Achievement, Ken Steele, Lee Judd, Richard Pyle and Uli Kappus, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2815-2819.

Training for the Big One - A Proactive Approach, Andrew M. Hui and David R. Putnam, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p43-44.

Use of a National Loss Estimation Methodology for Risk Management, Thalia Anagnos, Scott Lawson, Jawhar Bouabid and Mourad Bouabid, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p249-250.

Use of a Technical Clearinghouse during Emergencies, Carl E. Mortensen, Richard K. Eisner, James F. Davis and Michael S. Reichle, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p309-310.

Emission control Editor's Note, Thomas L. Theis, EE Mar. 96, p168.

VOC Inventory at New York City Wastewater Treatment Plants, Richard Pope, Bert Aubrey and Demetrios Moschandreas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p75-80.

Boiler Emissions Drop, CE Nov. 96, p21.

Energy from Paper Sludge: Criteria and Hazardous Air Pol-lutants, Amy K. Zander, Thomas L. Theis and Michael Brennan, EE Aug. 96, p758-760.

Environmental Linkages between Urban Form and Munici-pal Solid Waste Management Infrastructure, Tony D Nino and Brian W. Baetz, UP Sept. 96, p83-100.

Marine Engines Emissions for Vessels of the United States Coast Guard, Zoltan C. Mester, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3355-3356.

To Allay Brownfields "Misperceptions", Dante J. Tedaldi, P.E., CE Oct. 96, p37.

Empirical equation

Coordination of Empirical and Rational Alluvial Canal For-mulas, Shrikrishna V. Chitale, HY June 96, p357-359.

Lake Number: A Long-Term Lake Water Quality Predictor, Midhat Hondzo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3176-3187.

Employee benefits

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Employee relations

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Business Plans Live and Grow, Jack E. Reinhard, P.E., ME Nov./Dec. 96, p3-4.

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Human Resources Strategies for Successful Consulting Engineering Firms, Patricia A. Hecker, ME Sept./Oct. 96, p32-36.

Is Moonlighting or Donating Professional Engineering Services Ethical? Thomas W. Lynch, El Jan. 96, p37-38. Learning on the Jagged Edge, Bill Hayden, Jr., ME Jan./ Feb. 96, p23-25.

Make Employees Feel Special, Harvey Mackay, ME Nov./ Dec. 96, p7.

Moonlighting: Ethical Issues for Professional Engineers, Andrew M. Hui, El Jan. 96, p39-40.

Providing Engineering Services to Nonemployers: An Ethi-cal Balance, David P. Brosnan, El Jan. 96, p35-36. Retaining Generation X Employees, Joan Lloyd, ME Nov./ Dec. 96, p5-6.

Assessing ESOPs, Ed Carberry, ME Sept/Oct. 96, p17-19.

Development of Worker Safety in the Environmental Field in the Past 25 Years, David R. Smith, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p42-54.

Feedback Letter, Dameron H. Williams, ME Nov./Dec. 96. p5.

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OSHA Safety Regulations, CE Nov. 96, p28. Substitute Goals, James C. Porter, ME Jan./Feb. 96, p8-9.

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96, p35. Counteroffers Don't Work in Consulting Firm, Survey Says, ME Jan./Feb. 96, p13.

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Room for Engineers in Corps? Angelo F. Coniglio, CE Apr. 96, p32,36.

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Zirschky, CE Jan. 96, p6. Small Businesses Fuel Economic Growth, Innovation, and Job Creation, Garold D. Oberlender, SC Aug. 96, p76-

Why the Corps Needs Engineers, Louis L. Guy, Jr., CE May 96, p28.

Adhesion Kinetics of Fuel Oil #6 and Oil-in-Water Emulsions on Marine Sediments under Turbulent Mixing Conditions, Rudolf Jaffé, Hector R. Fuentes, Vassilios A. Tsihrintzis and Liduo Shen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4389-4394.

Encasements

Local Damage Assessment of Metal Barriers under Turbine Missile Impacts, Amde M. Amde, Amir Mirmiran and Thomas A. Walter, ST Jan. 96, p99-108.

Seismic Behavior of Older Steel Structures, Charles W. Roeder, Brett Knechtel, Eric Thomas, Anne Vaneaton, Roberto T. Leon and F. Robert Preece, ST Apr. 96, p365-373.

Windsor Bridge Pier Repairs, Phillip Pierce and Joseph Mieczkowski, SC May 96, p79-81.

Endangered species

Ecological and Biological Considerations in River Restoration, Dudley W. Reiser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2601-2606.

Engineers Outfox Nature to Bury Sewer Line, CE Dec. 96, p87,89

Evaluation of Potential Impacts to Endangered Species That Use Wetland Areas: A Case Study, Andrea Rosenthal, David Reutter, Roger Menendez and Barbara Michael, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2033-2038.

Managing Conflicting Demands from Endangered Species: Taking the Challenge, Kenneth W. Kirby, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4142-4147.

Saved by the Net, CE Sept. 96, p22.

Slim Environmental Outlook, Casey Dinges, CE Aug. 96,

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Three Dimensional Particle Tracking Model for the Sacra mento-San Joaquin Delta, Tara A. Smith and Gilbert V. Bogle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4329-4334.

Alfalfa Power, CE Nov. 96, p8.

Analysis of Work-of-Fracture Method for Measuring Frac-ture Energy of Concrete, Zdeněk P. Bažant, EM Feb. 96, p138-144.

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Editorial, Patrick K. Takahashi, EY Dec. 96, p75-77.

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Significance of Particle Crushing in Granular Materials, Poul V. Lade, Jerry A. Yamamuro and Paul A. Bopp, GT Apr. 96, p309-316.

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Measuring Absorbed Cyclic Energy in Reinforced Concrete Beams, Ken Gaver and Sophia Hassiotis, ST Sept. 96,

Energy budget

An Update on Surface Renewal Estimation of Evapotranspiration, R. L. Snyder, D. Spano, P. Duce and K. T. Paw U., (North American Water and P. , (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p430-435.

Energy conservation

Cool Roofs and Pavements to Help Hot Smoggy Cities, Ar-thur H. Rosenfeld, Hashem Akbari, Haider Taha and Melvin Pomerantz, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1-13.

Start-Ups, CE Feb. 96, p8.

Energy consumption

Design Decision Making for Infrastructures under the Restriction of the Energy Consumption, Minoru Matsuo, Yusuke Honjo and Ikuo Sugiyama, (*Probabilistic Me-chanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p376-379.

The Economics of Space Solar Power, Carissa Bryce Chris-tensen, Douglas A. Comstock and John C. Mankins, (En-gineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p260-268.

Editorial, Boris Berkovski, EY Dec. 96, pvi-x.
Solar Power Satellites, Rebecca Kluck, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1281-1284.

Weir Aeration: Models and Unit Energy Consumption, Ning H. Tang, N. Nirmalakhandan and R. E. Speece, EE Feb. 95, p196-199.

Energy development

Coal's Clean Comeback, Donald E. Pless and Stephen D. Jenkins, CE Sept. 96, p46-49.

Editorial, Boris Berkovski, EY Dec. 96, pvi-x.

Energy dissipaters

Design of Energy Dissipation Devices Based on Concept of Damage Control, K. L. Shen and T. T. Soong, ST Jan. 96, p76-82.

Dispersive-Flow Energy Dissipator, Shou Long Yang, HY Dec. 94, p1401-1408.

Pipe Plunge Pool Energy Dissipator, Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323.

Energy dissipation

Application of Vertical Turbulence Closure Schemes in the Chesapeake Bay Circulation Model — A Comparative Study, Harry V. Wang and Raymond S. Chapman, (Esturine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p283-297.

Basic Concepts and Applications of Structural Control, T. T. Soong, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p16-29.

A Boussinesq Model for Inshore Zone Sediment Transport Using an Energetics Approach, Theofanis V. Karambas, Howard N. Southgate and Christopher Koutitas, (*Coastal Dynamics* '93, William R. Dally, ed. and Ryszard B.

Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), 9841-849.
The Development of New Structural Systems in the Aftermath of the Kobe Earthquake, Mark P. Sarkisian, (Building an International Community of Structural Engineers, S. K. Glosh, ed. and Jamshid Mohammadi, ed., 1996),

p934-943.

Dissipated Energy as a Function of Material Microstruc-ture, Mark J. Meisner and George N. Frantziskonis, (En-gineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1030-1033.

An Electrorheological Damper with Annular Duct, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1197-1204.

An Emerging Technology: Damping Design for Wind and Seismic Events, Robert J. McNamara. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p1252-1260.

Energy Dissipation in Concrete Materials Due to Viscoelas-tic and Damage Mechanisms, Vassilis P. Panoskaltsis,

tic and Damage Mechanisms, Vassilis P. Panoskaltsis, Saurabh Bahuguna and Dimitris Soldatos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p857-860. Energy Dissipation in Dynamic Failure Simulations, Thom-as Minz, Karsten Rix and Kaspar Willam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1046-1049. Energy Dissipators edited by D.L. Vischer and Willi Hager, Henry T. Falvey, HY Aug. 96, p478.

Energy-Based Linear Damage Model for High-Intensity Seismic Loading, Y. H. Chai, K. M. Romstad and S. M. Bird, ST May 95, p857-864.

Energy-Based Modeling of High Damping Rubber Seismic Isolators for Dynamic Analysis, Peter W. Clark and James M. Kelly, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p200-211.

Evaluation of Soil Liquefaction by Energy Principles, J. Ludwig Figueroa, Adel S. Saada, Liqun Liang and Nitin M. Dahisaria, GT Sept. 94, p1554-1569.

Experimental Implementation of Hybrid Control, J. Pandya, Z. Akbay, M. Uras and H. Aktan, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1172-1179.
Human Biomechanics Inform Seismic Protection, ET

riuman Biomechanics Inform Seismic Protection, ET Apr./May 96, p10-11. Model Study of a Roller Compacted Concrete Stepped Spillway, Charles E. Rice and Kem C. Kadavy, HY June 96, p292-297.

50, p.326-37.
The Modelling of Plunging Breakers by the Introduction of a K-I Turbulence Closure Model, Michele Drago and Luigi Iovenitti, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p317-328.

One-Dimensional Modelling of Individual Breaking Waves, K. M. Wijnberg and L. C. van Rijn, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p341-354.

Physical and Numerical Study of Wave Induced Currents in Wave Basins of Various Sizes, Peyman Badiei and J. William Kamphuis, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p377-388.

Random Responses of Discretized Structures with Energy Dissipation Devices, C. W. S. To, M. L. Liu and J. M. Kelly, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p824-827.

Reduction of Structural Response by Energy Dissipation Devices Modelled on Shape Memory Materials, C. W. S. To and J. M. Kelly, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p491-494.

Seismic Torsional Provisions: Influence on Element Energy Dissipation, Adrian M. Chandler, Joseph C. Correnza and Graham L. Hutchinson, ST May 96, p494-500.

Structural Control: Basic Concepts and Applications, Y. Fujino, T. T. Soong and B. F. Spencer, Jr., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

Vibration Control of Structures Utilizing Architectural Walls, H. Allison Smith, Luciana R. Barroso and Vicki L. Vance, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p495-498.

Dividing Rectangular Closed Conduit Flows, A. S. Ramamurthy, Weimin Zhu and B. L. Carballada, HY Dec. 96, p687-691.

Energy recovery systems

Carbon Bags Help Trash Burn Cleaner, CE Jan. 96, p77. Energy from Paper Sludge: Criteria and Hazardous Air Pol-lutants, Amy K. Zander, Thomas L. Theis and Michael Brennan, EE Aug. 96, p758-760.

Protective Film Helps Landfills Make Energy, CE Nov. 96.

Energy sources Bioenergy in Transition, Ralph P. Overend, Charles M. Ki-noshita and Michael J. Antal, Jr., EY Dec. 96, p78-92.

Conceptual Design of Enertopia in Korea, Kiryun Choi, EY Dec. 96, p102-113.

Editorial, Boris Berkovski, EY Dec. 96, pvi-x.

New Sunshine Program: Comprehensive Approach to the 21st Century, Mitsugi Chiba, EY Dec. 96, p93-101.

Visualizing the Flow, Mahadev Raman, Burkhard Bein, Colm Hogan and Dennis Sheldon, CE June 96, p43-45. "SPS 2000" and its Internationalisation, Patrick Collins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p269-279.

Flywheels for Energy Storage in Space Using Superconducting Bearings, T. L. Wilson, W. K. Chu, K. Ma and H. Xia, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p355-359.

Energy transfer

Energy Transfer Rates in Unsteady Plane Mixing Layers, M. R. Hajj and I. M. Janajreh, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1066-1069.

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st Century Leadership and Technology, Malcolm J. Todd, ME July/Aug. 96, p40-49. 21st Centu

27 Years Documenting Engineering Heritage, Eric DeLony, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p162-173.

Accelerating Innovation: New Style of Leadership Needed,

Les McCraw, ME Sept./Oct. 96, p3-5.
Bentley's Brave New World, CE Oct. 96, p22,24.

Buffalo Section Works with Cub Scouts to "Build a Better

Future", CE Nov. 96, p74.

CPT in Cold Regions Engineering: A Logging and Design Tool, Richard Fortier, Branko Ladanyi and Michel Al-lard, (Cold Regions Engineering: The Cold Regions In-

ard, (Cola Regions Engineering: Ine Cola Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p459-470.
Current U.S. Japan Collaborative Activities in Wind Engineering, B. Bienkiewicz, T. Ohkuma and K. Fujii, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1075-1082.
Developments in Effective Emergency, Management: A.

1996), p1075-1082.
Developments in Effective Emergency Management: A Means of Natural Disaster Cost Reduction, Gerald R. Schimke, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p37-38.
Engineering Aspects of Wetland Mitigation, A. Mahendra Rodrigo, Kenneth P. Dunne, Lewis O. Morgan and Rao Nivargikar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, 4 1006), p3027-2032. ed., 1996), p2027-2032.

Engineering Automation Expands, CE Sept. 96, p22.
Engineering Features of the Red Bluff Research Pumping
Plant, K. Warren Frizell, Charles R. Liston and Stephen Atkinson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p316-321.

Ed., 1990), p30-321. Engineering in Context: Engineering in Developing Countries, Laura Brigitte Parsons, El Oct. 96, p170-176. Engineers of Dreams Is Well Worth the Read as Petroski Zeroes in on Bridges, Augustine J. Fredrich, NE Nov. 96, p15.

Environmental Goal Needs Definition, David M. Herring, P.E., CE Dec. 96, p27-28. Ethics Will Save Our Society, James R. Carr, P.E., CE Dec.

96, p30. 90, p.su. Finite Element Analysis of Fracture Behavior of ECC Shear Beams, Petr Kabele and Hideyuki Horii, (Materials for the New Millennium, Ken P. Chong, ed., 1996).

Modeling and Debugging Engineering Decision Procedures with Machine Learning, Yoram Reich, Miguel Medina, Tung-Ying Shieh and Timothy Jacobs, CP Apr. 96, p157-166.

Rita Robison, An Engineering Writer for CE, Dies at 70,

CE Oct. 96, p76,78.
The Status of Cold Regions Research, Thomas C. Kinney, Robert Carlson and Howard Thomas, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p196-202.

Thermal Impact of a Buried Chilled Gas Pipeline, Lutfi Raad, Xioalin Yuan and Dieter Weichert, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p203-214.

Wind Engineering Co-operation: A Perspective of Europe and of China, Brian E. Lee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1069-1074.
Wortley's Winter Wanderings: A Narrative, C. Allen Wort-ley (Cold Regione Engineering The Cold Regions Infra-tage).

ley, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p837-854.

Engineering education

Architectural Anatomy: Interdisciplinary Multimedia Tools for Building Analysis and Design, Anthony Webster, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p753-759. Architectural Engineering Program at University of Miami, David A. Chin and Michael K. Phang, AE June 96, p78-

Argument Against Separate Writing Courses for Engineers, Terry Clayton, El July 96, p111-113.

ASCE's Technical Council on Computer Practices, Glenn

S. Orenstein, CP Apr. 96, p93-94.

CAD and Visualization in Architectural Design Education -A View from Germany, Undine Kunze, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p927-930.

Can A/E Grads Do Facility Design and Construction?, ME

Sept./Oct. 96, p10-11.

SERIOCEL - 90, pio-11.
CELL - A Vertically Integrated Learning Resource, Michael Bertz and Nelson C. Baker, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p348-354.

Certificate Program in Construction Engineering and Management, Amarjit Singh and Harold S. Hamada, El July 96, p114-122.

Civil Engineering Education: An Historical Perspective, Lawrence P. Grayson, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p44-52.

Classroom Simulation of Public Involvement in H.L.W. Issues Featuring STS Concepts, Z. T. Bieniawski, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p505-506.

Comments on Quality Management and Civil Engineering Education, Charles H. Samson, El Apr. 96, p52

Computer-Based Undergraduate Integrated Civil Engineer-ing Curricula at WPI, Guillermo F. Salazar, Leonard D. Albano, Roberto Pietroforte and P. Jayachandran, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p140-146.

Consensus! Engineering Students Need More Management Education, Jeff Russell, James P. T. Yao, John Farr, P.E., Stuart G. Walesh, P.E. and John Bishop, P.E., ME Nov./

Dec. 96, p17-29.

Construction Automation and Robotics in Civil Engineer-ing Education Programs, Walter W. Boles and Jing Wang, El Jan. 96, p12-16.

Context for Writing in Engineering Curriculum, Matthew R. Kuhn and Karen Vaught-Alexander, El Oct. 94, p392-400.

Dan Pletta, Prominent Engineering Educator, Dies at 92, NE Oct. 96, p6.

Design/Construction Integration through Multimedia Ani-Designs on student integration unough symmetric and matter matter, bob McCullouch, Dulcy Abraham and Phillip Knickrehm, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p760-766.
Direct Outcome-Based Assessment Measures, J. D. Bakos,

Jr., El Jan. 96, p31-34.

A Distributed Engineering Problem Generator, Martin C. Boyd and Nelson C. Baker, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p466-472.

Editor's Note, Thomas L. Theis, EE Sept. 96, p778.

Editorial, Anthony G. Collins and Rafael Bras, EE May 96, p339.

Editorial, Thomas L. Theis, EE June 96, p451. Editorial, Thomas L. Theis, EE Nov. 96, p955.

Education Can End Bidding Evils, James R. Woglom, CE Jan. 96, p30-31.

Engineering Education for Appropriate Technology, Richard L. Rosen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2743-2747.

Engineering Education Goes Digital with World Wide Web

Database, CE Jan. 96, p16,18.
Engineering Education: Paragon or Paradox? Robert D. Kersten, El Oct. 96, p147-150.

Environmental Engineering Forum, Steven I. Safferman, Vivek P. Utgikar and Sarwan S. Sandhu, EE Sept. 96, p779-784.

Environmental Hydraulics: New Research Directions for the 21st Century, ASCE Task Committee on Hydraulic Engineering Research Advocacy, HY Apr. 96, p180-183.

Failures in Civil Engineering: Structural, Foundation and Geoenvironmental Case Studies by Robin Shepherd and J. David Frost, Kenneth L. Carper, CF May 96, p87.Fear of Metric, Edward Kausel, CE Apr. 96, p38.

Forum, El July 96, p95-103.

Forum, El Oct. 96, p139-146.

GIS and CAD-based Design Software in CE Education, Randy Dymond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p501-507. Guest Editorial, Ruben J. Baer, CF May 96, p46. Guest Editorial, F. Lawrence Bennett, CR Sept. 96, p119-

Harnessing the Internet for Civil Engineering Course Delivery, Rafael G. Quimpo, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p355-361.

Honing the Writing Skills of Engineers, P. M. Berthouex, EI July 96, p107-110.

How to Make Our Heroes-Their Heroes, Francis E. Griggs, Jr., (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p144-154.

The Importance of Being Historical: Civil Engineers and Their History, Jane Morley, El Oct. 94, p419-428.

Industry-University Partnerships for Construction Engineering Education, Robert K. Tener, El Oct. 96, p156-

Insect Robots: Case Studies for Teaching Students About Design of Computer-Aided Experimentation, James Moller and Osama Ettouney, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p310-316.

Integrated Civil Engineering Curriculum: Implementation and Management Issues, Neil S. Grigg, Marvin E. Criswell and Thomas J. Siller, El Oct. 96, p151-155.
International Postgraduate Program of Water Resources

Engineering in Asia, Thian Yew Gan, El Jan. 96, p6-11. The International Walking Machine Decathlon: A Design Competition to Enhance Undergraduate Engineering Ed-

ucation, Gordon K. Lee, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p296-302. Just-In-Time Training on E-Mail, John F. Marron, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p931-936.

A Million Engineers, CE Feb. 96, p8.
Multi-Site Cross-Disciplinary A/E/C Project Based Learning, Renate Fruchter, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p126-132.

Multimedia-Based Instruction of Building Construction, Diego Echeverry, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p972-977.

National Reserach Council Symposium on Major Issues in Engineering Education, Peter G. Hoadley, El Apr. 96, p51.

On the Shoulders of Giants-Part Three, Francis E. Griggs, Jr., El Apr. 96, p55-64.

Part-Time Graduate Education: Obstacles, Conflicts, and Suggestions, Allen P. Davis and Richard H. McCuen, EI Apr. 95, p108-113.

Practitioners' Forum, Frederick S. Merritt, AE Dec. 96, p125-128. Reader Urges End to 'Liberal' Thinking, Mark A. Thomey,

CE Apr. 96, p32.

State Engineers as Policymakers: Apolitical Experts in a Federalist System, Bruce E. Seely, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p123-135.

Trends in Engineering: Education and Practice, Thomas T. Theis, CE Nov. 96, p6.

Trial Applications of Multimedia Instructional Aids in a

Building Construction Curriculum, David R. Riley and Clark Pace, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p362-368. Utilizing Information Technologies to Better Educate Engi-

neers of Tomorrow, Abbas Aminmansour, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p965-971. Viewpoint, James T. P. Yao, IS Mar. 96, p1-4.

Why the Corps Needs Engineers, Louis L. Guy, Jr., CE

May 96. p28. The World's Oldest Civil Engineering Professor, Daniel S. Turner, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p13-

WWW and Multimedia in Undergraduate Civil Engineering, Randy Dymond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996). p341-347.

Engineering firms

A/E Firms See Future in the Web, ME May/June 96, p11. Advice to Environmental Execs: Get Tougher, CE Dec. 96,

Analytic Approach Helps Firm Expand Business, CE Dec.

96, p22.
ASCE Opposes California Amendment on A/E Services, CE July 96, p70.
ASFE Publishes Financial Performance Survey, ME July/

Aug. 96, p6. Bar Codes in the Design Office, Richard L. Bland, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p951-957.

Black & Veatch Buys Three European Firms, CE Nov. 96,

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Bonuses Up Sharply, ME Nov./Dec. 96, p12. Business Plans Live and Grow, Jack E. Reinhard, P.E., ME Nov./Dec. 96, p3-4.

Changing Times for Engineers Is Focus of Triennial Con-clave between U.S., Britain, Virginia Fairweather, NE Dec. 96, p1,10.

Controlling Overhead Costs, Kirti Gandhi, ME July/Aug. 96, p18-22.

Designing a PC Network to Meet the Specific Needs of Engineers, Shawn A. Dent, Daniel P. Davis and Thomas gineers, Statum A. Deat, Damier F. Davis and Thomas Gdula, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p937-943. Engineering Automation Expands, CE Sept. 96, p22. Engineers On the Line, J. A. Morgan, CE Dec. 96, p27.

Environmental Firms Merge, CE Dec. 96, p22. Expert Testimony Can Prove Negligence, CE June 96, p24. Firm Serves As a Model for its Piers, CE Oct. 96, p97. Firms Form Brownfield Alliance, CE Dec. 96, p22

Frequent "Failure Modes" an A/E/C Might Expect in Their Business, William M. Hayden, Jr., ME Sept/Oct. 96, p11.

Getting (and Giving) Good Value, ME July/Aug. 96, pl 1. Global Expansion: A Growing Dilemma, Howard Schirmer, Jr., ME Sept/Oct. 96, p28-31.
Grateful for Bid Process, N. Stanley Good, CE Jan. 96,

p28-29.

International Sourcebook for Construction Industry Product Assessment, CERF Report #95-5021, July 1996, Civil Engineering Research Foundation, 1996, 0-7844-0173-X,

75pp. Intranet Technology to Aid Engineers, CE Dec. 96, p20.

Late License Acceptable, CE Sept. 96, p28-29. Leadership Development, Jim Krug, ME Nov./Dec. 96, p15-16.

Louis Berger, Who Built Large Firm, Dies at 82, CE Oct. 96, p74.

Lower Overhead Responsible for Rise in Profits, ME Mar./ Apr. 96, p8.

Management Buys Back HDR From French Parent, CE Nov. 96, p27.

Maximizing Resources to Produce High Quality Results, Christopher J. Perry, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p958-964

New on the Web, CE Sept. 96, p11. Overtime Overhaul Overdue, ME May/June 96, p11-12. Parsons Brinckerhoff Set to Double in Size, CE Nov. 96.

Rain Making: The Professional's Guide to Attracting New Clients by Ford Harding, Judith Nitsch, P.E., ME Nov./ Dec. 96, p6-7

Representing the City, CE Dec. 96, p24.

Richard Elstner, 72, Was Failures Expert, CE Nov. 96, p75-76.

Risky Business, ME Nov./Dec. 96, p12.

A Satellite in Your Future?, ME Mar./Apr. 96, p9-10. Searching for a Successful Strategy? Mel Hensey, ME Sept./Oct. 96, p6-7.

Secret Strategies Revealed, ME May/June 96, p11.

Senior Engineers, Defining Their Place in an Electronic Office, James D. Miller, CP Oct. 96, p263.

Small Business is Big Business, Joseph Kaplan, SC Aug. 96, p78.

Small Firms, Big Challenges, Monica Maldonado, CE Feb. 96, p60-63

Small, Smaller Smallest, Howard F. Greenspan, CE June 96, p28.

Statute of Limitations on Negligence, CE Nov. 96, p28. Sticking with the Web, Peter Salwen, CE June 96, p36-41.

Stronger Leadership Needed, ME Nov./Dec. 96, p13. Structures Firm Adds Industrial Focus, CE Dec. 96, p22. Systems Engineering Firms Merge, CE Dec. 96, p22

Two Firms to Merge, CE Jan. 96, p8.

Upheavals in Soil Firms, CE Sept. 96, p11. Why Satisfied Customers Defect, Thomas O. Jones, ME

Nov./Dec. 96, p11. Working Longer for Profitability, CE Dec. 96, p8.

Engineering mechanics

Engineering Mechanics, 2 vols., Y. K. Lin and T. C. Su, 1996, 0-7844-0172-1, 1240pp.

Engineering profession

68,000 New Jobs Projected for CEs over Next 10 Years, NE May 96, p5.

Appropriate Technology for Sustainable Development, Maurice L. Albertson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3247-3252.

ASCE Mourns Loss of Industry Leaders in Plane Crash, CE May 96, p71. ASCE Mourns Loss of Industry Leaders in Plane Crash,

NE May 96, p15.

Benjamin Wright-The Father of American Civil Engineering, Neal FitzSimons, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Ken-non, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p98-107.

The Birth and Success of Orange County's Hydrology and Hydraulics Technical Group, Chenchayya T. Bathala, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2259-2263.

Civil Engineers Need to Stay Together, C. Gary Kellogg, CE Feb. 96, p6.

Dates Set for Engineers Week '97, CE Dec. 96, p70. Education and Research Needs for Appropriate Technology, Maurice L. Albertson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2760-2765.

The Engineer and the Smithsonian Institution's Civil Engineering Collections, William E. Worthington, Jr., (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p34-43.

Engineering and History: Manifestations in Monuments, Henry Petroski, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p155-161.

Engineering Ethics, Stanley H. Goldstein, P.E and Robert A. Rubin, CE Oct. 96, p40-44.

Engineering Too Splintered, F. James Knight, CE Oct. 96,

Feds De-Engineering Government, Bhagwan Goklani, CE Oct. 96, p37.

How to Make Our Heroes-Their Heroes, Francis E. Griggs, Jr., (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p144-154.

J.A.L. Waddell and the Diffusion of Civil Engineering Techniques, George F. W. Hauck and Louis W. Potts, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p53-65.
Montgomery C. Meigs: The Eclectic Engineer, Dean A.

Herrin, (Civil Engineering History: Engineers Make His-tory, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p66-

73. NEW '96 Gets Message from President; Home Page on Computer Net, CE Feb. 96, p68. Organizing a Local Water Resources Technical Group, Thomas G. Sands, (North American Water and Environmontas G. Sands, (vorn American water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2254-2258. Promote People Skills, Jim Krug, ME Sept_/Oct. 96, p1. Reader Urges End to 'Liberal' Thinking, Mark A. Thomey,

CE Apr. 96, p32.
Research Relevance: Communication is Key, John B. Scal-

zi, CE Aug. 96, p6.

Spheres of Influence: Federalism, Politics, and Engineering Design, Todd Shallat, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Ken-non, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p136-143. What's 'NEW' for 1996?, CE Jan. 96, p69.

What's NEW 10 1990; LC 2nn. 30, pop.
Women Engineers Take High Road in California's Transportation Scene, NE July 96, p11.
Working Hard, But Happily, ME July/Aug. 96, p12.
The World's Oldest Civil Engineering Professor, Daniel S.

Turner, (Civil Engineering History: Engineers Make His-tory, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p13-22

Engineering services 68,000 New Jobs Projected for CEs over Next 10 Years, NE May 96, p5.

ASCE Opposes California Amendment on A/E Services, CE July 96, p70.

Business Development Basics, Mel Hensey, P.E., ME

Nov./Dec. 96, p8-9. Changing Times for Engineers Is Focus of Triennial Con-clave between U.S., Britain, Virginia Fairweather, NE Dec. 96, p1,10.

Congress Approves New Design-Build Law, Michael Charles, CE Mar. 96, p100.

Chairles, C.E. Mar. 706, p100.
Considering Constructor Prequalification, Gary D. Bates, P.E., ME Nov./Dec. 96, p10.
Construction Industry Web Site Opens, CE July 96, p24.
Cooperation Can End Bid Evils, David R. Chapman, P.E., CE July 96, p32.

Engineers Commune in Virtual Village, CE Jan. 96, p15-

Engineers, Not QBS, Insure Quality, Mark W. Fantozzi, CE Apr. 96, p30,32.

Great Tips from Client Feedback Programs, Sylvia Wheeler, ME Nov./Dec. 96, p10.

Law Does Not Regulate All Use of the Word 'Engineer', CE July 96, p27.

Marketing Engineering Services: Partnering Pales by Com-

parison, Oscar C. Boldt, ME Jan./Feb. 96, p3-5. New Version of Manual 45 Ready, CE Dec. 96, p70. Parsons Brinckerhoff Set to Double in Size, CE Nov. 96,

p27. Regarding Bid Competition, James F. Adams, CE May 96,

Services Rendered, Payment Due, CE Sept. 96, p29. Trends in Engineering: Education and Practice, Thomas T.
Theis, CE Nov. 96, p6.

Why Satisfied Customers Defect, Thomas O. Jones, ME Nov./Dec. 96, p11.

Engineering societies
ASCE Joins Ranks of Congressional Fellows, Martin Hight, CE Dec. 96, p114.

ASCE Task Group Lays Foundation for Structural Institute, Eric Rasmussen, NE June 96, p14. Dates Set for Engineers Week '97, CE Dec. 96, p70.

Engineering surveying Guest Editorial, Harlan J. Onsrud, SU Feb. 96, p1-2.

Engineers

Appropriate Technology for Sustainable Development, Maurice L. Albertson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3247-3252.

ASCE's Biannual Salary Index, CE Aug. 96, p64,66,67. Bad Vibrations, Lawrence W. Gubbe, P.E., CE Aug. 96,

Climate Change: What the North American Water Engineer Should Know, Maurice Roos, (North American and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1471-1476.

Communication Breakdowns, Philip C. Terry, SC Nov. 96, p108-112.

Construction Safety: A Vision for the Future, Stewart Young, ME July/Aug. 96, p33-36. Cooperation Can End Bid Evils, David R. Chapman, P.E.,

CE July 96, p32. Cramming, CE Oct. 96, p11. Dates Set for Engineers Week '97, CE Dec. 96, p70.

Early Surveys in the Nation's Capital, Steven M. Pennington, (Civil Engineering History: Engineers Make Histo ry, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p86-95. Editorial, Anthony G. Collins and Rafael Bras, EE May 96, p339.

p339.
p359.
p36.
The Engineer and the Smithsonian Institution's Civil Engineering Collections, William E. Worthington, Jr., (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p34-43.
Engineers On the Line, J. A. Morgan, CE Dec. 96, p27.

Ethical Responsibilities of Engineering Profession, Mark J. Holliday, El July 94, p270-272. A Heyday for Engineers' Salaries, CE Oct. 96, p28.

IFPATS: A Link Between Distributed AI Systems and Ex-

IFPATS: A Link Between Distributed AI Systems and Expert Users, G. J. Krige, CP Apr. 96, p151-156.
J.A.L. Waddell and the Diffusion of Civil Engineering Techniques, George F. W. Hauck and Louis W. Potts, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p53-65.
Johnson Space Center Crew Return Vehicle Activities, Charles H. Campbell, B. Kent Joosten and Robert E. Meyerson, [Engineering, Construction, and Operations.

Meyerson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p392-398

Latin American Infrastructure Database Formed, CE Dec. 96, p22.

Leadership Development, Jim Krug, ME Nov/Dec. 96, p15-16.

Liability of Engineers When Wetlands Laws Change, Peter J. Coote, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p970-975.

Malpractice Suit Against Engineer, CE May 96, p24. Maximizing Resources to Produce High Quality Results, Christopher J. Perry, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p958-964.

Measuring Blast Damage, Clifton E. R. Lawson, P.E., CE Oct. 96, p38-39.

Oct. 96, pos-29.
Montgomery C. Meigs: The Eclectic Engineer, Dean A. Herrin, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p66-

More Ethical Practice, Not Training, Dan Feger, P.E., CE Nov. 96, p38,40.

New Faces in Familiar Places, NE Nov. 96, p15

On the Stamp Campaign, Robert B. Johnson, CE Dec. 96, p28-29.

On TRAC with Tate Jackson, William E. Kelly, NE Feb. 96, p14.

Reader Reviews 'Transgressions', Eugene H. Harlow, CE Mar. 96, p28,31.

Reasonable Care Must Be Taken, CE Dec. 96, p24.

Room for Engineers in Corps? Angelo F. Coniglio, CE Apr. 96, p32,36.

Rules of Thumb, Nancy Gibson and John Whittaker, ME Nov./Dec. 96, p34-39.

Seeking Structural Solutions, Virginia Kent Dorris, CE Nov. 96, p46-49.

Selection of Sediment Transport Relations: Part I, Review of Sediment Transport Comparisons, Martin J. Teal and David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2831-2836.

Selection of Sediment Transport Relations: Part II, Ranges of Dimensionless Numbers, David S. Smith and David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2837-2842.

So Mrs. Roebling—What's Your Side of the Story—About the Brooklyn Bridge? Patricia D. Galloway, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p23-24.

State Engineers as Policymakers: Apolitical Experts in a Federalist System, Bruce E. Seely, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Ir., ed., 1996), p123-135.

Use of a Technical Clearinghouse during Emergencies, Carl E. Mortensen, Richard K. Eisner, James F. Davis and Michael S. Reichle, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p309-310.

Why the Corps Needs Engineers, Louis L. Guy, Jr., CE May 96, p28.

Women Engineers Get Leadership Training, CE Dec. 96,

"Meigs Among the Ruins': Montgomery C. Meigs and the Construction of the United States Capitol Extension", Dean A. Herrin, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p96-97.

Entrainment

Adhesion and Aerodynamic Resuspension of Fibrous Parti-cles, Nurtan A. Esmen, EE May 96, p379-383.

Bifurcation of Line Thermals, M. Dehghani and V. H. Chu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p446-449.

Entrainment of Eggs and Larval Fish Into Propeller Jets, Stephen T. Maynord, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3147-3152.

Experiments on Resuspension of Fluid Mud Using an Os-cillating-Grid Tank, Panagiotis D. Scarlatos, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p808-811.

A Heuristic Model for Particle Entrainment into Suspen-sion, Yarko Niño and Marcelo García, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p812-815.

Sound Way to Save Fish, John Nestler and Gene Ploskey. CE Sept. 96, p58-61.

Stably-Stratified Surface Thermal Jet in a Current: Cold Climate Condition, A. M. Zaghloul, R. Martinuzzi and R. E. Baddour, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p1062-1065.

Wave Field in the Efflux of River Water, Akira Mano and Subandono Diposaptono, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p185-196.

Entropy

Reliability Analysis of Beam with Initial Deflection by Entropy Model, Yoshiro Kohama, Toyofurni Takada and Atsunori Miyamura, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p652-655.

Envelope curves

Measurements of Bridge-Scour Depths in Mississippi, K. Van Wilson, Jr., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3023-3032.

Environment

1997 Budget, Casey Dinges, CE May 96, p98. Editorial, Patrick K. Takahashi, EY Dec. 96, p75-77. Fluid Management in Space-Based Systems, Jack A. Salzman, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p521-526.

An Interactive Operator Interface for Task-Level Direction of a Robot in Uncertain Environments, Eric S. Miles and Robert H. Cannon, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p50-56.

Meteoroid Hazards in the Lunar Environment, Frank J. Rooney and John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p653-662.

New Materials for the 21st Century, Edward E. DiTomas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p14-22.

Reader Reviews 'Transgressions', Eugene H. Harlow, CE

240

Mar. 96, p28,31.

Real Time Positioning and Equipment Control for Hostile Environments, Yvan J. Beliveau, (Robotics for Challeng-ing Environments, Laura A. Demsetz, ed., 1996), p64-70.

Suggested Name Change for ASCE, Carl H. Carpenter, P.E., CE Oct. 96, p31. Sustainability: Another New Paradigm, Larry Quinn, P.E.,

CE Oct. 96, p6. Visualizing the Flow, Mahadev Raman, Burkhard Bein, Colm Hogan and Dennis Sheldon, CE June 96, p43-45.

Environmental audits

Environmental Site Investigation Guidance Manual (M&R No. 83), Task Committee on Hazardous Waste Site Assessment Manual of the Environmental Engineering Division of the American Society of Civil Engineers, (Yee K. Cho, chmn.), 1996, 0-7844-0096-2, 141pp.

SQIG: A DOE Complex-Wide Approach to Savings through Sharing, Michael J. Chestnut and Robert R. Rinderman, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p310-311.

Standardizing Environmental Assessments: A Practical Per-spective, J. R. Marsh, K. W. Green and T. Dong, EE Mar. 96, p222-226.

Environmental effects
The Caspian Sea Transgression (Environmental Medical Aspect), L. I. Elpiner, (North American Water and Environment Congress & Destructive Water, Chenchavva

Bathala, ed., 1996), p3498.

The Changing Role of Construction Mitigation, Sallye E.

Perrin and Kristin C. Lewis, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p63-69. Corps' Shoreline Work Assessed, CE Oct. 96, pl 1.

Evaluating Risk to the Environment from Mining Using Failure Modes and Effects Analysis, Kelvin Dushnisky and Steven G. Vick, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth,

ed., 1996), p848-865. From Natural Disaster to Human-Caused Disaster, Antoni Palau and Jorge Alcázar, (North American Water and Environment Congress & Destructive Water, Chen-

Chayles Sathala, ed., 1996), p3497.

Hazard Ranking of Landfills Using Fuzzy Composite Programming, Michael E. Hagemeister, David D. Jones and Wayne E. Woldt, EE Apr. 96, p248-258.

Mathematical Model for Durability of Cladding, K. D. Hielmstad, D. A. Lange, I. D. Parsons and F. V. Law-Hjelmstad, D. A. Lange, I. D. Parsons and F. rence, MT Aug. 96, p172-174.

Measures of Exceedance by Random Fields for Ocean Stress and Environmental Application, M. R. Leadbetter and Holger Rootzén, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p258-261.

New City Breaks Ground, CE Sept. 96, p20,22.

Environmental engineering

Advice to Environmental Execs: Get Tougher, CE Dec. 96,

Big Business, Paul J. Zofnass, CE May 96, p52-55. Black & Veatch Buys Three European Firms, CE Nov. 96,

p27. CEOs Warned: Enviro Business Won't Pick Up, ME Jan/

Feb. 96, p11.

A Constructive Act, CE Dec. 96, p13. Corps Moves Closer to Bid Shopping, Allen W. Hatheway, CE June 96, p35.

Development of Worker Safety in the Environmental Field in the Past 25 Years, David R. Smith, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p42-54. Editor's Note, Thomas L. Theis, EE Aug. 96, p675.

Editorial, EE Jan. 96, p1-2.

Editorial, Mark R. Wiesner and Thomas L. Theis, EE Feb.

Editorial, Bruce Logan, EE Mar. 96, p167. Editorial, Thomas L. Theis, EE June 96, p451. Editorial, Thomas L. Theis, EE Nov. 96, p955.

Environmental Engineering Forum, Takashi Asano and George Tchobanoglous, EE Aug. 95, p548. Environmental Engineering Forum, Steven I. Safferman, Vivek P. Utgikar and Sarwan S. Sandhu, EE Sept. 96,

p779-784 Environmental Firms Merge, CE Dec. 96, p22.

Environmental Site Investigation Guidance Manual (M&R No. 83), Task Committee on Hazardous Waste Site Assessment Manual of the Environmental Engineering Division of the American Society of Civil Engineers, (Yee K. Cho, chmn.), 1996, 0-7844-0096-2, 141pp.

Firm Serves As a Model for its Piers, CE Oct. 96, p97. Getting (and Giving) Good Value, ME July/Aug. 96, p11. Going Global: A CEO's Perspective, Vincent A. Rocco, ME Mar./Apr. 96, p21-24.

Grants Aid South American Development, CE Dec. 96, p13.

Impacts of NAFTA on Environmental Engineering, Mark W. Killgore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2306-2311.

No More Bullish Predictions, CE Dec. 96, p13-14.

North American Water and Environment Congress & Destructive Water, CD-ROM (Windows version only), Chenchayya Bathala, ed., 1996, 0-7844-0166-7, 1340pp.

Organizing a Local Water Resources Technical Group, Thomas G. Sands, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2254-2258.

Ozone Update Requested, Ernest Nussbaum, CE Nov. 96,

p.30.
Practical Geoenvironmental Visualization, G. B. Baecher, J. A. Zarge and J. Shapiro, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1990), p56-62.

Restoration Design for Urban Streams: Anacostia River Basin, Maryland, Meg Burns, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4198-4201.

Roadkill Studied, CE Sept. 96, p27.

Start-Ups, CE Mar. 96, p8.

Stronger Leadership Needed, ME Nov./Dec. 96, p13.

Trends in Engineering: Education and Practice, Thomas T. Theis, CE Nov. 96, p6.

Environmental factors

1994 Alaska Flood Recovery Project Management of a Disaster Recovery by a General Contractor, David S. Westhaver and Alison H. Boyce, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p111-112

Accidental Situations: Application of Surface-Water Moni-toring Data, P. Berg and T. Vasiljeva, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1338-1339.

Buying Wetlands, CE Aug. 96, p20.

Coal's Clean Comeback, Donald E. Pless and Stephen D.

Jenkins, CE Sept. 96, p46-49.

Consensus as the Measure of Sustainability, Michael J.

Bender and Slobodan P. Simonovic, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4148-4153.

Constructional and Environmental Aspects of Structural Materials at Antarctica and Indian Himalayas, R. C. Pathak, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p968-977.

Dynamic Response of Compliant Offshore Structures, R. Adrezin, P. Bar-Avi and H. Benaroya, AS Oct. 96, pl14-131.

Environmental Assessment of a Site for Civil Construction, S. M. Govorushko, UP Mar. 96, p18-31.

Grown Covolusion, OF Mar. 70, p18-31. Environmentally Acceptable Piling for Use in Navy Pier Fender Systems, David Hoy, George Warren and Duane Davis, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1189-1198.

Factors Affecting the Selection of a Crossing Method, David E. Hairston, (Pipeline Crossings 1996, Lawrence

F. Catalano, ed., 1996), p214-221.
Firms Form Brownfield Alliance, CE Dec. 96, p22.

Fuzzy Rule-Based Modeling of Reservoir Operation, Bi-jaya P. Shrestha, Lucien Duckstein and Eugene Z. Sta-

jaya P. Siresina, Lucien Duckstein and Eugene 2. Stakhiv, WR July/Aug. 96, p262-269.

Modeling Damage to Rigid Pavements Caused by Subgrade Pumping, M. Asghar Bhatti, Jeffery A. Barlow and James W. Stoner, TE Jan/Feb. 96, p12-21.

Pipeline Crossing Accidents and Leak Detection Opportunities, Diane J. Hovey and Edward J. Farmer, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p22-

Record Breaking Bundled Pipeline Crossings, Gerald Don-nelly and Mark W. Struss, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p37-47.

A System to Improve Water-Related Sustainability Characteristics of International Development Programs/Projects, Larry Quinn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3259-3264.

Environmental impact statements

Between the Devil and the Deep Blue Sea: A Tale of Two
Scientific (?) Analyses, T. R. Muraleedharan, El Jan. 96,

Dredging in the Southern Sacramento-San Joaquin Delta, Mike Mirmazaheri, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2636-2641.

Environmental Restoration Measures on the Tennessee Tombigbee Waterway (TENN-TOM), Nathaniel D. McClure, IV and Norman L. Connell, Sr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3326-3331.

Environmental impacts

Amtrak Breaks Ground on High-Speed Rail, CE Aug. 96, p16.

Between the Devil and the Deep Blue Sea: A Tale of Two Scientific (?) Analyses, T. R. Muraleedharan, El Jan. 96,

Design of the Santa Ana River Wash Crossing of the Inland Feeder, Birger Schmidt and Roy Cook, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p373-378.

Eddy Pump Dredging Demonstration at Cresta Reservoir, Larry L. Harrison and Harry P. Weinrib, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2091-2096. Editorial, Victor C. Li, MT Nov. 96, p183. Editorial, Boris Berkovski, EY Dec. 96, pvi-x.

EMC Issues in Electric Railway Traction Systems, M. Mazzucchelli, P. Pozzobon and G. Sciutto, (Applications of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p44-48.

Environmental Concerns for High-Voltage Transmission Lines in UNIPEDE Countries, E. C. Kalkani and L. G. Boussiakou, EE Nov. 96, p1042-1045.

Environmental Considerations for Water Resources Devel-opment in Haor Areas of Northeastern Bangladesh, G. M. Akram Hossain and Ainun Nishat, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1063-1068. Environmental Goal Needs Definition, David M. Herring,

P.E., CE Dec. 96, p27-28.

P.E., CE Dec. 96, p27-28.
Environmental Impacts of Autoclaved Cellular Concrete, M. C. Latona, R. D. Neufeld, L. E. Vallejo, W. Hu and C. Kelly, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p57-69.
Environmental Linkages between Urban Form and Municipal Soild Waste Management Infrastructure, Tony Di Nino and Brian W. Baetz, UP Sept. 96, p83-100.

Environmental Permitting for the Canal Electric Project, Gene F. Crouch, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p.237-244. Evaluation of Potential Impacts to Endangered Species That Use Wetland Areas: A Case Study, Andrea Rosenthal, David Reutter, Roger Menendez and Barbara Michael, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2033-2038.

History of Coastal Engineering in the USA, Robert L. Wiegel and Thorndike Saville, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996),

acts of Reservoir Sedimentation on Decommissioning of Dams, George W. Annandale, (North American Water of Dams, George W. Annandare, (vorm American water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2114-2119. Integration of Water Resources Planning and Environmen-tal Regulation, William Whipple, Jr., WR May/June 96,

p189-196.

Attenuation, David F. Laney, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2011-2020.

Managing Conflicting Demands from Endangered Species: Taking the Challenge, Kenneth W. Kirby, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4142-4147. Mitigation Wetland Losses for a Major Transportation Im-

provement Project in New Hampshire, Craig A. Wood, William J. Barry, Albert S. Garlo and William Arcieri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p982-987

Modeling Sediment in Gravel-Bedded Streams Using HEC-6, Robert N. Havis, Carlos V. Alonso and John G.

King, HY Oct. 96, p559-564.

Modeling the Ecological Impacts of Flaming Gorge Dam Operations, S. C. L. Yin, K. E. LaGory, J. W. Hayse, I. Hlohowskyj, R. A. Van Lonkhuyzen and H. E. Cho, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1911-1917.

Modeling Water-Resource Systems for Water-Quality Management, R. G. Willey, Donald J. Smith and James H. Duke, Jr., WR May/June 96, p171-179. Pipeline Crossings and the Corps Regulatory Process in New England, Karen Kirk Adams and David H. Killoy, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1997). 1996), p409-417.

Prediction of Effects of Woody Debris Removal on Flow Resistance, F. Douglas Shields, Jr. and Christopher J. Gippel, HY Apr. 95, p341-354. Protection of and from the Lunar Environment, Anthony M.

Wachinski, Tony Rachwal and Colin Waters, (Engineer-

washinsh, Iony Rachwal and Colin Walers, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p668-672.
Readers Respond to Thomey Letter, Norm Hoffman, P.E., James S. Pol, Jim Coppock, P.E., J. Frank Brennan, P.E., John A. Mundell, P.E. and F. Weston Starratt, P.E., CE

Aug. 96, p28-29. Reducing Environm educing Environmental Impacts through Non-Uniform Loading of Casks, N. Barrie McLeod, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p372-373.

Reducing Uncertainty in Environmental Site Characteriza-tion, Yi-Chang Tsai and J. David Frost, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1019-1033.

Reversibility Measures for Sustainable Decisions, Nick Fanai and Donald H. Burn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1525-1530.

Site and Size Optimization of Contaminant Sources in Suffered Water Systems, Nickley D. Retonocks and Michael

face Water Systems, Nikolaos D. Katopodes and Michael

Piasecki, EE Oct. 96, p917-923. Piasceki, E. Okt. 70, 19117-23.
South American Dam Failure Studied, CE Aug. 96, p18.
Utilizing Directional Drilling Techniques to Install Underwater Watermain, Timothy M. Stinson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p180-185. Water Quality Impacts of Dredging and Disposal Operations in Boston Harbor, J. Craig Swanson and Daniel Mendelsohn, (North American Water and Environment Congress & Destructive Water, Chenchayva Bathala, ed., 1996), p2642-2647.

Wetland Mitigation Evaluation Ten Years After Florida Keys Bridge Replacement, Roy R. Lewis, III, Curtis R. Kruer, Sally F. Treat and Stephanie M. Morris, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p759-763. "Do Nothing" Title Misleading, Bruce E. Rittmann, Mi-chael C. Kavanaugh and Jacqueline A. MacDonald, CE

Nov. 96, p36,38.

Environmental Issues
Accelerating Innovation: New Style of Leadership Needed,
Les McCraw, ME Sept./Oct. 96, p3-5.
Appropriate Technology for Sustainable Development,
Maurice L. Albertson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3247-3252.

Biosphere FEP List Development Specific to Yucca Mountain, Graham M. Smith, Barbara M. Watkins and Richard Little, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p244-246.

Biosphere Model for Assessing Doses from Nuclear Waste tospiere Model for Assessing Doses from Nuclear waste Disposal, Marsha I. Sheppard, R. Zach, S. C. Sheppard, B. D. Amiro, G. A. Bird, J. A. K. Reid and J. G. Szekely, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p240-243.

Program Commutee, 1990, 240-243.

Biosphere Modelling for Radioactive Waste Disposal, Richard A. Klos and Frits Van Dorp, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p237-239.

A Boom in Thailand, Charles R. Heidengren, CE Nov. 96,

p64-67.

Border Environment Cooperation Commission: 1995 Year End Status Report, Peter Silva, (North American Water and Environment Congress & Destructive Water, Chenchaya Bathala, ed., 1996), p1819-1821.

The Budget-Blame Battle at Superfund Conference, CE

The Budget-Biathe Ballie and the Environmental Professional— Jan. 96, p18.20.

CERCLA Liability and the Environmental Professional— An Overview of Judicial Developments, John J. Allen, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p35-41.

The Changing Role of the Civil Engineer in the Past 25 Years, F. Thomas Young, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p55-62.

Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996, 0-7844-0204-3, 144pp.

Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996, 0-7844-0190-X, 965pp.

Cooperative Approaches in Achieving Additional Water Conservation at Prado Dam, James A. Van Haun, (North American Water and Environment Congress & Destruc-

American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p.2352-2353.

Critical Evaluation of Risk Assessment: A Look from the Inside Out, Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p419-421.

The Dying of the Trees: The Pandemic in America's Forests by Charles E. Little, Brian R. Brenner, El July 96, p136-137.

Editorial, A. Jacob Odgaard, HY July 96, p366.

Environmental Concerns for High-Voltage Transmission Lines in UNIPEDE Countries, E. C. Kalkani and L. G. Boussiakou, EE Nov. 96, p1042-1045.

Environmental Engineers Take Aim at Firing Range, CE

Aug. 96, p18.

Aug. 96, p18.
Environmental Justice: An Issue for States, Linda K. Murakami, Sia Davis and Deb Starkey, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p480-482.
Environmental Justice: The Department of Energy's Response to Executive Order 12898, Alvaro Nieves, Dee Wernette and Georgia Johnson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p483-485.

Environmental Standards Digitized, CE Dec. 96, p20. Environmental Worldviews and Water Resources, Robert E. O'Connor, Richard J. Bord and Ann Fisher, (Risk-Based Decision Making in Water Resources VII, Yacov

Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p10-18.

EPA in Limelight at WEFTEC Meeting, CE Dec. 96, p10. Fear Not: The Art of Risk Communication, Christine Barr.

ME Jan./Feb. 96, p18-22.

History of Coastal Engineering in Great Britain, Rendel Palmer, ed. and Tritton Limited Development and Engineering Consultants, ed., (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p214-274. Largest California Highway Design-Build Project Opens.

CE Oct. 96, p26,28.

The Management and Policies of the BECC, April Lander, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1813-1818.

New Sunshine Program: Comprehensive Approach to the 21st Century, Mitsugi Chiba, EY Dec. 96, p93-101.

North American Water and Environment Congress & De-

North American Water and Environment Congress & Destructive Water, CD-ROM (Windows version only), Chenchayya Bathala, ed., 1996, 0-7844-0166-7, 1340pp. Pipe Plunge Pool Energy Dissipator, Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323.
Public Attitudes, Behavior, and the Willingness to Sacrifice to Mitigate Uncertain Adversity: Water Management Implications for Climate Change, Robert E. O'Connor, Richard J. Bord and Ann Fisher, (North American Water and Environment Congress & Destructive Water Chen. and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1828-1833. Reader Remembers Cost, Not Fish, Charles C. McCloskey,

P.E., CE Nov. 96, p32,36.

P.E., CE NOV. 90, p.52,36.
Recently Emphasized Objectives and Risk Analysis for Project Planning in Developing Countries, Alvin S. Goodman and Lampros E. Bourodimos, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, 1006-01-156-166. ed., 1996), p154-168. R, for Risk Communication, Steven D. Perry, CE Aug. 96,

p61-63.

Saved by the Net, CE Sept. 96, p22. Slim Environmental Outlook, Casey Dinges, CE Aug. 96,

p96.
Solving Aviation and Intermodal Transportation Related Is-Solving Aviation and Intermodal Transportation Related Issues — "A New Prototype for the 21st Century", Clifford Bragdon and Carl Berkowitz, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p212-222.
State-of-the-Art Review of Modeling Transport and Fate of Oil Spills, ASCE Task Committee on Modeling of Oil

Spills of the Water Resources Engineering Division, HY

Nov. 96, p594-609. Strategies for Remediation Managers, Gary Dunbar and

Scot Foster, CE June 96, p53-55.
Telesleeve Crossing, David E. Comfort and Paul F. Lucas, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p139-146.

This Year's Budget, with Only Five Months Left, Is a Done Deal, NE June 96, p2.

To Allay Brownfields "Misperceptions", Dante J. Tedaldi,

P.E., CE Oct. 96, p37.

P.E., CE Oct. 96, p37.
Two Social Concerns of an ASCE Subcommittee, Mario Salvadori, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p30-34.
Venice, Italy: an Integrated Approach to Solve the Environmental Problems of Its Unique Collection System, Federico G. A. Vagliasindi, Vincenzo Belgiorno, Rodolfo M. A. Napoli and Giorgio Conti. (Narth American Water) A. Napoli and Giorgio Conti, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1801-1806.

Westlake Farms Demonstration Wetlands A Cooperative Effort, John M. Shelton, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p388-393.

"California Border Environment Activities Since Passage of NAFTA", James M. Stubchaer, Bart Christensen and Susan Phillips, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1807-1812.

Environmental mapping

COASTMAP: An Integrated System for Environmental Monitoring, Modeling and Management, Thomas Opishinski, Malcolm L. Spaulding and Craig Swanson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2528-2532.

Spaceborne Fourier Transform Hyperspectral Imager, Leonard John Otten, III, Andrew D. Meigs and R. Glenn Sellar, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p224-230.

Environmental planning

Central Artery/Tunnel (CA/T) Project Environmental Per-mitting, Jeffrey M. Paul, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2236-2241

Commercial Wetland Mitigation Banking, Robert Brum-baugh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p4233-4238.

Construction Industry Research Prospectuses for the 21st Century, CERF Report # 96-5016.T, Civil Engineering Research Foundation, 1996, 0-7844-0186-1, 130pp.

Controlling Brazil's Pollution: Federal versus State Taxes and Fines, Antonio Estache and Kangbin Zheng, IS June 96, p83-93.

Cost Effectiveness and Incremental Cost Analyses for Environmental Planning, William Hansen, Kenneth Orth and Ridgley Robinson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4220-4225.

Creating the 21st Century through Innovation, CERF Report # 96-5016.E, Civil Engineering Research Founda-

tion, 1996, 0-7844-0185-3, 60pp.

Critical Needs for Sustainable Water Resources: Bridging the Gap Between Science and Implementation, B. A. Miller and M. J. Sale, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1297-1298.

Ecosystem Management in the State of Florida, Ernest L. Barnett and Jim Lewis, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3586-3591.

Engineering and Construction for Sustainable Development in the 21st Century: Assessing Global Research Needs, CERF Report #96-5016A, Civil Engineering Research Foundation, 1995, 0-7844-0142-X, 145pp.

An Environmental Ethic for ASCE, John F. Scott, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3265-3270.

Environmental Improvement in Southern Africa, Daniel P. Miller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1069-1074.

Environmental Planning for Water Resources Develop-ment, Cuatro Cienegas Region, Coahuila, Mexico, James r. Kunkel and Dario Rodríguez-Bejarano, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1249-1254.

Environmental Policy Making in Today's Political Environment, Warren M. Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p2805-2809.

Game Model Approach to Multi-Purpose/Multi-Objective Water Resources Related Environmental Protection Project Planning and Management in Developing Nations: A Nigerian Example, Azuka Benjamin Anyika, (North American Water and Environment Congress & Destruc tive Water, Chenchayya Bathala, ed., 1996), p1057-1062.

How Did a California Dam Get a Section 404 Permit? Gary W. Darling and Joel B. Butterworth, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p976-981.

Upper Mississippi River System Environmental Management Program (EMP), Doyle W. McCully, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3320-3325. Validation of the Simplified Audit Process at a Roofing Tar Paper Speciality Product Manufacturer - Part 2, Pierre Sylvestre, Ronald Zaloum, Chantal Goyette and Claude Audet, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p93-98.

Environmental Protection Agency

CERF Receives Award, CE Nov. 96, p8.

Developing the Infrastructure for Lead Assessment and Abatement, Joseph S. Carra, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p70-76. EPA in Limelight at WEFTEC Meeting, CE Dec. 96, p10.

EPA Proposes Rural Wastewater Grants, CE Dec. 96, p8. EPA Requires Cryptosporidium Watch, CE July 96, p20. EPA Targets Suspected Fertility Disrupters, CE July 96,

p25. Final WIPP Compliance Criteria (40 CFR Part 194), Mary Kruger and Elizabeth Forinash, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p224-225.

Recommendations from EPA's Review Committee on WIPP, Chris G. Whipple, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p226-227

Review of the Performance Assessment in the WIPP Draft Compliance Application, William W.-L. Lee, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p228-230.

Sea-Level Rise Predicted, CE Jan. 96, p8.

Selecting Design Conditions as Part of a Watershed Approach to Water Quality Control, David W. Dilks and Kathryn A. Sweet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1543-1548.

Under Way: Decontamination Pilots for Dredged Material, CE Nov. 96, p10,12.

Environmental quality

Designing Instream Flows to Satisfy Fish and Human Water Needs, Hal Cardwell, Henriette I. Jager and Michael J. Sale, WR Sept./Oct. 96, p356-363.

Developing the Infrastructure for Lead Assessment and Abatement, Joseph S. Carra, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p70-76.

An Environmental Ethic for ASCE, John F. Scott, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3265-3270.

Environmental Improvement in Southern Africa, Daniel P. Miller, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1069-1074.

Gas-Phase Removal of H2S and NH3 with Dielectric Barrier Discharges, Moo Been Chang and Tian Deng Tseng, EE Jan. 96, p41-46.

Indoor Environmental Quality Needs Warrant Multi-Faceted Actions, David A. Harris, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p77-83.

An Integrated Coastal Management Plan for Mamala Bay, Donald R. F. Harleman and Susan E. Murcott, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4096-4100.

Integrating Drainage, Water Quality, Wetlands, and Habitat in a Planned Community Development, Michael R. Galuzzi and John M. Pflaum, UP Sept. 96, p101-108.

Postoccupancy Indoor Environmental Quality Evaluation of an Institutional Building, Brian A. Rock, P.E. and Craig A. Hillman, AE Sept. 96, p88-94.

River Meander Zones and Floodplain Reconnection, David A. Bella, Peter C. Klingeman and Hiram W. Li, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2613-2618.

Technology Development and Sustainable Construction, Yasuyoshi Miyatake, ME July/Aug. 96, p23-27.

Testing and Effectiveness of a New Urban BMP Stormcep-tor 8, Vincent H. Berg and Graham J. Bryant, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1864-1869.

Environmental quality regulations Comments Regarding the NAS Report on Yucca Mountain Standards, Chris Whipple, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p261-262.

Environmental Justice: An Issue for States, Linda K. Murakami, Sia Davis and Deb Starkey, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p480-482.

Environmental Justice: The Department of Energy's Re-sponse to Executive Order 12898, Alvaro Nieves, Dee Wernette and Georgia Johnson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p483-485.

Integration of Water Resources Planning and Environmen-tal Regulation, William Whipple, Jr., WR May/June 96,

p189-196.

Making a Case for "Cost-Effective" Compliance, Dale T. Bignell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p305-307

NA River Project Environmental Compliance with the National Environmental Policy Act (NEPA), Ruth B. Vil-lalobos, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2347-2349.

NAS Recommendations and Current Legislative Proposals: Implications for U.S. NRC's Regulatory Program, J. P. Kotra, M. V. Federline, T. J. McCartin, N. A. Eisenberg and J. H. Austin, (*High Level Radioactive Waste Man*agement, Technical Program Committee, 1996), p269-

The National Academy of Sciences Report and Environmental Radiation Standards for Yucca Mountain, Law-rence Weinstock and Raymond L. Clark, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p267-268.

National Research Council Report: "Technical Bases for Yucca Mountain Standards"—A State of Nevada View, Carl A. Johnson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p285-

Predictions on Federal Cleanup Market, CE July 96, p21-

Regulatory Perspective on Future Climates at Yucca Mountain, Neil M. Coleman, Norman A. Eisenberg and David J. Brooks, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p255-257.

Regulatory Perspective on NAS Recommendations for Yucca Mountain Standards, Stephan J. Brocoum, Miguel A. Lugo, Steven P. Nesbit, Paul M. Krishna and James A. Duguid, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p272-273.

Review of the Performance Assessment in the WIPP Draft Compliance Application, William W.-L. Lee, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p228-230.

Screening, Combining and Tracking Features, Events and Processes in WIPP Performance Assessments, D. A. Galson, D. G. Bennett, R. D. Wilmot, D. R. Anderson agement, Technical Program Committee, 1996), p231-233.

Titusville Cleans Up, CE Aug. 96, p18,20.

Understanding How to Maintain Compliance in the Current Regulatory Climate, Dale T. Bignell, Jeffry L. Newman and Ronald D. Burns, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p298-299.

Environmental research

CERF Receives Award, CE Nov. 96, p8.

Environmental Fluid Mechanics - A Review of Some Recent Results, Robert L. Street, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p30-32.

The Environmental Valuation Reference Inventory (EVRI) for Water Related Benefits Transfers, Jim Frehs, Matthew Clark, Paul De Civita, Fernand Filion, Virginia Kibler and Mahesh Podar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1331-1336.

Risk Model Applied Backwards, Monica Maldonado, ET Oct./Nov. 96, p1,7.

Environmental surveys

COASTMAP: An Integrated System for Environmental Monitoring, Modeling and Management, Thomas Op-ishinski, Malcolm L. Spaulding and Craig Swanson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996). p2528-2532.

Interference by Natural Organics in Diesel Analyses, Paul Dworian, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p71-81.

Epoxy coatings

Coating of Steel Structures in Cold Regions, Yuji Nakamura, Taiichi Inaba and Akihiro Tamada, (Cold Regions Engineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p173-184.

Creep Test Results Confirmed, Toby D. Leamon, P.E., CE

Sept. 96, p30.

Improving the Performance of Epoxy-Coated Rebar, Robert D. Lampton. Jr. and Dieter Schemberger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1209-

Influence of Coatings on Bar-Concrete Bond, Protasio F. Castro, MT Nov. 96, p212-214.

Not So Suspicious, H. Nierlich, CE Sept. 96, p30-31.

Prefabricated Epoxy-Coated Rebar for the U.S. Navy, Douglas F. Burke, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1199-1208.

Slowing Corrosion Damage in Concrete: The Use of Or-ganic-Coated, Ceramic-Clad, Metallic-Clad and Solid Metallic Reinforcing Bars, David B. McDonald, Donald W. Pfeifer, Matthew R. Sherman and Gilbert T. Blake, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1266-1275.

"Suspicious" Implications Allayed, William F. Powers, III, Kerry B. Allen and Michael P. Bruen, CE Sept. 96, p31-

Epoxy resins

Evaluation of Bridge Strengthening Measures Using Forced Vibration Tests, Kosal Krishnan, Frieder Seible and Gerald Pardoen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p845-852.

Sensitivity Studies of the Interfacial Shear Strength in Composite Materials Using the Microbond Test, W. M. Cross, L. Kjerengtroen, R. M. Winter, W. Jiang, W. Fan and J. J. Kellar, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p356-365.

Equations of motion Building on the Moon, CE Oct. 96, p11.

Channel Junction Effects in Channel Network Flow Simuhalinci Juliculoi Jetecs in Letters in Jeanne Keun-Heung Kim and Sang-Jin Ahn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1899-1904.

Comparative Study of the Transformed Methods for Solving Richards' Equation, M. Rashidul Islam, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1748-1753.

Equations of Motion for Mechanical Systems, Firdaus E. Udwadia and Robert E. Kalaba, AS July 96, p64-69.

New Trends in Biomechanics, Y. C. Fung, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1-15.

Equations of state

Constitutive Models for Concrete Penetration Analysis, Vladimir M. Gold, George C. Vradis and James C. Pear-son, EM Mar. 96, p230-238.

Computational Experiments with a Combined Traffic As-signment and Control Model with Asymmetric Cost signment and Control Model with Asymmetric Cost Functions, Claudio Meneguzzer, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p609-614. Equilibrium Network Traffic Signal Setting under Condi-tions of Queuing and Congestion, Hai Yang, (Applica-tions of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p578-582.

pi, eu., 1996, p. 19-3-3. Equilibrium-Range Spectrum of Waves Propagating on Currents, Kyung Duck Suh, Yoo-Yin Kim and Dong Young Lee, WW Sept./Oct. 94, p434-450. Estimation of the Potential Benefits from an ATT System

Using a Multiple User Class Stochastic User Equilibrium Assignment Model, M. J. Maher and P. C. Hughes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p700-704.

Hindsight on River Ice Jam Stability, Spyros Beltaos, CR

Sept. 96, p122-133.

Path-Storing Equilibration Algorithms for Several Traffic Assignment Models, Fabien Leurent, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p633-638.

Simple and Effective Equilibrium Models for Vibration Analysis of Curved Rods, A. Benedetti, L. Deseri and A. Tralli, EM Apr. 96, p291-299.

Equipment

The Effect of the Lunar Surface Environment upon Machinery, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Exact Solutions to A Class of Structure-Equipment Sys-tems, Genda Chen and T. T. Soong, EM Nov. 96,

p1093-1100.

External Inspection of an Ocean Outfall, Mike Heinz, Don Siverts and Bob Ooten, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2056-2059.

Getting Wet with Metric, Frederick A. Locher, (North American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996), p3683-3689. Influence of Hammer Type on SPT Results, Elliott E. Drumright, Charles W. Pfingsten and Robert G. Lukas, GT July 96, p598-599.

Meteoroid Hazards in the Lunar Environment, Frank J. Rooney and John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p653-662.

Overview of International Space Station Extravehicular Activity System, Jeff Dutton, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p473-479.

Performance of Chain Trenchers in Mixed Ground, Ian W. Farmer, CO June 96, p115-118.

Rational Design and Operation of Packed Bed Adsorption Reactors, Federico G. A. Vagliasindi and David W. Hen-dricks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p553-558.

Real Time Positioning and Equipment Control for Hostile Environments, Yvan J. Beliveau, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p64-70.

Reliability Based Design for Oil Country Tubular Goods, P. R. Brand, D. B. Lewis and M. A. Maes, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p534-537

ed. and Mircea D. Grigoriu, ed., 1996), p534-537.

Remotely Controlled Salvage Machines, Vladimir Kemurdjian, Anatoly Osipov, Boris Safonov and Peter Astafurov, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p206-212.

Simulating Seismic Response Behavior of Telecommunications Equipment, Ronald Ziemian, Derek Mostoller and Kenneth Philogene, ST Oct. 96, p1247-1249.

Equivalence between Kriging and CPDF Methods for Conditional Simulation, Masanobu Shinozuka and Ruichong

Thang, EM June 96, p530-538.
Equivalent Strength of Porous Fractured Rock, William G. Pariseau, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p216-219.

Evaluation of Equivalent Linear Analysis Methods of Bridge Isolation, J. S. Hwang, ST Aug. 96, p972-976.

Multi-Coupled Disordered Periodic Systems, Cindy X. Qiu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p539-542.

Simulation of Ergodic Multivariate Stochastic Processes, George Deodatis, EM Aug. 96, p778-787.

Applicability of Scour Equations in Tidal Areas, J. R. Richardson, E. V. Richardson and B. L. Edge, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1980-1989.

Bridge Hydraulic and Scour Analysis Using FESWMS-2DH, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1555-1564.

Coastal Evolution Downdrift of St. Joseph Harbor on Lake Michigan, R. B. Nairn and L. E. Parson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p903-914.

A Comparison of Sediment Routing Models, A. R. Ghumman, P. R. Wormleaton, H. N. Hashmi and G. H. Akbari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Dam Foundation Erosion Study: Pit 4 Scale Model Simula-tion, R. J. Wittler, S. R. Abt, T. L. Lewis, J. F. Ruff and K. Adhya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3829-3834.

Dam Foundation Erosion Study: the Design of a Sidewall Orifice for Simulation of a Free Trajectory Overtopping Jet, R. J. Wittler, S. R. Abt, T. L. Lewis, J. F. Ruff and K. Adhya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p340-345.

Debris Basin Design Procedures, J. J. DeVries and T. V. Hromadka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1657-1662.

A DEM Based Hydrologic and Sediment Transport Model, Menghua Wang and Allen Hjelmfelt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2695-2700.

Dynamics of Sand Bars in Coastal Zones, B. Boczar-Karakiewicz, J. L. Bona, A. Naguszewski and W. Romańczyk, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p862-867.

Effects of Rectangular Foundation Geometry on Local Pier Scour, A. C. Parola, S. K. Mahavadi, B. M. Brown and A. El Khoury, HY Jan. 96, p35-40.

Erosion and Stability of a Mine Soil, Tien H. Wu, Alan T. Stadler and Chin-wah Low, GT June 96, p445-453.

Field Measurements of Erosion across a Shallow Water Es-tuarine Mudflat, M. C. Christie, K. R. Dyer, M. J. Fen-nessy and D. A. Huntley, (*Coastal Dynamics* '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p759-770.

History of Coastal Engineering in Denmark, Torben Sørensen, Jørgen Fredsøe and Per Roed Jakobsen, (History and Heritage of Coastal Engineering, Nicholas C.

Kraus, ed., 1996), p103-141.

History of Coastal Engineering in Portugal, F. Vasco Costa, F. Veloso Gomes, F. Silveira Ramos and Claudino M. Vicente, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p413-428.

Influence of Backwater on Headcut Advance, Kerry M. Robinson and Gregory J. Hanson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p117-122.

Jet Scour around Vertical Pile, C. O. Chin, Y. M. Chiew, S. Y. Lim and F. H. Lim, WW Mar/Apr. 96, p59-67.

A Large-Scale Experiment on Breaching in Sand-Dikes, Paul J. Visser, Arie W. Kraak, Wim T. Bakker, Marion J. Smit, D. Wino Snip, Henk J. Steetzel and Jan van de Graaff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p583-594.

Mathematical Modelling of Coastal Morphodynamics Near a Tidal Inlet System, Jan S. Ribberink, Eelco H. Negen and Gerrit Hartsuiker, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p915-

Measurements of Erosion of Undisturbed Bottom Sediments with Depth, Joe McNeil, Catherine Taylor and Wilbert Lick, HY June 96, p316-324.

Modeling Contaminated Sediments, Robert K. Simons and

Daryl B. Simons, CE Sept. 96, p73-75.

Monitoring Scour at Bridge Piers in Snohomish Co., WA, Anthony P. Nahajski, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1156-1161.

Numerical Modeling for Sediment-Pass-Through Reservoirs, Howard H. Chang, Larry L. Harrison, Wing Lee and Scott Tu, HY July 96, p381-388.

Numerical Morphodynamic Modelling of Keta Lagoon,

Tim J. Chesher, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p927-938.

On Silt Abrasion Erosion of Three Gorges Hydraulic Tur-bine in the Future, Shehua Huang, Wei Li and Liangjun Cheng, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3856-3862. Optimal Fitting of a Model to Observations of Sediment

Concentration in the Irish Sea, J. N. Aldridge, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph

T. Cheng, 1996), p416-428. Propeller Wash Induced Erosion at Quay Walls, H. N. Hashmi, G. A. Hamill, H. T. Johnston and A. R. Ghumman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3812-3817.

A Radiological Disadvantage for Siting a Repository at Yucca Mountain, Peter Spiegler, (High Level Radioac-tive Waste Management, Technical Program Committee,

1996), p178-180.

Relationship between Kelp Beds and Beach Width in Southern California, M. Hany S. Elwany and Reinhard E. Flick, WW Jan./Feb. 96, p34-37. Santa Clara River Fluvial Analysis, Jun Wang, Ruh-Ming

Li and Sree Kumar, (North American Water and Environment Congress & Destructive Water, Chenchayya

Scaling-Up of Small-Scale Granular Sediment Transport Laws, J. Raghuraman and P. K. Haff, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p262-264. Scour in Erodible Rock I: The Erodibility Index, George W.

Annandale and Steven P. Smith, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1342-1348.

Scour in Erodible Rock II: Erosive Power at Bridge Piers, Steven P. Smith and George W. Annandale, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1349-1357. Scour Power, George W. Annandale, Steven P. Smith, Robert Nairns and J. Sterling Jones, CE July 96, p58-60.

Screening-Level Approach for Estimating Contaminant Ex-

port from Tributaries, Mark Velleux, Joseph Gailani and Doug Endicott, EE June 96, p503-514.

Sediment Erosion Rate in the Baltimore Harbor, Jerome P.-Y. Maa, Larry Sanford and Jeffrey P. Halka, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4383-4388. Studement of Shallow Foundations on Uncontrolled Mine Expoil Fill, J. Richard Cheeks, CF Nov. 96, p143-151. A Shoreline Risk Index for Northeasters, David Kriebel,

A Shoreline Risk Index for Northeasters, David Kriebel, Robert Dalrymple, Anthony Pratt and Vincent Sakovich, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p251-252.

Signatures of Coastal Change at Mesoscales. Timothy W. Kana, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed., 1996), p987-997.

Simulation of Channel Changes Induced by a Reservoir, Howard H. Chang, (North American Water and Environ-

ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2109-2113.

Site Selection for Pipeline Waterway Crossings, Brian J. Doeing and David T. Williams, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996), p365-372.

Slope Instability from Ground-Water Seepage, Muniram Budhu and Roger Gobin, HY July 96, p415-417.

South Carolina Coastal Erosion Study: Inlet Morpho-dynamics and Sediment Transport, P. A. Work, W. E. Rogers and E. J. Hayter, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1047-1058

Studies on the Erosion of a Compacted Soil, G. J. Hanson and K. M. Robinson, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2427-2432.

Erosion control

Are Erosion Control Programs Reducing Sedimentation? D. P. Roseboom, R. Sinclair, Gary Eicken and Pat Woods, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Channel Scour Protection at Roadway Crossings, Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3278-3285.

Effect of Grade Control Structures on DEC Streams, R. L. Bingner, E. J. Langendoon, L. Li and C. V. Alonso, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p280-285.

For Sure Shores, Monica Maldonado, CE Oct. 96, p57-60. Industry Standards for Erosion Control Products - Future Tools for Civil Engineers, David T. Williams, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3349-3354. Landform Grading and Slope Evolution, Horst J. Schor and Donald H. Gray, GT Oct. 95, p729-734.

Managing the Impacts of Storm Surges on Victoria Island, Lagos, Nigeria, Peter Chigozie Nwilo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3496.

Professional Associations Offer Design Resources for Civil Engineers, Ben Northcutt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3343-3348.

Reduction of Sediment Loads in DEC Streams, Chester C. Watson, Tom Pokrefke and Daniel Gessler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2885-2890.

The Sawmill Creek Watershed Restoration Project, Larry Lubbers, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2873-2878.

Error analysis

Basic Concepts of L₁ Norm Minimization for Surveying Applications, John Marshall and James Bethel, SU Nov. 96, p168-179.

Error Estimate in Einstein's Suspended Sediment Load Method, Nadim M. Aziz, HY May 96, p282-285.

Statewide Traffic Volume Studies and Precision of AADT Estimates, Satish C. Sharma, Brij M. Gulati and Samantha N. Rizak, TE Nov./Dec. 96, p430-439.

Whose Fault Was It? Alice C. Dillard, (Engineering, Con-

struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1274-1277.

Errors

Correction, CE Apr. 96, p38. Correction, CE July 96, p8. Correction, CE Sept. 96, p38 Corrections, CE Aug. 96, p31. Corrections, CE Nov. 96, p41.

Concettons, CE visual Superior Superior Superior State State Change Estimation Using Substructural Identification in Time Domain, Chung-Bang Yun and Hyeong-Jin Lee, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996).

p840-849.
Engineering Ethics, Stanley H. Goldstein, P.E and Robert A. Rubin, CE Oct. 96, p40-44.
Engineers On the Line, J. A. Morgan, CE Dec. 96, p27.
Error Estimates for FORM and SORM Computations of Failure Probability, Jean-Claude Mitteau, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p562-565.

Error Mohr Circle and Invariants of Cofactor Coefficient, Xinjian Kou and Jimian Song, SU Nov. 96, p158-167

Experimental Uncertainty and Measurement Errors in Hy-draulic Engineering, Fred L. Ogden, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1135-1138.

Generalized Random Decrement Method for System Identification, P. D. Spanos and B. A. Zeldin, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p850-853

Knowledge Acquisition and Engineering for Steel Bridge Fabrication, Hani G. Melhem, W. M. Kim Roddis, Sri-nath Nagaraja and Michael R. Hess, CP July 96, p248-

Proof Loads, Construction Error and the Reliability of Service Proven Structures, Mark G. Stewart, (Probabilistic Mechanics & Structural Reliability, Dan M. Frango-pol, ed. and Mircea D. Grigoriu, ed., 1996), p226-229.

Wastewater and Condo Jobs Are Highest Risks, CE Dec. 96, p22.

Water Wisdom, Caption Mistakes, Sanjay Chauhan and Kent C. Turner, CE May 96, p26.

An Approximation Method for Estimating Extremes of Narrow-Band Non-Gaussian Random Vibration, Arvid Naess and Tor Espen Hagen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p90-93.

Comparisons of Site Characterization Methods Using Mixed Data, Donna M. Rizzo, Theodore P. Lillys and David E. Dougherty, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth,

ed., 1996), p167-179.

Computing Flood Damage Reduction Accomplishment, Jo Ann Duman and Donna Lydon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2318-2323.

Economic Issues Regarding Water Quality Objectives in the Grassland Basin, Dennis Wichelns and Laurie Houston, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p661-666.

Error Estimates for FORM and SORM Computations of Failure Probability, Jean-Claude Mitteau, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p562-565.

Evaluation of Sampling Properties of General Extreme Value (GEV) Distribution-L-Moments Vs Conventional Moments, A Sankarasubramanian and K. Srinivasan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p152-158

Fatigue Evaluation of Bridges, George E. Tsiatas and Shane M. Palmquist, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p302-305.

Incorporation of Time-Intensity and Spatial Variability Into Probable Maximum Precipitation (PMP) Estimates, Ana Paula Barros, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p64-65.

Mitigation of Flood Hazard on Alluvial Fans, Julianne J. Miller and Richard H. French, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2324-2329.

Nongrowing Season Evaporation in Northern Utah, Richard G. Allen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p225-230.

Pier Scour at Wide Piers, Peggy A. Johnson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2193-2201.

Risk Analysis of Levee Closures Using Range/Confidence Estimates, W. D. Rowe and Michael Burnham, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Sta-khiv, ed., 1996), p367-387.

Statistical Distributions and Natural Hydrograph, Nazeer Ahmed, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p292-297.

Statistical Moments of Principal Stress-Related Quantities in Random Vibration Analysis, Ronald S. Harichandran and Mu-Tsang Chen, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p962-965.

Stochastic Modelling of River Geometry, J. Dalsgaard Sørensen and K. Schaarup-Jensen, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p898-901.

Estimating and Project Management for Building Contrac-tors, Michael Kitchens, 1996, 0-7844-0148-9, 242pp.

Estimating Trenching Productivity Using Neural Networks, Simaan AbouRizk, Brenda McCabe and Wissam Saadi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p220-226.

Estimating Wave-Induced Kinematics at Sloping Struc-tures, Steven A. Hughes and Jimmy E. Fowler, WW

July/Aug. 95, p209-215.

A Framework for Estimating Losses Due to Hurricane Ex-treme-Winds, Gregory L. F. Chiu, (Natural Disaster Re-duction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p287-288.

Frequency Distributions and Bayesian Techniques for Estimating Performance in Composite Materials, John Miller and José Gomez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p492-501.

Parametric Estimating: An Object-Oriented Approach, Ir-tishad U. Ahmad and Praveen K. Ommi, (Computing in Civil Engineering, 10rge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p254-260.

Wavelets in Random Processes Representation, Marina Vannucci, Antonio Moro and Pol D. Spanos, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p672-675.

Estimation

Basic Concepts of L₁ Norm Minimization for Surveying Applications, John Marshall and James Bethel, SU Nov.

Calibration Procedures for Rational and USSCS Design Flood Methods, G. W. Titmarsh, I. Cordery and D. H. Pilgrim, HY Jan. 95, p61-70.

Design of Microtunneling and Jacking Pipe, Alan Atalah, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p395-402.

Development of Integrated Inventory Databases and Earth-quake Damage and Loss Estimation Methodologies for Structures in Utah, Christopher Rojahn, Stephanie A, King, Roger E, Scholl, Anne S, Kiremidjian, Lawrence D, Reaveley and Robert F, Wilson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p7-8.

Development of Probabilistic Earthqake Damage Estima-tion Models, D. Mirfendereski and C. Scawthorn, (Natu-ral Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p243-244.

DSHA Versus PSHA for Critical Structures, Ellis L. Krinitzsky, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p241-242.

Earthquake-Initiated Hazmat Releases: An Assessment, Michael K. Lindell and Ronald W. Perry, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p237-238.

An Enhanced Kalman Filtering Algorithm for Dynamic Freeway OD Matrix Estimation and Prediction, Samer Madanat, James Krogmeier and Shou-Ren Hu, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p423-428.

Equivalence between Kriging and CPDF Methods for Con-ditional Simulation, Masanobu Shinozuka and Ruichong Zhang, EM June 96, p530-538.

Estimation of Driven Pile Resistance at an Overconsolidated Clay Site Using Geostatistical Methods, Gil L. Yoon and Michael W. O'Neill, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p950-953.

Estimation of Flash Flood Potential for Large Areas, K. P. Georgakakos, A. K. Guetter and J. A. Sperfslage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1147.

Estimation of Flood Forecasting Errors and Flow-Duration Joint Probabilities of Exceedance, Debdas Mukherjee and Nada Monsour, HY Mar. 96, p130-140.

Estimation of Frequency-Dependent Reflection Coefficients
Using Current and Elevation Sensors, David A. Huntley, David J. Simmonds and Mark A. Davidson, (Coastal Dy namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p57-68.

Estimation of In-Situ Test Uncertainty, Fred H. Kulhawy and Charles H. Trautmann, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.

Roth, ed., 1996), p269-286.

Estimation of Mean Flow Velocity in Ice-Covered Channels, Martin J. Teal, Robert Ettema and John F. Walker,

HY Dec. 94, p1385-1400.

Estimation of the Potential Benefits from an ATT System Using a Multiple User Class Stochastic User Equilibrium Assignment Model, M. J. Maher and P. C. Hughes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p700-704.

Estimation of the Probable Maximum Rainfall and Snowmelt Floods Via Physically Based Model of River Runoff Generation, L. S. Kuchment, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1337.

Evaluating Subsurface Uncertainty Using Zonal Kriging, William L. Wingle and Eileen P. Poeter, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1318-1330.

Extreme Winds as a Component of Catastrophic Risk, Gregory L. F. Chiu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p498-501.

FEMA-NIBS Earthquake Loss Estimation Methodology, Robert V. Whitman, Henry J. Lagorio and Philip J. Schneider, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p113-114.

Field Estimation of Standard Deviations for 3D Gaussian Model, An Jin and Shoou-Yuh Chang, EE July 96,

p660-662.

Finite Element Interval Estimation by Convex Model, Shi-geru Nakagiri and Nobuhiro Yoshikawa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p278-281

Grade-Control Structures for Salt River Channelization, Dennis L. Richards and Tim Morrison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p606-611.

Inverse Estimation of Parameters for an Estuarine Eutrophi-cation Model, J. Shen and A. Y. Kuo, EE Nov. 96,

p1031-1040.

A Log-Linear Model for Path Flow Estimation, Michael G. H. Bell and Caroline M. Shield, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p695-699.

1996), poss-699.
Magnitude-Distance Contours for Probabilistic Seismic Hazard Analysis, P. Bazzurro, S. R. Winterstein, T. C. Ude and C. A. Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p202-205.
Method for Estimating Boiling Temperatures of Crude Oils, Robert K. Jones, EE Aug. 96, p761-763.
Nonparametric Estimation of Low-Elow Proguescies, Kay.

Nonparametric Estimation of Low-Flow Frequencies, Kaz

Nonparametric Estimation of Low-Flow Frequencies, Kaz Adamowski, HY Jan. 96, p46-49.

Parameter Estimation of Structures from Static Strain Measurements. I: Formulation, Masoud Sanayei and Michael J. Saletnik, ST May 96, p555-562.

Parameter Estimation of Structures from Static Strain Measurements. II: Error Sensitivity Analysis, Masoud Sanayei and Michael J. Saletnik, ST May 96, p563-572.

Pedestrian Flow Estimation in Urban Environment by Image Processing, P. Vannoorenberghe, C. Motamed, J.-M. Blosseville and J.-G. Postaire, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p119-123.

Pier Width and Local-Scour Depth, Robert Ettema, Bruce W. Melville and Brian Barkdoll, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p251-256.

Probability Based Estimation of Expected Annual Benefits, Eric D. Loucks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p298-303.

Probability-Weighted Moments without Plotting Position Formula, Tefaruk Haktanir, HE Apr. 96, p89-91.

Program for Estimating the Remaining Fatigue Life of Steel Railway Bridges, Vinaya Sharma and John Choros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p223-229.

The Reliability Analysis of a Major Dam Project, J. Bar-neich, D. Majors, Y. Moriwaki, R. Kulkarni and R. Davidson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1367-

Reliability of Remediation Designs in Presence of Modeling Error, Changqing Zhen and James G. Uber, WR July/Aug. 96, p253-261.

Scour in Erodible Rock I: The Erodibility Index, George W. Annandale and Steven P. Smith, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1342-1348.

Selection of Parameter-Estimation Method for LP3 Distri-bution, Babak Naghavi and Fang Xin Yu, IR Jan/Feb.

96, p24-30.

Statewide Traffic Volume Studies and Precision of AADT Estimates, Satish C. Sharma, Brij M. Gulati and Saman-

tha N. Rizak, TE Nov./Dec. 96, p430-439.

Study of Traffic Estimation Using Neural Networks, Masafumi Iwata, Shirou Hikita and Kiyotoshi Komaya, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p203-207.

Suspended Sediment Loads in Dry and Wet Years, Renjie
Xia and Misganaw Demissie, (North American Water
and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1442-1446.

Temporal Development of Local Scour at Bridge Piers, Yee-Meng Chiew and Bruce W. Melville, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2556-2564. This Is Not Good News, Percival A. Miller, CE May 96,

p29.

Traffic Dynamics: Method for Estimating Freeway Travel
Times in Real Time from Flow Measurements, Do H.
Nam and Donald R. Drew, TE May/June 96, p185-191.

VARIA - Variable Message Sign Control Based on OD-Estimation in a Motorway Network, Thomas Sachse and Hubert Schmid, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p383-387.

3D Model of Estuarine Circulation and Water Quality Induced by Surface Discharges, Wenrui Huang and Mal-colm Spaulding, HY Apr. 95, p300-311.

Accuracy of a 3D Hydrodynamic Model Verification due to the Relative Magnitude of Forcing Functions, Bernard B. Hsieh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3452-3457.

Acquisition and Restoration of a Drainage District in the Snohomish River Valley, John Engel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3950-3955.

Animation Techniques for Visualizing Coastal Flow Dy-namics, Brian King, Patrick Collins, Duncan Galloway and Eric Wolanski, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p192-203

Anticyclonic Upper Layer Residual Circulation and Estuarine Circulation in Osaka Bay, Keiji Nakatsuji and Tateki Fujiwara, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p128-142.

BAYMAP: A Simplified Embayment Flushing and Transport Model System, J. Craig Swanson and Daniel Mendelsohn, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p570-582.

Can Numerical Estuarine Models be Driven at the Estuary Mouth, B. H. Johnson, H. V. Wang and K. W. Kim, (Es-tuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p255-267.

Coastal Ocean Model Performance in Eastern Australia, William L. Peirson and Ian P. King, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p632-643.

Determination of Bridge Scour Velocity in an Estuary, Billy L. Edge, Stephan N. Vignet and John S. Fisher, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Effect of Acceleration on Bottom Shear Stress in Tidal Estuaries, A. Y. Kuo, J. Shen and J. M. Hamrick, WW Mar/Apr. 96, p75-83.

Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996, 0-7844-0165-9, 730pp.

Experiments on Resuspension of Fluid Mud Using an Os-cillating-Grid Tank, Panagiotis D. Scarlatos, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p808-811.

Field Data Collection and Analysis for Verification of Estu-arine Models, W. H. McAnally, T. C. Pratt, G. T. Stevens and T. M. Parchure, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p204-214.

Field Measurements of Erosion across a Shallow Water Es-tuarine Mudflat, M. C. Christie, K. R. Dyer, M. J. Fen-nessy and D. A. Huntley, (*Coastal Dynamics* '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

Flushing Criteria in Estuarine and Laboratory Experiments, Walter Debler and Jorg Imberger, HY Dec. 96, p728-

Impacts of Sea Level Rise on Coastal Water Resources Management, Chin Y. Kuo, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1822-1827.

Implicit Scheme for Estuarine Water-Quality Models, Byung-Gi Hwang and Wu-Seng Lung, EE Jan. 96, p63-

Inverse Estimation of Parameters for an Estuarine Eutrophication Model, J. Shen and A. Y. Kuo, EE Nov. 96, p1031-1040.

Investigation into the Possibilities of Using Bristol Channel Models for Tidal Predictions, M. Amin and R. A. Flather, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p41-52.

Mixing Processes in the Dangava River Estuary, B. Hakansson, E. Zaharchenko and H. B. Wittgren, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3276-3277.

Modeling Changing Freshwater Delivery to Apalachicola Bay, FL, W. K. Jones and Wenrui Huang, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p116-127.

Modeling Horizontal Diffusion with Sigma Coordinate Sys-tem, Wenrui Huang and Malcolm Spaulding, HY June 96, p349-352.

Modeling the Effect of Reduced Nitrogen Loading on Water Quality, Y. Peter Sheng, Eduardo A. Yassuda and Changlu Yang, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p644Modeling the Impact of Uncertainty in Spatial Variability of Estuarine Boundary Conditions, B. H. Johnson and K. W. Kim, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2731-2736.

Multiphase Distribution of Cohesive Sediments and Heavy Metals in Estuarine Systems, Parmeshwar L. Shrestha and Gerald T. Orlob, EE Aug. 96, p730-740.

and Geraid I. Orloo, EE Aug. 96, p.730-740. Nested Three-Dimensional Hydrodynamic Modeling of the Delaware Estuary, John S. Ramsey, Robert P. Hamilton, Jr. and David G. Aubrey, (Estuarine and Coastal Model-ing, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p.53-65.

Prediction of Storm Induced Flows in Great Lakes Estua-rine Inlets, James H. Riley and William L. Wood, (Estu-arine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p583-595.

The Role of Circulation Patterns on the Simulation of Constituent Transport in San Juan Bay, Puerto Rico, Gavin Gong and James D. Bowen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p518-529.

The Role of Macroflocs in Estuarine Sediment Dynamics

and its Numerical Modeling, A. Malcherek and W. Zielke, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p695-706.

alt Transport Characteristics of Pak Phanang Estuary, Somboon Pornpinatepong and Malcolm L. Spaulding, (Estuarine and Coastal Modeling, Malcolm L. Spaulding, Castarine T. Cheng, 1905), p691-708.

and Ralph T. Cheng, 1996), p92-105.

A Secondary Flow Correction for Depth-Averaged Flow Calculations, John Finnie, Barbara Donnell, Joe Letter and Robert S. Bernard, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p301-305.

Sediment Erosion Rate in the Baltimore Harbor, Jerome P.-Y. Maa, Larry Sanford and Jeffrey P. Halka, (North

American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4383-4388. Settling and Erosion Characteristics of Mud/Sand Mistures, Hilde Torfs, Helen Williamson and Heidi Huysentruyl, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p749-758.

Systatus D. Zenter, Ga., 1990), p. 1997 189.
Simulation of Dissolved Oxygen in Sacramento-San Joaquin Delta, Haridarshan L. Rajbhandari, Gerald T. Orlob and Francis I. Chung, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.3545-3550.

Simulation of Three-Dimensional, Non-Hydrostatic Free-Surface Flows for Estuaries and Coastal Seas, Vincenzo Casulli and Stelling Guus S., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng,

1996), p1-12.

Two Dimensional Modeling of the Mobile River Delta and the Mobile Bay System, Conor C. Shea, Charles D. Powell and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3662-3667.

WoMAP in a Windows Environment, Daniel Mendelsohn, Eoin Howlett and J. Craig Swanson, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p555-569.

Ethics

Between the Devil and the Deep Blue Sea: A Tale of Two Scientific (?) Analyses, T. R. Muraleedharan, El Jan. 96,

p1-5.
Editorial, Earl F. Burkholder, SU May 96, p45-46.
Editorial, Earl F. Burkholder, SU Nov. 96, p143-144.
Engineering Ethics, Stanley H. Goldstein, P.E and Robert
A. Rubin, CE Oct. 96, p40-44.
A. Rubin, CE Oct. 96, p40-44.
LA Morean, CE Dec. 96, p27.

Engineers On the Line, J. A. Morgan, CE Dec. 96, p27. Ethical Responsibilities of Engineering Profession, Mark J. Holliday, El July 94, p270-272.

Ethics in Graduate Education, Gregory D. Reed, El Apr. 96, p53.

Ethics Not Dependent on Consequences, Robert F. Brown, P.E., CE Nov. 96, p40-41.

Ethics Will Save Our Society, James R. Carr, P.E., CE Dec.

Is Moonlighting or Donating Professional Engineering Services Ethical? Thomas W. Lynch, El Jan. 96, p37-38.

Moonlighting: Ethical Issues for Professional Engineers, Andrew M. Hui, El Jan. 96, p39-40.

More Ethical Practice, Not Training, Dan Feger, P.E., CE Nov. 96, p38,40.

Providing Engineering Services to Nonemployers: An Ethi-cal Balance, David P. Brosnan, El Jan. 96, p35-36.

Reader Reviews 'Transgressions', Eugene H. Harlow, CE

Mar. 96, p28,31.

Transferring Knowledge about High-Level Waste Reposi-tories: An Ethical Consideration, Stefan Berndes and Klaus Kornwachs, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p494-

Younger-Member Group Eyes Five ASCE Awards for 1997, CE Dec. 96, p68,70.

"Ethics" Credit, CE Nov. 96, p30.

Ethylene

PCE in Dewatering Flows - A Case Study Risk-Based Clean-Up Action Levels, Shala L. Craig and Sri Krish-namachari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2242-2247.

The 'Dynamics of Beaches' Project, P. Prinos, A. S. Arcil-la, N. Christiansen, J. van de Graaf, M. Hogedal, A. Lewis, B. O'Connor, F. Rivero and J. de Rouck, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582.

Black & Veatch Buys Three European Firms, CE Nov. 96,

The CSG 2000 Programme: Modernising Europe's Spaceport for the Next 20 Years, Juan de Dalmau, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p413-418.

Deep Geological Disposal Programs in Preparation and Under Development, D. P. Khrushchov, (High Level Radioactive Waste Management, Technical Program Com-

mittee, 1996), p19-21.

European Experiences in Fire Design of Structural Steel. Yngve Anderberg, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p357-364.

European Progress on river Renaturalisation, Richard D. Hey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p2595-2600.

p.299-2000. Experimentation of the ERTMS System on the Italian, German and French Railways, Daniel Lancien, Florian Kollmannsberger and Paolo Ripamonti. (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p30-38.

1990), p.00-38.
The Financial-Economic Evaluation of ATT Systems in Road Freight Transport, Ferdinand Ballhaus, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Vorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p465-469.

Impact of Anthropogenic Activities in Rivers Upon Accuracy of Hydrological Forecasts and on Development of Forecasting Methodologies—Experiences From the Slovak-Hungarian Reach of Danube, K. Hajtasova and A. Svoboda, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1718.

Long Term Scenarios for Europe in Space, Klaus Pseiner, Angelo Atzei and David Raitt, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p145-154.

Practitioners' Forum, Georges Jacquemart, P.E., TE Nov./ Dec. 96, p411-413. PsD Test on Four-Story R/C Building Designed According to Eurocodes, P. Negro, A. V. Pinto, G. Verzeletti and G.

E. Magonette, ST Dec. 96, p1409-1417.
Seismotectonic and Seismic Hazard in Southern Bulgaria, Tosho Stoyanov, (Natural Disaster Reduction, Georg W. Housner, ed. and Riley M. Chung, ed., 1997), p175-

TDA Profiles Opportunities in European Market, CE July

Urban Control Services Integration the Innovative Components of THERMIE-JUPITER Architecture in Florence, G. Ambrosino, M. Boero, L. Niccolai, M. Romanazzo and M. Turrini, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p515-519.

etc. and Francesco Frippi, ed., 1990b, p37-513.
Wind Engineering Co-operation: A Perspective of Europe and of China, Brian E. Lee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1069-1074.

Eutrophication

Inverse Estimation of Parameters for an Estuarine Eutrophi-cation Model, J. Shen and A. Y. Kuo, EE Nov. 96,

Watershed Riparian Management and Its Benefits to a Eu-trophic Lake, R. Bruce Williamson, Christine M. Smith and A. Bryce Cooper, WR Jan./Feb. 96, p24-32.

Evacuation Strategies for Public Officials, T. Michael Car-ter, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p109-110.

Flood Management Strategies for the Rhine and Maas Rivers in the Netherlands, Jos Dijkman and Rob Klomp, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Hurricane-Induced Storm Surge Analysis for the City of New Orleans, LA, David J. Mark and Norman W. Scheffner, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p343-344.

The Importance of Dissemination and Instruction in Hurricane Warnings, Earl J. Baker, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p391-392.

Evaluation

Arizona Local Government Bridge Scour Evaluation Study, Bart S. Bergendahl and Raymond C. Jordan, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p479-488.

tive Water, Chenchayya Bathala, ed., 1996), p479-488. Bridge Strength Evaluation Based on Field Tests, Jonathan S. Reid, Michael J. Chajes, Dennis R. Mertz and Geoffrey H. Reichelt, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p294-297.
Building Evaluation Techniques by George Baird et al. Frederick S. Merritt, AE Sept. 96, p122-123.
Catastrophic Riverine Flooding: Rapid Evaluation with a Robust Numerical Model, David C. Frochlich and Michael A. Ports, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chune, ed. 1997), p225-226.

chael A. Ports, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p225-226. Comprehensive Evaluation Method on Earthquake Damage Using Fuzzy Theory, Bo Song, S. Hao, Suminao Murakami and Satoru Sadohara, UP Mar. 96, p1-17. Condition Assessment of Transportation Infrastructure Using Ground-Penetrating Radar, Kenneth R. Maser, IS

June 96, p94-101.
Contractor Prequalification in Saudi Arabia, Abdulaziz A.
Bubshait and Kamal H. Al-Gobali, ME Mar/Apr. 96,

Dusana Discount of Current Approaches to Earthquake Resistant Design, Christopher Rojahn and Andrew Whittaker, (Natural Disaster Reduction, George W. Housner, 231 232 ed. and Riley M. Chung, ed., 1997), p331-332. Critical Evaluation of Risk Assessment: A Look from the

Inside Out, Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p419-421

Earthquake Hazard Assessment Through Geographic Infor-mation Systems, Stephanie A. King, Anne S. Kirem-idjian and Kincho H. Law, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p123-124.

Engineers Seek Better Way to Market New Building Technology, CE Sept. 96, p26-27.
Evaluating Innovative Concrete Technologies through the HITEC Process: the JMI Channel Bridge, Kathleen H. Almand, Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p161-166.

Evaluating the Potential of ATT Technologies in Hazardous Materials Transportation Risk Management, Konstan-tinos G. Zografos and George M. Vasilakis, (Applica-tions of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p480-484.

Evaluating the Variability of Engineering Properties of Soil Deposits Using Fractals, Luis E. Vallejo, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and

Mary J. S. Roth, ed., 1996), p353-367. Feston, ed. and Mary J. S. Roth, ed., 1996), p353-367. Evaluation and Upgrade of Major Transmission Lines Crossing Active Faults, Robert W. Lau, David D. Lee, David L. Pratt and Marilyn L. Miller, (*Pipeline Cross-*

Bridge System, CERF Report: HITEC 96-01, Civil Engineering Research Foundation, 1996, 0.7844-0157-8,

Evaluation of Bond Characteristics of Steel and Glass-Fiber Reinforcing Bars, James R. Lundy and Damian I. Ka-chlakev, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p638-647.

Evaluation of Bond Strength with Polypropylene Fiber Re-inforced Concrete, R. C. Zellers, V. Ramakrishnan, V. N. Rajpathak and S. Yu, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p123-132.

An Evaluation of Drainage Conditions in the San Joaquin Valley, M. Manucher Alemi and George Nishimura, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996). p177-182.

Evaluation of Dynamic Strength of Concrete from Results of Static Tests, Iosif E. Shkolnik, EM Dec. 96, p1133-1138.

Evaluation of Equivalent Linear Analysis Methods of Bridge Isolation, J. S. Hwang, ST Aug. 96, p972-976.

Evaluation of Flow Resistance in Ice-Covered Channels, Florin Braileanu, Robert Ettema and James Wuebben, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p606-616.

Evaluation of FRP Composites Botted and Adhesive Joints, Sotiris Sotiropoulos, Hota V. S. GangaRao and Roberto Lopez-Andio, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p233-242.

Evaluation of Grout Materials for Anchor Embedments in Hardened Concrete, Willie E. McDonald, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p958-

Evaluation of Modelling Needs for Central Valley Project Operations, John Burke and Donald Frevert, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p806-811.

Evaluation of Reliability of an Existing Concrete Bridge: A Case Study, Andrew Scanlon, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p522-525.

Fatigue Evaluation of Bridges, George E. Tsiatas and Shane M. Palmquist, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p302-305.

Fatigue Evaluation of Highway Bridges Using Ultrasonic Stress Measurements, Samer H. Petro, Udaya B. Halabe, Paul Fuchs, Powsiri Klinkhachorn and Hota V. S. GangaRao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p876-883.

Feds Study Seismic Guidelines, CE Dec. 96, p8.

Historical Development of Bridge Scour Evaluations, E. V. Richardson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3-27.

FMS: Evaluation of Pilot Projects, Marco Monticelli, (Applications of Advanced Technologies in Transportation Engineering, Vorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p475-479.

Issues in Pursuing Quality in Facility Program Develop-ment, Ernest W. Parti, AE Mar. 96, p32-40.

A Knowledge Based Construction Contractor Proposal Evaluation System, John A. Kuprenas and Farzin Madjidi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p247-253.

Load Testing and Strength Evaluation of a Non-Composite Steel Plate Girder Bridge, Y. Edward Zhou, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p884-

A Minimum Risk Evaluation Methodology for Fault Tolerant Automotive Control Systems, P. Borodani, L. Gortan, R. Librino and M. Osella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p552-557.

A Non-Destructive Method for Prestress Evaluation, Atorod Azizinamini, Armin B. Mehrabi, Bruce Keeler and John Rohde, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

Mohammadi, ed., 1996), p900-907.

Pavement Evaluation with Seismic Tomographic Imaging, S. Nazarian, D. Yuan, D. Doser and K. Dhanasekharan, (Case Histories of Geophysics Applied to Civil Engineer-ing and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p56-72.

Probabilistic Fatigue Models for Bridge Evaluation, Jeffrey A. Laman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p286-289.

A Procedure for Evaluating Reflective Cracking, Shakir R. Shatnawi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1429-1438.

Quantitative Approach to Rapid Seismic Evaluation of Slab-on-Girder Steel Highway Bridges, Murat Dicleli and Michel Bruneau, ST Oct. 96, p1160-1168.

Ranking Models Used for Condition Assessment of Civil Infrastructure Systems, L. E. Chouinard, G. R. Andersen and V. H. Torrey, III, IS Mar. 96, p23-29.

Reliability Analysis for Deep-Seated Stability of Pile-Supported Structures, William M. Isenhower, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p870-873.

Reliability Evaluation of Slender HSC Columns, Sofia M. C. Diniz and Dan M. Frangopol, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p242-245.

Reliability Evaluation Using SFEM, Achintya Haldar and Liwei Gao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p166-169.

Results of Field Evaluations of the New Modular Inclined Fish Diversion Screen, F. C. Winchell, S. V. Amaral, E. P. Taft, T. C. Cook, A. W. Plizga, E. M. Paolini and C. W. Sullivan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p881-886.

Rethinking Well Efficiency, Otto J. Helweg and Timothy Mays, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p954-959.

Safety Evaluation of Current Concrete Slab Formwork practices, Saeed Karshenas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p656-659.

Scour Around Exposed Pile Foundations, Mohammad Salim and J. Sterling Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2202-2211.

Seismic Risk Assessment for Environmentally Sensitive Facilities in Northern Maine, Elizabeth A. Champeon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1052-1067.

Site-Specific Live Load Models for Bridge Evaluation, Michel Ghosn and Dan M. Frangopol, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p30-33.

South Carolina Department of Transportation's Statewide Program of Bridge Scour Evaluation, Randall D. Williamson, Dean D. Hatfield and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p729-735.

State of Delaware - Scour Evaluation Program, Thomas M. Heil, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p459-468

A Summary of Research and Development Projects in Nondestructive Evaluation Technologies for Bridges, Steven B. Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p230-237.

Toward a Generic Kernel for Air Traffic Management System, C. Dujardin, G. Joly, D. Hollinger and O. Palmade, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p87-91.

Traffic Action Effect Reduction Factors, Simon F. Bailey and Rolf Bez, (Probabilistic Mechanics & Structural Re liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p22-25.

Uncertainty in Evaluation of Historical Subsidence Measurements, Kevin M. O'Connor, Sean M. Killen, Mark R. Chandler, Jan E. Stache and John A. Siekmeier, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p710-726.

Utility-Theory Model for Bid Markup Decisions, S. P. Doz-zi, S. M. AbouRizk and S. L. Schroeder, CO June 96,

p119-124

Value Engineering in the Assessment of Exterior Building Wall Systems, Abdulmohsen Al-Hammad and Mohammad A. Hassanain, AE Sept. 96, p115-119.

Westlake Farms Demonstration Wetlands A Cooperative Effort, John M. Shelton, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p388-393.

Advanced Seawater Desalination Plant, David W. Dean and Earl B. Lindquist, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p685-690.

Analyzing Drought with a Simplified Climate Model, Michael L. Anderson and M. Levent Kavvas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1075-1080.

Bird Use of an Evaporation Basin and a Mitigation Wetland, Andrew G. Gordus, Jeff Seay and Scott B. Terrill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Crop Growth and Water Use Model for Lettuce, M. Gallar-do, R. L. Snyder, K. Schulbach and L. E. Jackson, IR

Nov./Dec. 96, p354-359.

Dormant Season Evaporation: Challenges to the Current Models, Jerry L. Hatfield and John H. Prueger, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p219-224.

Drainage Ponds and Demonstration Wetlands, Joseph Skorupa, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p394-399.

Evaporation of Petroleum Products from Contaminated Soil, Seon-Hong Kang and Charles S. Oulman, EE May 96, p384-387.

Landfill Leachate Treatment by Evaporation, Deborah R. Birchler, Mark W. Milke, A. Leigh Marks and Richard G. Luthy, EE Sept./Oct. 94, p1109-1131.

Method for Estimating Boiling Temperatures of Crude Oils, Robert K. Jones, EE Aug. 96, p761-763.

Modeling Reservoir Evaporation Losses by Generalized Networks, Yung-Hsin Sun, Shu-li Yang, William W-G. Yeh and Peter W. F. Louie, WR May/June 96, p222-226.

Nongrowing Season Evaporation in Northern Utah, Richard G. Allen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p225-230. Terraforming Mars, Felix Zamora, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed.,

1996), p1311-1314.

Water Conservation Definitions From a Hydrologic View-point, Richard G. Allen, Charles Burt, A. J. Clemmens and L. S. Willardson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p899-904.

Evapotranspiration

Assessing Integrity of Weather Data for Reference Evapo-transpiration Estimation, Richard G. Allen, IR Mar/Apr. 96, p97-106.

CO₂ and Temperature Effects on Evapotranspiration and Irrigated Agriculture, Jorge A. Ramírez and Bryce Finnerty, IR May/June 96, p155-163.

Comparison of Methods for Estimating REF-ET, D. M. Amatya, R. W. Skaggs and J. D. Gregory, IR Nov/Dec. 95, p427-435.

Crop Growth and Water Use Model for Lettuce, M. Gallardo, R. L. Snyder, K. Schulbach and L. E. Jackson, IR Nov. Dec. 96, p354-359.

Emerging Concepts for Management of Salinity and Drain-age in Irrigated Regions, M. E. Grismer, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2126-2129.

Evaluation of Dormant Season Evapotranspiration, Jerry L. Hatfield, John H. Prueger and Thomas J. Sauer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p418-423.

Evapotranspiration Estimates under Deficient Water Sup-plies, J. L. Hatfield and R. G. Allen, IR Sept./Oct. 96,

Modeling Seasonal Furrow Irrigation, N. S. Raghuwanshi and W. W. Wallender, IR July/Aug. 96, p235-242.

and W. W. Wallender, IK July/Aug. 96, p235-242.
Nongrowing Season Evaporation in Northern Utah, Richard G. Allen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p225-230.

Nonsteady-State Drawdowns in Two Coupled Aquifers, Louis H. Motz, IR Jan./Feb. 96, p19-23.

Regulatory Assessment of Evapotranspiration at Yucca Mountain, Neil M. Coleman and Michael P. Miklas, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p199-200.

Shallow and Surfacing Ground Water in an Arid Urban En-vironment, D. L. Smith and J. C. Guitjens, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1495-1500.

Simulating Evapotranspiration on Semi-Arid Rangelands, G. N. Flerchinger, C. L. Hanson, W. P. Kustas and M. A. Weltz, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p424-429.

An Update on Surface Renewal Estimation of Evapotranspiration, R. L. Snyder, D. Spano, P. Duce and K. T. Paw ., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p430-435.

Water Conservation Definitions From a Hydrologic Viewpoint, Richard G. Allen, Charles Burt, A. J. Clemmens and L. S. Willardson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p899-904.

Evolution, development

Numerical Simulation of Widening and Bed Deformation
of Straight Sand-Bed Rivers. I: Model Development, Stephen E. Darby and Colin R. Thorne, HY Apr. 96,

Numerical Simulation of Widening and Bed Deformation of Straight Sand-Bed Rivers. II: Model Evaluation, Stephen E. Darby, Colin R. Thorne and Andrew Simon, HY Apr. 96, p194-202.

Examination

Cramming, CE Oct. 96, p11.

Excavation

Adaptive Self-Tuning Control of Excavators, A. J. Koivo and Allen D. Nease, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p220-226. Analysis of Deep Excavation with Column Type of Ground Improvement in Soft Clay, Chang-Yu Ou, Tzong-Shiann Wu and Hsii-Sheng Hsieh, GT Sept. 96, p709-716. Applications of Soil Nailing in Residual Soil, James W. Sigourney, (Design with Residual Materials: Geotechni-

cal and Construction Considerations, Gordon Matheson, ed., 1996), p57-65.

Building on the Moon, CE Oct. 96, pl 1. Canal Road Water Treatment Plant Intake Tunnels, Joel Moskowitz, Robert T. Wisniewski, II, Vincent Tirolo

Moskowitz, Robert 1: Wisniewski, II, Vincent Tirolo and Peter Evensen, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p322-331.

CISC-Computer Integrated Spatial Control for Autonomous Trenching and Pipe-Laying. Xiaodong Huang and Leonhard E. Bernold, (Analysis and Computation, Frank-

lin Y. Cheng, ed., 1996), p502-509. Computer-Aided Design of Braced Excavations, Chandra S. Brahma and Howard C. Biddlecome, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p838-844.

Considerations for Realistic Lunar Excavation, Michael J. Lally, Scott P. Mackey and Laurie R. Gaskins, (Engi-

Latiy, Scott P. Mackey and Laurie R. Caskins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p896-902.

Construction Through Crude Oil, Kyle R. Ott, Richard J. Switalski and Dale J. Sadowski, CE Feb. 96, p56-59.

Controlled Drill & Blast Excavation at AECL's Underground Research Laboratory, G. W. Kuzyk, D. P. Onagi and P. M. Thompson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p404-406. p404-406.

Controlled Excavation Along a Prescribed Path, Eugeniusz Budny and Witold Gutkowski, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p227-234. Dangerous Digging Requires New Excavation Methods, CE May 96, p22-23.

Determination of Importance Process during Yucca Mountain Site Characterization, Peter S. Hastings, Dealis W. Gwyn and Robert F. Wemheuer, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p327-329.

DOT Crew Excavates Historic Train Cars, CE Nov. 96, p15,19.

Excavation Cautious for Memorial at Arlington Cemetery, CE Sept. 96, p14.

Ground Movement Prediction for Deep Excavations in Soft Clay, Youssef M. A. Hashash and Andrew J. Whittle,

GT June 96, p474-486.
Innovative Technology Development for Safe Excavation,
Xiaodong Huang, Daniel Bernd and Leonhard E. Bernold, CO Mar. 96, p91-96.

Integrating the Refraction Seismic Method into Stream Crossing Characterization for Scour and Excavation Conditions, Michael L. Rucker, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), pl163-1177.

Lunar Excavating Research, Walter W. Boles and John F.

Connolly, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p699-705. Lunar Regolith, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p630-638.

Model Studies of Effects on Lunar Soil of Chemical Explosions, Chaun-Ping Lin, Deborah J. Goodings, Leonhard E. Bernold, Richard D. Dick and William L. Fourney,

E. Bernou, Richard D. Dec and Alliand E. Folking, GT Oct. 94, p1684–1703. Modeling and Control of Excavator Dynamics during Dig-ging Operation, A. J. Koivo, M. Thoma, E. Kocaoglan and J. Andrade-Cetto, AS Jan. 96, p10–18.

A Neural Network Impedance Learning Control Model for a Robotic Excavator, Xiaodong Huang, Leonhard Ber-nold and Gordon Lee, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p213-219. Performance of Chain Trenchers in Mixed Ground, Ian W.

Farmer, CO June 96, p115-118.

Remote Sensing in Investigation of Engineered Under-ground Structures, William F. Kane, Douglas C. Peters

and Robert A. Speirer, GT Aug. 96, p674-681 Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996, 0-7844-0178-0, 248pp. Three-Dimensional Finite Element Analysis of Deep Excavations, Chang-Yu Ou, Dar-Chang Chiou and Tzong-Shiann Wu, GT May 96, p337-345.

Tunnel Boring Records Set, CE May 96, p15-16.

Turnback Project Moves Ahead, David A. Sutter, James P. Connolly and Ching Wu, CE Jan. 96, p36-39.

Vibratory Excavation and Anchoring Tools for the Lunar Surface, J. Ledlie Klosky, Stein Sture, Hon-Yim Ko and Frank Barnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p903-

Excitation

Advances in System Identification Using Output Measure-ments, N. P. Jones, J. H. Ellis and K. Pan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p160-163.

Approximations for Elasto-Plastic Oscillations with Gaussian White Noise Excitation, Roger Pettersson, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p506-509.

Asymptotic Approximation of Reliability Integrals for Un-certain Systems, C. Papadimitriou, J. L. Beck and L. S. Katafygiotis, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p574-577.

Dynamic Analysis of Axisymmetric Foundations on Poroe-lastic Media, Gary F. Dargush and Manoj B. Chopra, EM July 96, p623-632.

Effects of Non-Structural Elements on the Acceleration Response of Tall Multi-Story Buildings Under Wind Exci-tation, Cindy X. Qiu, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p974-977

Generalized Random Decrement Method for System Identification, P. D. Spanos and B. A. Zeldin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangool, ed. and Mircea D. Grigoriu, ed., 1996), p850-853.

Hysteretic MDOF Model to Quantify Damage for RC Shear Frames Subject to Earthquakes, H. Uğur Köylüoğlu, Søren R. K. Nielsen and Ahmet Ş. Çakmak, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Identification of Nonlinear Systems under Random Excitation, B. A. Zeldin and P. D. Spanos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p168-171.

Identification of Wind Spectral Characteristics from Struc-ture Response, K. Pan, N. P. Jones and J. H. Ellis, (*Prob-*abilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p482-485.

Linear Optimal Structural Control Including the External Excitation, G. F. Panariello, R. Betti and R. W. Longman, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p760-763.

Macroscopic Models with Complex Coefficients and Cau-sality, Nicos Makris, José A. Inaudi and James M. Kelly, EM June 96, p566-573.

Modified Bang-Bang Control Law for Structural Control Implementation, Z. Wu and T. T. Soong, EM Aug. 96,

Nonlinear Response of Bridges under Multisupport Excita-tion, Giorgio Monti, Camillo Nuti and Paolo E. Pinto, ST Oct. 96, p1147-1159.

Nonlinear Rocking Motions. I: Chaos under Noisy Periodic Excitations, H. Lin and S. C. S. Yim, EM Aug. 96,

Nonlinear SDOF System Subject to Poisson-Distributed Pulse Process, Sau-Lon James Hu, George Tsiatas and Shuang Jin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p680-683.

Oscillations of Bridge Stay Cables Induced by Periodic Motions of Deck and/or Towers, A. Pinto da Costa, J. A. Martins, F. Branco and J. L. Lilien, EM July 96, p613-622.

An Overview of Techniques for Analyzing a System Mod-elled as a Duffing Oscillator Driven by Deterministic and Stochastic Excitations, M. A. Tognarelli and A. Kareem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996).

Parameter Identification of a Hysteretic Structure, M. Bat-taini, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p430-433

Path Integration Applied to Structural Systems with Uncer-tain Properties, Søren R. K. Nielsen and H. Uğur Köylüoğlu, (Probabilistic Mechanics & Structural Relia-Köylüoğlu, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p6-9.

Random Response of Nonlinear System to PERPM Model, Y. Wang, Z. Hou, M. Dimentberg, M. Noori and Y. Zhou, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p954-957

Reliability of Ocean Structure Using Spectrum-Consistent Excitation, Yunshen Zhou, Zhikun Hou, Mikhail F. Dimentherg and Mohammad Noori, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p982-985.

Response Cumulants of Nonlinear Systems Subject to External and Multiplicative Excitations, C. Papadimitriou, L. S. Katafygiotis and L. D. Lutes, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p744-747.

Response of an Oscillator with One-Sided Barrier under Non-White Random Excitation, G. Q. Cai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p112-115.

Response Spectral Densities of Stochastically Excited Nonlinear Systems, G. Q. Cai and Y. K. Lin, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p732-735.

Rule-Based Control Algorithm for Active Tuned Mass Dampers, Masato Abé, EM Aug. 96, p705-713.

Shaking Table Tests of Rigid, Semirigid, and Flexible Steel Frames, Marwan N. Nader and Abolhassan Astaneh-Asl, ST June 96, p589-596.

Spatial Seismic Coefficients, Some Sensitivity Results, Zbigniew Zembaty, EM Apr. 96, p379-382.

Stability of Bounded-Noise Excited System, Q. C. Li, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p128-131.

Stable Forced Vibrations Near Unstable Positions, Michael Zakrzhevsky, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p384-387.

Statistical System Identification of Structures Using ARMA Models, Joel P. Conte and Satyendra Kumar, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p142-145.

Statistics of Fractional Occupation Time for Nonlinear Stochastic Response, Armen Der Kiureghian and Chun Ching Li, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p116-119.

Stochastic Dynamics of Non-Linear Systems Excited by Parametric Delta Correlated Processes, Mario Di Paola and Antonina Pirrotta, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p930-933.

Stochastic Response of a Hysteretic System Under Nonstationary Excitations, Ismail I. Orabi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p392-395.

Tuned Mass Dampers for Structures with Bilinear Hysteresis, Masato Abé, EM Aug. 96, p797-800.

Vibration Absorber for Offshore Structures: Frequency-Domain Analysis, Mikhail F. Dimentherg, Shiyu Chen, Zhikun Hou and Mohammad Noori, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p588-591.

Vibration Control of Tall Buildings under Seismic and Wind Loads, Lih-Shing Fur, Henry T. Y. Yang and Seshasayee Ankireddi, ST Aug. 96, p948-957.

Exoskeleton structures

Translucent Structural Beacon, Drew A. Norman, CE Feb. 96, p50-52

Anchoring a Landfill Expansion, Max Kroschel, Michael S. Snow and Thomas A. Williamson, CE May 96, p64-66.

Anisotropic Claddings, Clemens Widhalm, Elmar Tschegg and Walter Eppensteiner, CF Feb. 96, p5-10.

anti water Episterian, 7 reb. 36, pp. 7 reb. 37, pp. 37, pp p348-355.

Decatur Airport Off-Peak Construction Allows Airport to Continue Operations, Charles A. Hagloch, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka

Seneviratne, ed., 1996), p115-127.

A Decision Support System for Minimizing the Distur-bance of Airfield Construction (SFIA Case Study), Adib Kanafani and Manar Shami, (Meeting the Challenge: Re-building Inner City Airports, Prianka Seneviratne, ed.,

1996), p234-245.

Evaluation of Potential Impacts to Endangered Species
That Use Wetland Areas: A Case Study, Andrea
Rosenthal, David Reutter, Roger Menendez and Barbara
Michael, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,
1996), p2033-2038.

Extending the Limits—San Jose Runway, Loy Warren, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p151-157.

Finite-Element Analysis of Temperature Effects on Plain-Jointed Concrete Pavements, Eyad Masad, Ramzi Taha and Balasingam Muhunthan, TE Sept./Oct. 96, p388-398. Section Lauds Utah Governor, CE Oct. 96, p74,76.

Steel Tops Off Chicago Orchestra Hall, CE Dec. 96, p17. Unique Pile Combination Supports New Tennis Complex. CE Dec. 96, p10,12.

Waterproofing An Expanded Convention Center, CE Dec.

96, p89.

"'Meigs Among the Ruins': Montgomery C. Meigs and the Construction of the United States Capitol Extension", Dean A. Herrin, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p96-97. **Expansive** cement

Enhancing Performance of Soundless Chemical Demolition Agents, Jimmie Hinze and Andrew Nelson, CO June 96, p193-195.

Experimental data

Experimental data Design Model Bias Factors for Driven Piles from Experi-ments at NGES-UH, Gil L. Yoon and Michael W. O'Neill, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p759-722.

Experimental design
Enhancing Creativity when Solving Contradictory Technical Problems, Sergey Drabkin, El Apr. 96, p78-82.

Experimentation

ty, Howard D. Ross, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p527-532. Combustion Processes and Applications in Reduced Gravi-

Crystal Growth in Microgravity, Grant Meyer, (Engineer-

ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1295-1297.

Detection of ASR in PCC Using Ultrasonic Waves, N. M. Al-Akhras, I. L. Al-Qadi and M. R. Hajj, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p897-

Evaluation of the UK Coastal Research Facility, Richard R. Simons, Richard J. S. Whitehouse, Ruairi D. MacIver, Jonathan Pearson, Paul B. Sayers, Yingdao Zhao and Adrian R. Channell, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p161-172.

Experimental Uncertainty and Measurement Errors in Hy-draulic Engineering, Fred L. Ogden, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1135-1138.

Experimental Verifications of H_a and Sliding Mode Control for Seismically Excited Buildings, J. N. Yang, J. C. Wu, A. M. Reinhorn, M. Riley, W. E. Schmitendorf and F. Jabbari, ST Jan. 96, p69-75.

Experimentation of the ERTMS System on the Italian, Ger-man and French Railways, Daniel Lancien, Florian Kollmannsberger and Paolo Ripamonti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p30-38

Experiments with Elasto-Plastic Oscillator, S. Randrup-Thomsen and O. Ditlevsen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-

cea D. Grigoriu, ed., 1996), p518-521.

Heat and Moisture Absorption Effects in Composites; Theory and Experiments, A. Szekeres and R. A. Heller, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p63-72.

Issues on Geomechanics, Nicholas C. Costes and Stein Sture, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p516-520.

Local Buckling Experiments on Pultruded Compos Beams, Roberto Lopez-Anido, Rachid Bendidi, Hota V. S. GangaRao and Mohammed Al-Megdad, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p914-923

Long-Term Deflection Control in Cantilever Prestressed Concrete Bridges. II: Experimental Verification, Hui-Sheng Chiu, Jenn-Chuan Chern and Kuo-Chun Chang,

EM June 96, p495-501. Lunar Excavating Research, Walter W. Boles and John F.

Connolly, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p699-705. Measuring Coherency of Human-Induced Rhythmic Loads Using Force Plates, A. Ebrahimpour and L. L. Fitts, ST July 96, p829-831.

Methods of Experimental Research of Asteroid Properties in Space Missions, D. V. Petrov, V. A. Simonenko and O. N. Shubin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p68-73.

The Nature of Passivity of Reinforcing Steel, Farrel Martin and Jan Olek, (Materials for the New Millennium, Ken P.

Chong, ed., 1996), p1111-1120.

Ocean Environment Contours for Structural Response Analysis and Experiment Design, Steven R. Winterstein, Todd C. Ude, Paolo Bazzurro and C. Allin Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p592-595

Potential of Waste Glass for Concrete Masonry Blocks, Christian Meyer, Stephen Baxter and Weihua Jin, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p666-673.

The Production of Photovoltaic Devices in Space, A. Ignatiev and A. Freundlich, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p287-292.

Rocket Experiments and Demonstrations for Microwave Power Transmission (MPT), Nobuyuki Kaya, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p280-286.
Shakedown Tests of One-Third-Scale Composite Bridge,

M. G. Barker, P. M. Bergson, C. E. French, R. T. Leon, T. V. Galambos and F. W. Klaiber, BE Feb. 96, p2-9.

Statistical Implications of Methods of Finding Characteris-

tic Strengths, Richard D. Hunt and Anthony H. Bryant, ST Feb. 96, p202-209. Stress-Strain Relationship of High-Strength Concrete in Compression, T. H. Wee, M. S. Chin and M. A. Mansur, MT May 96, p70-76.

The Agent Collaboration Environment, An Assistant for Architects and Engineers, Kirk D. McGraw, Philip W. Lawrence, Jeffrey D. Morton and Jeff Heckel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p739-745. An Al Agent Construct for Space and Planetary Science Applications, Lee Plansky and Nancy Linarez-Royce, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p341-348.

Aid-to-Decision for Variable Message Sign Control in Mo-Aud-to-Decision for Variable Message Sign Control in Mo-torway Networks during Incident Condition, Jean-Marc Morin, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p378-382.

Application of Expert Systems to Workflow in Construc-tion Management, Raja R. A. Issa and Charles S. Duvel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p781-785.

Applications of Case-Based Reasoning in Construction En-Yau, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p663-669.

Appropriate Sanitation Technology Advisor: A Planner's Tool in Less Developed Countries, Larry Quinn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2993-2998.

An Architecture Integrating Symbolic and Connectionist Models for Traffic Management Center Decision Support, Martin Molina, Filippo Logi, Stephen G. Ritchie and Jose Cuena, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p320-324.

ASCE's Technical Council on Computer Practices, Glenn

S. Orenstein, CP Apr. 96, p93-94.

Automated Code Compliance Checking for Building In-spection, Tang Hung Nguyen, Claude Bédard and Kinh Huy Ha, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p1020-1026.

Automated Constructibility Analysis of Work-Zone Traffic-Control Planning, Deborah J. Fisher and Naveen Rajan, CO Mar. 96, p36-43.

An Automated Design and Review Assistant: SEDAR, Michael C. Fu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p118-125.

Automated On-Scene Management of Traffic Accidents, George M. Vasilakis and Yorgos J. Stephanedes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p292-295.

Automated Optimal Structural Design Synthesis using Machine Generated Rule Base and Artificial Neural Net-works, J. M. Deshpande, M. J. Skibniewski and K. Lucprasert, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p867-873.

Consensus Building Model to Select CASIS in Small Com-munities, Steven W. McCrary, Colin O. Benjamin and Vijay E. Ambavanekar, UP June 96, p46-70.

Design of Large Space Systems for Packaging and Launch on Multiple, Heterogeneous Vehicles, Steven D. Jolly, AS Apr. 96, p45-51.

Development of a Knowledge-Driven Interactive Contractual Agreement Preparation Program using Multimedia, Thomas F. Harrington, Cheryl L. Ruf and Guillermo F. Salazar, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p649-655.

Development of an Expert System for Daily Drought Moni-toring, T. J. Chang, H. Zheng, X. A. Kleopa and C. B. Teoh, CP Jan. 96, p20-24.

Developmental Approach for the Use of Expert Systems in Preparing Bidding Documents, Michael Bowen and Guillermo F. Salazar, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996).

Editor's Note, Thomas L. Theis, EE Sept. 96, p778.

Evaluation of a Real-Time Expert System for Surface Street Traffic Management and Control, Stephen G. Ritchie, Filippo Logi, Seungmin Kang and Craig Rindt, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p276-280.

An Expert System Application for Robot Assisted Urban Search and Rescue, John G. Blitch, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p199-205.

An Expert System as Support in Maintenance of Road Pavement Surface, P. Giannattasio, M. Crispino, V. Nicolosi, G. Ambrosino and M. Boero, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p500-504

Expert System for Assessing Main Pipeline Reliability and Residual Lifetime, Sviatoslav A. Timashev and Inessa L. Yablonskikh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p322-325.

Expert System for Water Treatment Plant Operation, Xin X. Zhu and Angus R. Simpson, EE Sept. 96, p822-829.

A. Zhu and Angus R. Simiponi, Ed. Sept. 90, po22-629.
An Expert System for Wind-Resistant Residential Construction, James R. McDonald, Douglas A. Smith and Kishor C. Mehta, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p315-316

An Expert System for Wind-Resistant Residential Construction, James R. McDonald, Douglas A. Smith and Kishor C. Meha, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p982-988.

The Highway Safety Expert System: A New Approach to Safety Programs, Tarek Sayed and Frank Navin, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p346-362.

A Hybrid System for Partial Prestressed Concrete Beam Design, Nicolaas Stuurstraat, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed.,

1996), p887-891.

Knowledge Acquisition and Engineering for Steel Bridge Fabrication, Hani G. Melhem, W. M. Kim Roddis, Sri-nath Nagaraja and Michael R. Hess, CP July 96, p248-

A Multimedia Expert System for Slurry Wall Construction, Nie-Jia Yau and Chien-Hong Lu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p600-606.

Network Expert Geographic Information System for Landfill Siting, Jehng-Jung Kao, Wei-Yea Chen, Hung-Yue Lin and Show-Jyi Guo, CP Oct. 96, p307-317.

Object-Oriented Pumping-Test Expert System, Driss Oua-zar, Alexander H-D. Cheng and Abdu Diore Kizamou, CP Jan. 96, p4-9.

Preliminary Design of 2-Story Buildings Using a Hybrid System. Hyeong-Taek Kang, C. John Yoon and Feng-Bao Lin, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p335-340.

Requirements for Industry Applicability of Knowledge-Based Schedulers, Florian Aalami and Martin A. Fischer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p774-780.

Screening-Level Approach for Estimating Contaminant Ex-port from Tributaries, Mark Velleux, Joseph Gailani and Doug Endicott, EE June 96, p503-514.

Validating Expert Systems in Transportation Practice, Gary S. Spring, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p985-991.

Water-Supply System Operations: Critiquing Expert-System Approach, Anne Shepherd and Leonard Orto-lano, WR Sept./Oct. 96, p348-355.

Exploration

(DM)2: A Modular Mobile Manipulator, Christopher Lee and Yangsheng Xu, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p107-113.

Operational Satellite Remote Sensing for Mineral Exploration, Charles Sabine, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p237-244.

Strategies for Searching an Area with Semi-Autonomous Mobile Robots, Robin R. Murphy and J. Jake Sprouse, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p22-28.

Explosion effects

Blast Wall Bravura, Pieter J. van der Weijde and Paul H. L. Groenenboom, CE Dec. 96, p62-65.

Designs for Blast Protection (Available only in Structures special issue), Martin J. Fertal, P.E., CE Sept. 96, p3A-5A.

Exhibit Highlights Oklahoma's Building, CE Feb. 96, p8. Model Studies of Effects on Lunar Soil of Chemical Explosions, Chaun-Ping Lin, Deborah J. Goodings, Leonhard E. Bernold, Richard D. Dick and William L. Fourney, GT Oct. 94, p1684-1703.

Acoustic Efficiency Analysis Using Infrasound from NEOs, Douglas O. ReVelle and Rodney W. Whitaker, (Engi-neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p102-108.

Blast Resistant Design of Commercial Buildings, Moham-med Ettouney, Robert Smilowitz and Tod Rittenhouse,

SC Feb. 96, p31-39.

Nuclear Explosion Near Surface of Asteroids and Comets -II. General Description of the Phenomenon, O. N. Shu-bin, V. Z. Nechai, V. N. Nogin, D. V. Petrov and V. A. Simonenko, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p74-80.

Practitioners' Forum, AE June 96, p45-48.

Protecting Buildings against Vehicle Bomb Attacks, Anatol Longinow and Kim R. Mniszewski, SC Feb. 96, p51-54.

Explosives

Designs for Blast Protection (Available only in Structures special issue), Martin J. Fertal, P.E., CE Sept. 96, p3A-5A.

Earthquakes, Bombs and Mines, CE July 96, p8.

On New Materials, Thanks All Around, Christopher Y.
Tuan and Lawrence C. Muszynski, CE Feb. 96, p31. Protecting Buildings against Vehicle Bomb Attacks, Anatol Longinow and Kim R. Mniszewski, SC Feb. 96, p51-54.

Structural Design for Vehicular Bombs, Task Committee on Structural Design for Physical Security, (Paul F. Mlakar, FASCE, Chair, chma.), (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1269-1276.

Exports

Bank Aids U.S. Exports to Japan, CE June 96, p8. Grants Aid South American Development, CE Dec. 96, p13.

External pressure

Tubular Members. I: Stability Analysis and Preliminary Results, Spyros A. Karamanos and John L. Tassoulas, EM Jan. 96, p64-71.

Tubular Members. II: Local Buckling and Experimental Verification, Spyros A. Karamanos and John L. Tassou-las, EM Jan. 96, p72-78.

Extraction procedures

Cleaning Up Clay, Eric C. Lindhult and Daniel A. Kwiecin-ski, CE May 96, p49-51.

Conceptual Design of Soil Venting Systems, David W. DePaoli, James H. Wilson and Carl O. Thomas, EE May 96, p399-406. Control of Seawater Intrusion through Injection-Extraction

Well System, A. Mahesha, IR Sept./Oct. 96, p314-317. EDTA-Enhanced Electrokinetic Extraction of Lead, Albert

T. Yeung, Cheng-non Hsu and Rajendra M. Menon, GT Aug. 96, p666-673.
Effects of Vapor Extraction on Contaminant Flux to Atmosphere and Ground Water, Tjalfe G. Poulsen, Joel W. Massmann and Per Moldrup, EE Aug. 96, p700-706.

Long-Term Leaching of Metals from Concrete Products, Matthew T. Webster and Raymond C. Loehr, EE Aug. 96, p714-721.

Optimization of Soil Vapor Extraction System Design, Yung-Hsin Sun and William W-G. Yeh, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl 387-1392.

Extraterrestrial bases

Architectural Considerations in Design of Lunar-Based Astronomical Observatories, Stewart W. Johnson, Koon Meng Chua, Milton Schwartz and Jack O. Burns, (Engi-neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p871-880. Astrophysical Cosmology Using a Lunar Ligo, Thomas L. Wilson, Hans-Joachim Blome and Norman LaFave, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p861-863.

Challenges in the Construction of a Lunar Base, Roy Sargent and Keith Hampson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p881-888.

257

Commercial Mining Activities for the Space Frontier, David M. Neil, Russell J. Miller, David S. McKay and Brad R. Blair, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p800-805

A Comparison of Alternative Methods for the Mars Sample Return Mission, Robert Zubrin, (Engineering, Construct tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p724-733.

Concept for a Permanent Lunar Utilities System, David G. Schrunk, Bonnie L. Cooper and Burt L. Sharpe, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p935-941.

Conceptual Design of a Crater Lunar Base, Alice Eichold, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p920-927.

Considerations for Realistic Lunar Excavation, Michael J. Lally, Scott P. Mackey and Laurie R. Gaskins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p896-902.

Design and Performance Criteria for Inflatable Structures in Space, Marvin E. Criswell, Willy Z. Sadeh and Jenine Abarbanel, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1045-1051.

Discovery of Abundant, Accessible Hydrocarbons Nearly Everywhere in the Solar System, A. Zuppero, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p791-799.

Johnson, ed., 1996), p191-199.

The Distinction between an Interplanetary Vehicle and a Mars Surface Habitat, Marc M. Cohen, (Engineering, Advantage in Space, Stewart W. Construction, and Operations in Space, Stewart Johnson, ed., 1996), p984-996.

Engineering, Construction, and Operations in Space, 2 vols, Stewart W. Johnson, ed., 1996, 0-7844-0177-2, 1365pp.

First Mars Outpost Architectural Study, Jun Okushi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p928-934.

Fluidized Drilling for Lunar Mining Applications, Brad R. Blair, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p813-820.

Location of a Lunar Base: A Site Selection Strategy, Law-rence A. Taylor and Dong-Hwa S. Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p741-755.

Lunar Base Development Stages, Willy Z. Sadeh and Mar-vin E. Criswell, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p912-

Lunar Sample Return: A Near-Term Marketing Opportuni-ty? Brad R. Blair, (Engineering, Construction, and Oper-ations in Space, Stewart W. Johnson, ed., 1996), p194-

Lunar Settlement Foundation: A Private Community, Dallas G. Bienhoff, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p942-

Lunar Textile Method for the Shield Wall on the Lunar Sur-face, Mikiya Okumura, Takao Ueno and Yasuhiro Ohashi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p889-895. Mars Sample Return Using In-Situ Propellant Production,

David I. Kaplan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p717-

Observational Cosmology from the Moon, Thomas L. Wilson and Hans-Joachim Blome, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p864-870.

On Exploration and Usage of Near-Earth-Missing Objects, V. A. Simonenko, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p61Protection of and from the Lunar Environment, Anthony M. Wachinski, Tony Rachwal and Colin Waters, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p668-672.

Solar Power Satellites as an Alternative Energy Source, Wendy Shefelbine, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

p1307-1310.

The Surface Extreme Environment Dwelling System (SEEDS) for Mars, Kurt Anthony Micheels, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1020-1026.

Terraforming Mars, Felix Zamora, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1311-1314.

Concurrent Engineering and Electronic Data Interchange, Tony Tascione, (Analysis and Computation, Franklin Cheng, ed., 1996), p397-406.

Interference Assemblies, R. R. Little, G. R. Frederick and B. K. Park, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p240-241.

Knowledge Acquisition and Engineering for Steel Bridge Fabrication, Hani G. Melhem, W. M. Kim Roddis, Sri-nath Nagaraja and Michael R. Hess, CP July 96, p248-

The Next Generation in Composite Rebars for Concrete Reinforcement, Salem S. Faza, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p905-913.

Optimal Design of Prestressed Concrete Transmission Poles, Fatma Y. Kocer and Jasbir S. Arora, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p111-122.

Tensioned Fabric Structures—A Practical Introduction edit-ed by R. E. Schaeffer, Frederick S. Merritt, AE Sept. 96, p121.

Fabrics

Editor's Note, David Darwin, ST Sept. 96, p987-988.

Fabric Anisotropy and Its Relationship to Macroscopic Constitutive Behavior of Clays, A. Anandarajah, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), p877-880.

The Fabric Dyers' Use of Recycled Water, Chuck Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

New Materials and Methods for Insitu Rehabilitation of Underground Pipe, Richard D. Blackmore, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1298-1307

Structural Aerodynamics (Available only in Focus on Structures Special Edition), Bob Lang and Hugh Muirhead, CE Jan. 96, p3A-7A.

Structural Design Forum, Carl J. Lehman, SC May 96, p60-66

Structural Design Forum, SC Aug. 96, p62-68.

Structural Forum, SC Nov. 96, p95-98.

Structural Strength of Bridge Decks Reinforced with Weld-ed Wire Fabric, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Sept. 96, p989-997.

Tensioned Fabric Structures: A Practical Introduction, Task Committee on Tensioned Fabric Structures of the Technical Committee on Special Structures of the Technical Administrative Committee on Metals of the Technical Division of the A.S.C.E., (R.E. Shaeffer, chmn.), 1996, 0-7844-0156-X, 80pp.

Tensioned Fabric Structures—A Practical Introduction edit-ed by R. E. Schaeffer, Frederick S. Merritt, AE Sept. 96,

Variation of Fabric Anisotropy of Kaolinite in Triaxial Loading, A. Anandarajah, N. Kuganenthira and D. Zhao, GT Aug. 96, p633-640.

"Banding" Timber Crossties Using Composite Fabrics for Improving Their Performance, S. S. Sonti and H. V. S. GangaRao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1449-1457.

Facilities

3-D Graphical Simulation for Temporary Facility Planning using Object-Oriented Building Product Model, Kenji Ito, Yuji Kano, Jun Ueda and Shinichi Setoguchi, (Com-10, Tuji Kano, Jun Oeda and Sninieni Setogueni, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p49-55.
Achieving Industrial Facility Quality: Integration is Key, Kelly Jean Fergusson and Paul M. Teicholz, ME Jan/

Feb. 96, p49-56.

Air Transportation: A Systems Approach, Harry A. Kinnis-on, (Meeting the Challenge: Rebuilding Inner City Air-ports, Prianka Seneviratne, ed., 1996), p246-253. All-Around Arenas (Available only in Structures special issue), Lawrence G. Griffis, P.E., CE Sept. 96, p6A-11A. Architect Gives Precast Care to Nursing Center, CE Sept. 96, p96.

Assessment of AWT Systems in Tampa Bay Area, Richard O. Mines, Jr., EE July 96, p605-611. Boiler Emissions Drop, CE Nov. 96, p21.

California Unveils Fuel Cell Plant, CE Nov. 96, p20-21. Can A/E Grads Do Facility Design and Construction?, ME Sept./Oct. 96, p10-11.

Cast-in-Place Factory Largest for Industry, CE Nov. 96, p13.

Chanel Fashions Stylish Building, CE Sept. 96, p25-26. Cold Neutron Facility Gets a Face-Lift, ET Mar./Apr. 96,

Double Duty Water Treatment, CE Mar. 96, p8

Earle T. Andrews, ASCE's 98th President, Dies at 94, NE Sept. 96, p15.

Editorial, Kincho H. Law, CP July 96, p173.

Facilities for the Earth-Moon Test Range, Robert C. Wigand, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p956-962 Houston Transtar: Total Traffic Control, CE July 96, p12.

Issues in Pursuing Quality in Facility Program Develop-ment, Ernest W. Parti, AE Mar. 96, p32-40.

Lessons Learned from Multiphase Reconstruction Project, Raymond J. Krizek, Wei Lo and Ahmad Hadavi, CO Mar. 96, p44-54.

Management of the Hanford Engineer Works in World War II, Harry Thayer, 1996, 0-7844-0160-8, 225pp.

Mapping the Future, CE July 96, p18-19 Membrane Technology Helps Shopp Wastewater, CE Dec. 96, p89. Shopping Center Clean

Methanol Plant Construction Begins, CE Feb. 96, p8.

A New Kind of Rubber Drive, CE Nov. 96, p94-95.

Operation and Maintenance of Ground Water Facilities

(M&R No. 86), Committee on Ground Water of the Irrigation and Drainage Division, American Society of Civil Engineers, (Lloyd C. 0-7844-0139-X, 180pp. Fowler, chmn.),

Recasting a Foundry (Available only in Structures Special Issue), Gary W. Loomis and Dave P. Knepper, CE May

96, p14A-16A.

Retrofitting a Nuclear Lab, CE Dec. 96, p12,13.

Start the Presses! Ramon Gilsanz, CE Apr. 96, p65-67. Time for an Integrated Approach to Facility Management, Paul Scarponcini, CP Jan. 96, p3. Titusville Cleans Up, CE Aug. 96, p18,20.

University Arts Building Presents Structural Challenge, CE Nov. 96, p10.

Faculty Editor's Note, Kenneth L. Carper, CF May 96, p45.

Guest Editorial, Ruben J. Baer, CF May 96, p46 Some Thoughts from the Editor, Robert B. Harris, CO Dec. 96, p297

Analysis of Bond Stress Distributions in Pullout Specimens, Homayoun H. Abrishami and Denis Mitchell, ST Mar. 96, p255-261.

Approach to Failure Mode Analysis of Large Structures, Shaowen Shao and Yoshisada Murotsu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p704-707.

Behavior of Pressure Tunnels and Guidelines for Liner Design, Gabriel Fernández, GT Oct. 94, p1768-1791. Continuous and Discontinuous Failure Modes, Z. Chen,

EM Jan. 96, p80-82.

Correlation of Component Damage, Insurance Losses and Wind Storm Severity, Timothy A. Reinhold, Gregory L. F. Chiu and Robert Akins, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p191-192.

Editor's Note, David Darwin, ST Sept. 96, p987-988.

Evaluating Risk to the Environment from Mining Using Valuating Risk in the Environment in Judge Prailure Modes and Effects Analysis, Kelvin Dushnisky and Steven G. Vick, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p848-865.

Failure Criteria for Masonry Panels under In-Plane Load-

ing, U. Andreaus, ST Jan. 96, p37-46.

Finite Element Modelling of Deep Rolled Wide Flange Beam Subject to Localized Edge Loading - A Case Study, M. Arif Fazil and Celal N. Kostem, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p874-880.

Frequent "Failure Modes" an A/E/C Might Expect in Their Business, William M. Hayden, Jr., ME Sept./Oct. 96,

p11.

Measured Seismic Behavior of a Two-Story Masonry Building, Gregory R. Kingsley, Guido Magenes and G. Michele Calvi, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p123-134.

Offshore Platform's Failure and Repair - Case Studies, T. S. Thandavamoorthy and A. R. Santhakumar, (Natural Disaster Reduction, George W. Housner, ed. and Riley

M. Chung, ed., 1997), p181-182.

Parameter Study of an Internal Timber Tension Connection, Stephen F. Duff, R. Gary Black, Stephen A. Mahin and Marcial Blondet, ST Apr. 96, p446-452.

Probability Analysis Method Using Fast Fourier Transform, Yasuhiro Mori, Jun Sakamoto and Takayoshi Sekioka, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p696-699

Probability Based Design Requirements for Ship Struc-tures, Alaa E. Mansour, Paul H. Wirsching, Bilal M. Ayyub and Gregory J. White, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p98-101.

Punching Shear Failure in Concrete Decks as Snap-Through Instability, Michael F. Petrou and Philip C. Per-dikaris, ST Sept. 96, p998-1005.

Seismic Behavior of Older Steel Structures, Charles W. Roeder, Brett Knechtel, Eric Thomas, Anne Vaneaton, Roberto T. Leon and F. Robert Preece, ST Apr. 96, p365-373

Structural Damage due to Hurricane Marilyn in St. Thomas and Culebra, Luis A. Godoy, Roberto Huyke, Ricardo R. Lopez, J. A. Martinez-Cruzado and Raul Zapata, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p135-136.

A Study on the Link between Damage Mechanics and Fracture Mechanics, Zhen Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p739-742.

Analyses of Lunar Membrane Structures for Potential Failure Scenarios, James Day and Phil Richter, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1052-1058.

Analytical Modelling of Damage Based on an Improved Percolation Model, A. Delaplace, S. Roux and G. Pijau-dier-Cabot, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p1171-1174.

Application of a Reliability-Based Fatigue Life Model to a Gas Turbine Engine Structure, Robert G. Tryon, Thomas A. Cruse and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p636-639.

Asymptotic Approximation of Reliability Integrals for Un-certain Systems, C. Papadimitriou, J. L. Beck and L. S. Katafygjotis, (*Probabilistic Mechanics & Structural Re-liability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p574-577.

Beware of Flying Cranes - and Disconnected Codes, M. Russell Nester and Allan R. Porush, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p219-220.

Ridge Monitoring Using An Optical Fibers Sensor System, R. L. Idriss and M. B. Kodindouma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p.238-

Brittle-Ductile Transition in Porous Rocks by Cap Model, Vlado A. Lubarda, Sreten Mastilovic and Jaroslaw Knap,

EM July 96, p633-642.

Case History - Outfall Pipeline Failure - Burlington, VT, Nelson L. Thibault and Eugene J. Forbes, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996), p487-493

Cast-Iron-Column Strength in Renovation Design, Donald

Friedman, CF Aug. 95, p220-230.

Compressive Behavior of Concrete: Physical Mechanisms and Modeling, Pierre Rossi, Franz-Josef Ulm and Fatiha Hachi, EM Nov. 96, p1038-1043. Computer Vision and Fracture Process in Cement-Based

Materials, Sokhwan Choi and Surendra P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Concrete Shear Failure in Reinforced-Concrete Elements, Prodromos D. Zararis, ST Sept. 96, p1006-1015.

Controlling Chaos to Prevent Ship Capsizing, Mingzhou Ding, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p434-437.

Damage Assessment of Reinforced Concrete Structures through Acoustic Emission Monitoring, Christian C. Steputat and Sashi K. Kunnath, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jarshid Mohammadi, ed., 1996), p837-844.

Design and Repair for Surficial Slope Failures, Robert W.

Day, SC Aug. 96, p83-87.

Development and Testing of Riverbank-Stability Analysis, Stephen E. Darby and Colin R. Thorne, HY Aug. 96,

Development of Tension Grips for GFRP Rebars, Hota V. S. GangaRao and Derek Altizer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p394-399.

Earthquake Fault Rupture Propagation Through Soil, Jonathan D. Bray, Raymond B. Seed, Lloyd S. Cluff and H. Bolton Seed, GT Mar. 94, p543-561.

Editor's Note, Kenneth L. Carper, CF Feb. 96, pl.
Editor's Note, Kenneth L. Carper, CF May 96, p45.
Editor's Note, Kenneth L. Carper, CF Aug. 96, p89.

Benton's Note, Rennear II. Carpet, Cr Aug. 96, pos.
The Effects of Natural Hazards on Pipeline Safety, Betty
Bonn, Myles Powers, Andy Chernoff, Alan Gregory,
Dan Phillips and Donna Roy, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,
1997), p68-69.

Efficient Pump Representation for Fixed-Grid MOC in Pipeline Systems, David H. Axworthy and Bryan W. Karney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p370-375.

Embedded Localization Band Elements for Mode-I and Mode-II Failure, L. J. Sluys and A. H. Berends, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1181-1184.

Error Estimates for FORM and SORM Computations of Failure Probability, Jean-Claude Mitteau, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p562-565.

Experiences in Cleaning Up the Influence of Oil Spill on the Water Bodies, G. M. Barenboim, N. A. Rubanova and I. M. Saipulaev, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2534.

Failure Criteria for Masonry Panels under In-Plane Load-ing, U. Andreaus, ST Jan. 96, p37-46.

Failure of a Stiffened Seat Bracket Connection, David L. Weaver, Jason S. Yates and Randall W. Poston, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p468-474.

Failure of Desert View Drive Embankment, Robert W.

Day, CF Feb. 96, p11-14. Failure of Fiber-Reinforced Granular Soils, Radoslaw L

Michalowski and Aigen Zhao, GT Mar. 96, p226-234. Failure of Unidirectionally Reinforced Composites with Frictional Matrix, Radoslaw L. Michalowski and Aigen Zhao, EM Nov. 96, p1086-1092.

Zhao, EM Nov. 96, p1080-1092.
Failures in Civil Engineering: Structural, Foundation and Geoenvironmental Case Studies by Robin Shepherd and J. David Frost, Kenneth L. Carper, CF May 96, p87.
Fatigue Failures of Hexa "liptical Steel Davit Arms Induced by Aeolian Vibrations at Resonant Conditions, Markus Ostendorp, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p874-877.
Field and Laboratory Measurements of Shoring Loads, Dryver R. Huston, Peter L. Fuhr and Jamie Willsey, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p704-710.

Fire Reliability at Earthquake Occasions, Mamoru Kohno, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p198-201

FORM/SORM Search Algorithms in the Presence of Inadmissible Domains, Roger Sindel and Rüdiger Rackwitz, (Probabilistic Mechanics & Structural Reliability, Dan Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p570-573

A Fuzzy Logic Paradigm for Fault Trees and Event Trees in Risk Assessment, Timothy J. Ross and Sunil Donald, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p369-375. Guest Editorial, David H. Nicastro, P.E., CF Feb. 96, p2-4. Guest Editorial, Ruben J. Baer, CF May 96, p46.

Guest Editorial, Nucer J. Baez, C. P. May 90, p40.
The Impact of Multiple Failure Modes in Risk Analysis for Civil Infrastructure Management, James H. Lambert, Lori R. Johnson and Yacov Y. Haimes, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed. 1006-199, 105. ed., 1996), p80-105.

Implementation of Variance Reduction Techniques Using Monte Carlo Stratified Sampling in the COMPROMIS Code Version 2, Emmanuel Ardillon, Patrice Pitner and Bernard Lapeyre, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p692-695.

Directionally Drilled Installation, Hugh W. O'Donnell, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p163-172.

Is No-Tension Design of Concrete or Rock Structures Al-ways Safe?—Fracture Analysis, Zdeněk P. Bažant, ST

Jan. 96, p2-10.

A Knowledge Based System for the Evaluation of Earthquake Damaged Structures, John A. Kuprenas and John Manios, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p742-749.

madi, ed., 1990), p.42-749.

A Large-Scale Experiment on Breaching in Sand-Dikes, Paul J. Visser, Arie W. Kraak, Wim T. Bakker, Marion J. Smit, D. Wino Snip, Henk J. Steetzel and Jan van de Graaff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p.583-594.

Lesson One for Engineers: Using Judgment, Angelo Pol-

vere, CE Jan. 96, p32.

Load Space Formulation for Reliability Estimation of Complex Structures, X. L. Guan and R. E. Melchers, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), Master

po88-091.

Marine Geophysical Investigation to Determine the Cause for Failure of the Yaquina Bay Jetty, Newport, Oregon, Richard E. Sylwester, Jon L. Dasler and Terry C. Sullivan, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p42-55.

Measures of Water Distribution System Reliability, Rafael G. Quimpo, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p388-395.

Meter Helps Rescuers Keep Level Heads After Roof Col-lapse, CE Aug. 96, p78.

A Minimum Risk Evaluation Methodology for Fault Tolerant Automotive Control Systems, P. Borodani, L. Gortan, R. Librino and M. Osella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p552-557

Modeling Rail Fatigue Behavior with Multiple Hazards, Feng-Yeu Shyr and Moshe Ben-Akiva, IS June 96, p73-

More Research Needed for Steel Moment Frames, Garry D. Myers, CE July 96, p29,31.

New Damage Variable in Failure Analysis of Concrete, Woon-Kwong Yip, MT Nov. 96, p184-188.

Nonlinear Finite-Element Model of Hollow Masonry, E. Y. Sayed-Ahmed and N. G. Shrive, ST June 96, p683-690.

Numerical Analysis of Damage in Lattices and Consequences on Continuum Modelling, Gilles Pijaudier-Cabot, A. Delaplace and S. Roux, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1034-1037.

Numerical Modeling of Anhui Debris Flow, Guoqi Han and Deguan Wang, HY May 96, p262-265.

Observations of Internal Crack Growth in Mortar Using X-Ray Microtomography, Eric N. Landis, Edwin N. Nagy, Denis T. Keane and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1330-1336.

On Seismic Displacements of Rigid Retaining Walls, Yingwei Wu and Shamsher Prakash, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p21-37.

Passive Isolation Systems for Launch Vehicles, Eugene R. Fosness, Paul S. Wilke and Conor D. Johnson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1176-1182.

Possibilities of Fracture Mechanics Models Application to Optimisation of Operational Use of Large-Size Machine Components, Lech Bukowski and Piotr Artymiak, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p780-783.

Predicting Contractor Failure Using Stochastic Dynamics of Economic and Financial Variables, Jeffrey S. Russell and Huaming Zhai, CO June 96, p183-191.

Predicting the Service Lives of Materials of Construction, Geoffrey Frohnsdorff, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p38-53.

Probabilistic Evaluation of Postclosure Criticality Events Internal to the Waste Package, Peter Gottlieb and John R.
Massari, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p345-347.

Probabilistic Finite Element Analysis of Aerospace Structures, M. R. Khalessi, H.-Z. Lin, T. Y. Torng, Y. Zhang and A. D'Angelo, (*Probabilistic Mechanics & Structural* Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p648-651.

Probabilistic Fracture Mechanics of Nuclear Pressure Vessels, M. A. Khaleel and F. A. Simonen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p54-57.

Probabilistic Risk Assessment for Tailings Impoundment Founded on Paleokarst, Dirk Van Zyl, Ian Miller, Victor Milligan and W. James Tilson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p563-585.

Railroad Bridge Behavior during Past Earthquakes, William G. Byers, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p175-182.

Reliability Analysis of Pipeline on Elastic Seafloor, H. Y. Yeh and Hengyun Li, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p752-755.

Reliability Evaluation Using SFEM, Achintya Haldar and Liwei Gao, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p166-169.

Reliability Methods for Stability of Existing Slopes, John T. Christian, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p409-418.

Reliability of Jackets: Beyond-Static-Capacity, D. G. Schmucker and C. A. Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p578-581.

Reliability Tester for Water-Distribution Networks, D. Khornsi, G. A. Walters, A. R. D. Thorley and D. Ouazar, CP Jan. 96, p10-19.

Resonance Induced Steel Cross-Arm Fatigue Failures, Markus Ostendorp, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p983-986.
Retail-Grocery-Floor Failure, Raymond S. Rollings, CF

May 95, p137-145.

Retrofit of Black Butte Hydroelectric Project Penstock, George A. Inverso, John A. Schwartz, Stephen M. Hart, Erik Bodholt and Billy Ferguson, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996), p469-476.

Salt-Saturated Concrete Strength and Permeability, T. W. Pfeifle, F. D. Hansen and M. K. Knowles, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p173-182

Seismic Shear Strength of Reinforced Concrete Columns M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Soil Creep and Creep Testing of Highly Weathered Tropi-cal Soils, Peter G. Nicholson, Philip W. Russell and Clint F. Fujii, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p195-213.

Some Recent Advances in Stochastic Structural Dynamics, Y. K. Lin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p396-421.

Stability of a Steep Slope Supporting a Building, Stephen G. Wright and Frank G. Bryant, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p434-450.

Roth, ed., 1990), p4:4-450.
Stability of Beams in an Elastic Foundation, Fady F. Barsoum and William F. Carroll, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1143-1146.
Statistical Aspects of Size Effects in Quasibrittle Fracture, Zdenek P. Bažant and Jaime Planas, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1179-1180.

Steel Connections Need More Research, A. Plumier, CE

Sept. 96, p35.

Sept. 96, p35.

Structural Safety for Fire Conditions, Fan Li and R. W. Fitzgerald, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p352-356.

Success or Failure: A Tale of Two Projects, Dov Kaminetzky and Benjamin Lavon, CE June 96, p62-63.

Three-Dimensional Failure Analysis of Composite Mason-ry Walls, Subhash C. Anand and Kishore K. Yalaman-

chili, ST Sept. 96, p1031-1039.

chili, ST Sept. 96, p1031-1039.
Time-Dependent Degradation of Structural Systems During Fire — A Method for Failure Prediction, Jiahong Jane Zuo and Jamshid Mohammadi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1042-1045.
Uncertainty in Back Analysis of Slopes, Robert B. Gilbert, Stephen G. Wright and Eric Liedtke, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Path ed. 10067, p404-517.

S. Roth, ed., 1996), p494-517. Uncertainty Model is a Redundancy, William Hayden, CE Aug. 96, p31.

Upgrading of Braced Frames for Potential Local Failures, Hae In Kim and Subhash C. Goel, ST May 96, p470-475. Water Distribution Network Reliability: Stochastic Simula-tion, Shu-li Yang, Nien-Sheng Hsu, Peter W. F. Louie and William W-G. Yeh, IS June 96, p65-72.

Failures, investigations
The Analysis of the Failure of the Minte Stream Culvert, L. Ayala and E. Brown, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3018. Case History of Swimming Pool Foundation Failure, Ber-nard H. Hertlein, CF Feb. 96, p33-34.

Collapse of Geogrid-Reinforced Retaining Structure, Gerald A. Leonards, J. David Frost and Jonathan D. Bray, CF Nov. 94, p274-292.

Common Causes of Retaining-Wall Distress: Case Study, Edred T. Marsh and Richard K. Walsh, CF Feb. 96,

Editor's Note, Kenneth L. Carper, CF Nov. 96, p141-142. Investigating and Repairing of Wood Bowstring Trusses, Richard J. Kristie and Arne P. Johnson, SC Feb. 96,

Residential Construction Failures Caused by Hurricane Andrew, Wimal Suaris and Mohammed S. Khan, CF Feb.

95, p24-33. Richard Elstner, 72, Was Failures Expert, CE Nov. 96,

p¹/₂-70. Success or Failure: A Tale of Two Projects, Dov Kaminetzky and Benjamin Lavon, CE June 96, p62-63. "Acts of God": The Symbolic and Technical Significance of Foundation Failures, Jane Morley, CF Feb. 96, p23-

Falling bodies

Impact of Weight Falling onto the Ground, Jose M. Roesset, Eduardo Kausel, Vicente Cuellar, Jose L. Monte and Julian Valerio, GT Aug. 94, p1394-1412.

Hazard Assessment of Debris Fans at Rico, Colorado, B. Christopher Wilbur, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1432-1445.

Farm management

Logging into Water, CE July 96, p14,18.

Alfalfa Power, CE Nov. 96, p8.

Design and Implementation of On-Farm Surface Drainage Projects in the Humid Tropics of Mexico, John C. Tiedeman and Rodolfo Namuche Vargas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2480-2485.

Economic Incentives Encourage Improvements In Farm-Level Water Management Practices, David Cone, Laurie Houston and Dennis Wichelns, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p406-411.

Flexible Water Deliveries: One District's Experience, Eric Swenson, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p679-684.

Soil Water Chemistry of Irrigation with Drainwater, B. R. Faulkner and J. C. Guitjens, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1483-1488.

Southern San Joaquin Drainage Water Management, Doug-las E. Davis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p382-387.

Westlake Farms Demonstration Wetlands A Cooperative Effort, John M. Shelton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p388-393.

Fast track construction

Cleveland Extends Light Rail on the Waterfront, CE Nov. 96, p20. Fast Track Basics, James D. Grove and Kevin B. Jones,

(Materials for the New Millennium, Ken P. Chong, ed., 1996), p466-474.

Fast-Track Concrete Paving-Overview of Key Components, Lawrence W. Cole and Gerald F. Voigt, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p446-455.

In Defense of Design Engineers, Burton A. Lewis, CE Sept.

Innovative Design/Build Approach: Ambassador Bridge Project, Jay B. Shah, ME July/Aug. 96, p58-61. Management of the Hanford Engineer Works in World War II, Harry Thayer, 1996, 0-7844-0160-8, 225pp.

Twenty-First Century Partnering and the Role of ADR, Robert S. Miles, ME May/June 96, p45-55. Using NDT to Fasttrack Pavements, James K. Cable, (Ma-terials for the New Millennium, Ken P. Chong, ed., 1996), p475-481.

Wisconsin Fast-Track Paving Experiences, Michael J. Hall, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p456-465.

Blind Bolts Seek Spotlight, ET Apr./May 96, p8-9.

Hot-Spot Fates appungnt, E1 Apt/May 90, p8-9.
Hot-Spot Fatigue Design of Aluminum Joints, Maurice L. Sharp, Glenn E. Nordmark and Craig C. Menzemer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1027-1036.

Mechanical Connections in Wood Structures (M&R No. 84), Task Committee on Fasteners of the Committee on Wood of the Structural Division of the American Society of Civil Engineers, (Lawrence A. Soltis, chmn.), 1996, 0-7844-0110-1, 245pp.

Probabilistic Modeling of Roof Sheathing Uplift Capacity, D. V. Rosowsky and S. D. Schiff, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p334-337.

Roof Sheathing Uplift Resistance for Hurricanes, Edward Sutt, Kallem Muralidhar and Timothy Reinhold, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p974-981.

ps) 4-9a1.
System Effects and Uplift Capacity of Roof Sheathing Fasteners, S. Murphy, S. Schiff, D. Rosowsky and S. Pye, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p765-770.

Fatalities

Analysis of Fatalities and Injuries Due to Powerline Con-tacts, Jimmie Hinze and David Bren, CO June 96, p177-

ASCE Mourns Loss of Industry Leaders in Plane Crash, CE

May 96, p71.
ASCE Mourns Loss of Industry Leaders in Plane Crash, NE May 96, p15.

Construction Forum, SC Nov. 96, p99-103.

Construction Forum, Sc. Nov. 90, p59-103.
The Construction Safety Record Since 1971, Jimmie Hinze,
(Civil Engineers Influencing Public Policy, Maureen K.
Cotton, ed., 1996), p113-120.
Dangerous Digging Requires New Excavation Methods,
CE May 96, p22-23.
John Scoville, Killed in Croatia Plane Crash, Headed Harza

Engineering in Chicago, NE May 96, p15. Using Virtual Reality to Avoid Construction Falls, Diah R. Soedarmono, Fabian C. Hadipriono and Richard E. Larew, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p899-905.

Barriers to the Use of High Performance Steel in I-Girder Highway Bridges, Richard Sause, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p108-115.

Bicycle-Wheel Spoke Patterns and Spoke Fatigue, Henri P. Gavin, EM Aug. 96, p736-742.

Corrosion Effects of Cement Stabilized Backfill on Galvanized Steel Reinforcement, S. N. Popova, B. N. Popov, R. E. White, M. F. Petrou and D. Morris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p988-

Decay of Residual Stress in Stochastic Fatigue, Loren D. Lutes and Shahram Sarkani, ST Jan. 96, p92-98.

Determining Bridge Inspection Requirements for Fatigue Damage Using Reliability, Theodore Hopwood, II, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p454-457

Durability and Long Term Performance of Cementitious Composites, A. Bentur, (Materials for the New Millenni-

Composites, A. Bentur, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p.1502.

Dynamic Fatigue of High-Rise Natural Draught Cooling Towers, Wilfried B. Krätzig, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p.298-309.

Effect of Load Models and Limited Data on Load and Resistance Factors for Fatigue Design, Clifford H. Lange and Steven R. Winterstein, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p58-61.

Effect of Rest Periods on Fatigue Response of Asphalt Concrete Mixtures, Tung-Wen Hsu and Kuo-Hung Tseng, TE July/Aug. 96, p316-322.

Evaluation and Rehabilitation of Victoria Bridge, G. Oommen, A. Lim and S. Tselios, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p207-214.

Experimental Study of Durability of Reactive Powder Concretes, N. Roux, C. Andrade and M. A. Sanjuan, MT

Feb. 96, p1-6.

Fatigue Crack Repair of Steel Beams with Tapered Cover Plate Details, Ahmed F. Hassan and Mark D. Bowman, ST Nov. 96, p1337-1346.

Fatigue Cracks at Stringer-Floorbeam Connections, Leon L-Y Lai, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p483-490.

Fatigue Failures of Hexa'lliptical Steel Davit Arms Induced by Aeolian Vibrations at Resonant Conditions, Markus Ostendorp, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p874-877.

Fatigue Reliability Analysis Based on Time Dependent First Passage, C.-J. Kuo and P. H. Wirsching, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p466-469.

Fatigue-Load Models for Girder Bridges, Jeffrey A. Laman and Andrzej S. Nowak, ST July 96, p726-733.

Geotextile-Reinforced Surface for Rapid Construction of Low-Volume Pavements, Reed B. Freeman and Randy C. Ahlrich, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p.298-307.

High-Performance Metals for Civil and Marine Structures, John W. Fisher, Richard Sause and Robert J. Dexter, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p23-37.

Improved Analysis Techniques for the Capacity and Fa-tigue Assessment of TFG Railway Bridges, Terrence W. Philbrick, Jr. and Scott D. Schiff, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p199-206.

Inspection of Fatigue Sensitive Bridge Members, Richard A. Walther and Michael J. Koob, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p321-328.

Investigation of Lignite-Based Bottom Ash for Structural Concrete, Nader Ghafoori and Jeffrey Bucholc, MT Aug. 96, p128-137.

Loading Cycles for Fatigue Reliability Assessment of Miter Gates at Navigation Locks on the Upper Mississippi River, Bilal M. Ayyub, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p854-857.

Low Cycle Fatigue of Structural Materials, Paul Howdy shell and Kathryn Carlson, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p83-92.

Mathematical Model for Durability of Cladding, K. D. Hjelmstad, D. A. Lange, I. D. Parsons and F. V. Law-rence, MT Aug. 96, p172-174.

Modeling Rail Fatigue Behavior with Multiple Hazards, Feng-Yeu Shyr and Moshe Ben-Akiva, IS June 96, p73-

Modelling of Randomly Meandering Fatigue Crack Growth, Kazimierz Sobczyk and Jerzy Trębicki, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p478-481.

Neural Networks and AASHO Road Test, M. R. Banan and K. D. Hjelmstad, TE Sept./Oct. 96, p358-366.

New Guidelines for Fatigue Design of HSS Connections, A. M. van Wingerde, J. A. Packer and J. Wardenier, ST Feb. 96, p125-132.

- Orthotropic Steel Deck for the Williamsburg Bridge Reconstruction, R. B. Gajer, J. Patel and D. Khazem, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p491-498.
- Orthotropic Steel Decks Are Viable Bridge Option, CE Nov. 96, p19-20.
- Probabilistic Durability Analysis of Reinforced Concrete Bridge Decks, Paul C. Hoffman and Richard E. Weyers, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p.290-293.
- Probabilistic Fatigue Models for Bridge Evaluation, Jeffrey A. Laman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p.286-289.
- Probabilistic Model for the Simulation of Traffic Flows over Highway Bridges, Cesar Crespo-Minguillon and Juan R. Casas, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed. 1996), p26-29.
- Probability-Based Design Requirements with Respect to Fatigue in Ship Structures, P. H. Wirsching, A. E. Mansour, B. M. Ayyub and G. J. White, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p114-117.
- Railway Bridge Loads Under Current Operating Conditions, Daniel H. Tobias, Douglas A. Foutch and John Choros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p215-222.
- Reactive Powder Concrete (RPC). A New Material for Prestressed Concrete Bridge Girders, Scott K. Gilliland, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p.125-132.
- Rebound of the Bascule Bridge, Patrick A. Cassity, P.E., Vinod C. Patel, P.E. and R. Shankar Nair, P.E., CE Aug. 96, p48-50.
- Reliability-Based Maintenance Strategy Using NDI, Achintya Haldar and Zhengwei Zhao, (*Probabilistic Mechan*ics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p364-367.
- Resonance Induced Steel Cross-Arm Fatigue Failures, Markus Ostendorp, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p983-986.
- Stiffness Reductions of Flexible Pavements due to Cumulative Fatigue Damage, A. C. Collop and D. Cebon, TE Mar/Apr. 96, p131-139.
- A Summary of Research and Development Projects in Nondestructive Evaluation Technologies for Bridges, Steven B. Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p230-237.
- Texas DOT Wants Damper on Galloping, CE Mar. 96, p10. Traffic Load Effects on Highway Bridges, Sang Hyo Kim and Sang Ho Lee, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-
- goriu, ed., 1996), p38-41.

 A Uniaxial Constitutive Model Accounting for Viscoelasticity and Damage Evolution under Cyclic Loading, Hyun-Jong Lee and Y. Richard Kim, (Engineering Me-
- chanics, Y. K. Lin and T. C. Su, 1996), p693-696.
 Uniaxial Cyclic Behavior of Discontinuous Fiber Reinforced Composites, Takashi Matsumoto and Victor C. Li, (Materials for the New Millennium, Ken P. Chong, ed. 1996), p426-435.
- Wind-Induced Failures of Steel Roof Decks, Víctor Figueroa Díaz, Ali Saffar, Samuel I. Díaz Santiago and Bernardo Deschapelles, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p894-897.
- Wind-Induced Fatigue Loading and Damage to Hip and Gable Roof Claddings, Y. L. Xu, ST Dec. 96, p1475-1483.

Fatigue life

- Application of a Reliability-Based Fatigue Life Model to a Gas Turbine Engine Structure, Robert G. Tryon, Thomas A. Cruse and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p636-639.
- Assessment of Remaining Fatigue Life of Existing Railway Riveted Bridges, Luo Weiwen and Jamshid Mohammadi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p42-45.
- Crack Growth in Uniaxially Aligned Fiber Reinforced Mortar, Mohsen A. Issa and A. B. Shafiq, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p624-627.
- Fatigue Analysis with Random Loads, Igor Rychlik and Georg Lindgren, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p46-49.
- Fatigue Evaluation of Bridges, George E. Tsiatas and Shane M. Palmquist, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p302-305.
- Fatigue Evaluation of Highway Bridges Using Ultrasonic Stress Measurements, Samer H. Petro, Udaya B. Halabe, Paul Fuchs, Powsiri Klinkhachorn and Hota V. S. GangaRao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p876-883.
- Fatigue Lifetime Prediction of Steel Bridge Details, Peter J. Massarelli and Thomas T. Baber, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p450-453.
- Mean Stress Effects in Fatigue of Welded Steel Joints, Shahram Sarkani and David P. Kihl, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p50-53.
- A Multi-Loop Strategy for Performance-Based Optimization with Probabilistic Constraints, Robert H. Sues, David R. Oakley and Graham S. Rhodes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p126-129.
- Permanent Deformation and Fatigue Characteristics of SMA Mixtures, Lousy N. Mohammad and Harold R. Paul, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p622-630.
- Probabilistic Fatigue Life Analysis of High Density Electronics Packaging, N. R. Moore, E. A. Kolawa, S. Sutharshana, L. E. Newlin and M. Creager, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p886-889.
- Program for Estimating the Remaining Fatigue Life of Steel Railway Bridges, Vinaya Sharma and John Choros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p223-229.
- Random Fields and Airplane Loads, Ludomir M. Laudanski, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p684-687.

Fatigue strength

- An Advanced Comprehensive Model for the Statistical Analysis of S-N Data, C. L. Shen, P. H. Wirsching and G. T. Cashman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p462-465.
- Fatigue Strength of Externally Reinforced Concrete Beams, L. C. Muszynski and R. L. Sierakowski, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p648-656.
- Performance Characteristics of Polyolefin Fiber Reinforced Concrete, V. Ramakrishnan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p93-102.
- Statistical Analysis of S-N Fatigue Data: Design Curve Based on Tolerance, C. L. Shen, P. H. Wirsching and G. T. Cashman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p470-473.

Fatigue tests

An Advanced Comprehensive Model for the Statistical Analysis of S-N Data, C. L. Shen, P. H. Wirsching and G. T. Cashman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed.; 1996), p462-465.

Fatigue Model of Asphalt Concrete, Jian Zhou and Robert Y. Liang. (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p563-567.

Fatigue Testing of Anchor Bolts, James P. Van Dien, Mark R. Kaczinski and Robert J. Dexter, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p337-344.

Full-Scale Fatigue Test of the Williamsburg Bridge Ortho-tropic Deck, Mark R. Kaczinski, Frank E. Stokes, Peter Lugger and John W. Fisher, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p329-336.

Predicting the Mode, Susceptibility, and Rate of Weather-ing of Shales, Paul M. Santi and Engin C. Koncagül, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996).

Feasibility studies

Bacterial and Chemical Pollution of Littoral Waters of Lake Ohrid at Pogradec - Town Area, Valer Angjeli, Vasilika Petro and Ramazan Bukli, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2536.

Feasibility of Modeling Phosphorus Dynamics in Stormwa-ter Wetlands, Karina T. Lopez Ivich, William James, Isobel W. Heathcote and John Fitzgibbon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p524-529.

Reconstruction of Bergstrom Air Force Base to Austin-Bergstrom International Airport, James P. Amick and John Almond, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratue, ed., 1996), pl-11.

Record Breaking Bundled Pipeline Crossings, Gerald Don-nelly and Mark W. Struss, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p37-47.

Congress Approves New Design-Build Law, Michael Charles, CE Mar. 96, p100.

Design-Build Origins in Question, Dean E. Stephan, Jeffrey L. Beard and Michael Charles, CE Aug. 96, p26,28.

The DOD Groundwater Modeling System: A Conceptual Model Approach, David R. Richards and Norman L. Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2589-2594.

Extending the Legacy: Planning America's Capital for the 21st Century, Reginald W. Griffith, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p25-33.

The FEMA Program of Seismic Safety of Buildings, Ugo Morelli, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p159-160.

ner, et. and Kriev M. Chung, etc., 1997), p159-160.
Nationally Applicable Guidelines for the Seismic Rehabilitation of Existing Buildings, Christopher Rojahn, Daniel Shapiro, Lawrence D. Reaveley, William T. Holmes, Jack P. Moehle, James R. Smith and Ugo Morelli, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p276-277.

New Faces in Familiar Places, NE Nov. 96, p15.

NRC's Refocused Prelicensing High-Level Waste Regula-tory Program, M. V. Federline, R. L. Johnson and J. T. Greeves, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p196-198.

Planning for Intermodal Access at American Airports, Phil-lip S. Shapiro, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p78-88.

Regulatory Assessment of Evapotranspiration at Yucca Mountain, Neil M. Coleman and Michael P. Miklas, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p199-200.

Regulatory Perspective on Future Climates at Yucca Mountain, Neil M. Coleman, Norman A. Eisenberg and David J. Brooks, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p255-257

Technical Program Communec, 1990), p.253-237.
Use of Expert Judgment in the HLW Regulatory Program:
U.S. NRC Staff Draft Guidance, Janet P. Kotra, Michael
P. Lee, Norman A. Eisenberg and Aaron R.
DeWispelare, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p247-249.

State Agency Not Responsible for Performance Bond, CE Nov. 96, p28.

Transportation Update, Casey Dinges, CE Jan. 96, p98. Turnkey Procurement Speeds Highway Work, ME May/ June 96, p10.

Federal government 1997 Budget, Casey Dinges, CE May 96, p98. ASCE Publishes Guide to Federal A/E Contracts, CE May 96, p72-73

Ballard Picked as Army Engineers Chief, NE Sept. 96, p15. Building the Infrastructure of the New Federal City: 1793-1800, Robert J. Kapsch, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs,

Kennin, ed., Robert I. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p74-85.
Computers Aid Federal Contract Awards, CE July 96, p8.
The Federal Government's Existing Building Inventory, Ann Bieniawski, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p161-

162 Feds De-Engineering Government, Bhagwan Goklani, CE

reus De-Engineering Government, Bragwan Gokiam, CE Oct. 96, p37.
Feds Study Seismic Guidelines, CE Dec. 96, p8.
Fiscal '97 Budget Likes Infrastructure, Martin Hight, CE Nov. 96, p116.

Predictions on Federal Cleanup Market, CE July 96, p21-

President Nominates ASCE Fellow to NIBS Board, NE Sept. 96, p15

Protecting an American Folklore Legend, Arthur J. Sortet, III and Harry B. Thomas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p274-275.

Spheres of Influence: Federalism, Politics, and Engineering Design, Todd Shallat, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Ken-non, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p136-143.

State Engineers as Policymakers: Apolitical Experts in a Federalist System, Bruce E. Seely, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E.

Griggs, Jr., ed., 1996), p123-135. Taxing Matters for Trust Funds, Casey Dinges, CE July 96, p100.

Trust Fund Vote in House, Casey Dinges, CE June 96, p100. A User's Guide to Federal Architect - Engineer Contracts,

2nd edition, James B. Goodowens, 1996, 0-7844-0145-4,

500pp. Water Resources Legislation, Martin Hight, CE Sept. 96,

p116. White House Proposes Design-Build Regulation, Michael Charles, CE Oct. 96, p116.

Commercial Wetland Mitigation Banking, Robert Brumbaugh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4233-4238.

1970), P423-425. Congress Approves New Design-Build Law, Michael Charles, CE Mar. 96, p100. Federal Legislation Will Increase Design-Build Opportuni-ties, Michael C. Loulakis and William L. Cregger, CE

ties, Michael C. Loulakis and William L. Cregger, CE-July 96, p.35.

Managing Conflicting Demands from Endangered Species: Taking the Challenge, Kenneth W. Kirby, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4142-4147.

This Year's Budget, with Only Five Months Left, Is a Done Deal, NE June 96, p2.

The Watershed Approach: A Framework for Action, Louise P. Wise and Janet D. Pawlukiewicz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3574-3579.

Federal project policy

COFPAES Supports House Bill on Design-Build Fee Re-imbursement, CE June 96, p73.

Congress Approves New Design-Build Law, Michael Charles, CE Mar. 96, p100.

Corps Comes Back from Difficult Year, Michael Charles, CE Feb. 96, p98.

Corps Moves Closer to Bid Shopping, Allen W. Hatheway, CE June 96, p35.

Corps Public Works In Jeopardy, Hugh Converse, CE June 96, p35.

Federal Legislation Will Increase Design-Build Opportuni ties, Michael C. Loulakis and William L. Cregger, CE July 96, p35.

Federal role

The 1993 Flood: A Vindication of Federal Levees and Reservoirs or A Call for "Back to Nature"? Richard J. Di-Buono and Gary R. Dyhouse, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p163-164.

Environmental Policy Making in Today's Political Environ-ment, Warren M. Lee, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p2805-2809.

Natural Disaster Reduction Structures Specialist of the Urban Search and Rescue Task Forces, Daniel W. Cook, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p221-222.

A New Approach to Airport Security, Sal DePasquale, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p53-62.

The Watershed Approach: A Framework for Action, Louise P. Wise and Janet D. Pawlukiewicz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3574-3579.

Federal-state cooperation

The Management Improvement Program: A Model to Improve the Performance of Irrigated Agriculture, A. R. Dedrick, E. Bautista and S. A. Rish, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3470-3475

Managing Transboundary Water Sharing, Stephen E. Drap-er, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p3230-3235.

ps259-3239.

Resolution of the ACT-ACF Water dispute with a Federal-State Partnership, N. D. McClure, IV, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3417-3422.

Federal-state relationships

Developing the Infrastructure for Lead Assessment and Abatement, Joseph S. Carra, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p70-76.

Feedback control

Acceleration Feedback Control of MDOF Structures, S. J. Dyke, B. F. Spencer, Jr., P. Quast, M. K. Sain, D. C. Kaspari, Jr. and T. T. Soong, EM Sept. 96, p907-918.

Control of Sliding-Isolated Buildings Using Sliding-Mode Control, J. N. Yang, J. C. Wu, A. M. Reinhorn and M. Riley, ST Feb. 96, p179-186.

Wiley, 51 Feb. 20, p177-160.
Hybrid Control of Seismic Response Using Nonlinear Output Feedback, A. K. Agrawal and J. N. Yang, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p339-

Robust H., Control Considering Actuator Saturation. I: The-ory, J. Geoffrey Chase and H. Allison Smith, EM Oct. 96, p976-983.

Robust H., Control Considering Actuator Saturation. II: Applications, J. Geoffrey Chase, H. Allison Smith and Tet-suo Suzuki, EM Oct. 96, p984-993.

Feedback loops

Feedback Service for Reducing Losses Due to Building Problems, D. E. Allen, CF May 96, p67-72.

H. Active Seismic Response Control Using Static Output Feedback, İ. E. Köse, W. E. Schmitendorf, F. Jabbari and J. N. Yang, EM July 96, p651-659.
Making Effective Use of Construction Lessons Learned in

Project Life Cycle, Nabil A. Kartam, CO Mar. 96, p14-21

Travel Modeling with and without Feedback to Trip Distribution, Robert A. Johnston and Raju Ceerla, TE Jan./ Feb. 96, p83-86.

COFPAES Supports House Bill on Design-Build Fee Reimbursement, CE June 96, p73.

Major Changes to the AAA's Construction Arbitration Rules, George H. Friedman, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p10-20. Services Rendered, Payment Due, CE Sept. 96, p29.

Fender design

Design Criteria for Fenders at Ferry Landings, Charles T. Jahren and Ralph Jones, WW July/Aug. 96, p187-194.

Delaware Authority Puts Money on Composite Bridges, CE Oct. 96, p16-17 Design Criteria for Fenders at Ferry Landings, Charles T.

Jahren and Ralph Jones, WW July/Aug. 96, p187-194 Environmentally Acceptable Piling for Use in Navy Pier Fender Systems, David Hoy, George Warren and Duane Davis, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1189-1198.

Design Criteria for Fenders at Ferry Landings, Charles T. Jahren and Ralph Jones, WW July/Aug. 96, p187-194.

River Dnister Pollution with Toxic Waste as a Result of Accident at Potassium Fertilizers Factory, Valeriu Ropot, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3499.

Fiber composites

Posign Criteria for Pseudoductile Fiber-Reinforced Composites, Christopher K. Y. Leung, EM Jan. 96, p10-18.
 Failure of Fiber-Reinforced Granular Soils, Radoslaw L.

Michalowski and Aigen Zhao, GT Mar. 96, p226-234. High Performance Fiber-Cement Composites by Extrusion Processing, Yixin Shao and Surendra P. Shah, (Materials

for the New Millennium, Ken P. Chong, ed., 1996), p251-260. Nonlinear Dynamics of Unidirectional, Fiber-Reinforced Tori, Raouf A. Raouf and Anthony N. Palazotto, EM

Mar. 96, p271-276.

Fiber optics Embedded Fiber Optic Displacement Sensor for Concrete Elements, Xi Chen, Farhad Ansari and Hong Ding, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p359-365.

Fiber Sensors for Damage Detection on Large Structures and for Assessment of Deformation Behavior of Cemenand to Assessment of Bernandon Education of Center titious Materials, W. R. Habel, D. Hofmann, B. Hil-lemeier and F. Basedau, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p355-358. First Smart Bridge Tested, CE June 96, p18.

First Smart Bridge Tested, ET Apr./May 96, p1,6. Houston Transtar: Total Traffic Control, CE July 96, p12 Micromechanics Based Design of Optical Fiber Crack Sen-sor, Christopher K. Y. Leung and Neill Elvin, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p236-239.

Optical Fiber Sensors for Advanced Civil Structures, Marten J. de Vries, Stephen H. Poland, Jennifer L. Grace, Vivek Arya, Kent A. Murphy and Richard O. Claus, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996). p64-67

Optical Waveguide Solar Energy System for Lunar Materials Processing, T. Nakamura, J. A. Case and C. L. Senior, (Engineering, Construction, and Operations in ior, (Engineering, Construction, and Operation, Space, Stewart W. Johnson, ed., 1996), p783-790.

Simultaneous Measurement of Strain and Temperature Using Fiber Grating Sensors, Faramarz Farahi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p351-354.

Structural Sensing with Fiber Optic Systems, Raymond M. Measures, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p224-227.

Su., 1990), p.224-227.
Marriage⁷ of Fiber Optic and Wireless Communications Supporting Intelligent Transportation Systems, Bruce C.
Abernethy, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p.248-255.

Fiber reinforced materials

Behavior of Cementitious Composites with Randomly Dis-persed Microfibers, D. A. Lange, C. Ouyang and S. P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p281-287.

Behavior of Fiber Reinforced Polymer Concrete, C. Vipu-lanandan and S. K. Mantrala, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1160-1169. Biaxial Low-Cycle Fatigue Behavior of Steel Fiber-

Reinforced Concrete, Li Fang and Christian Meyer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p436-445.

Cellulose Fiber Reinforced Concrete, Parviz Soroushian, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p809-818.

Concrete Reinforcement with Recycled Fibers from Carpet Industrial Waste, Youjiang Wang, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p792-798.

Construction Applications of Polyolefin Fiber Reinforced Concrete, D. Strand, C. N. MacDonald, V. Ramakrish-nan and V. N. Rajpathak, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p103-112.

Crack Growth in Uniaxially Aligned Fiber Reinforced Mortar, Mohsen A. Issa and A. B. Shafiq, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p624-627.

Design and Construction of a Bonded Fiber Concrete Overlay of CRCP, Hadi H. Shirazi, Masood Rasoulian a Bill King, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1647-1658.

Design Criteria for Pseudoductile Fiber-Reinforced Composites, Christopher K. Y. Leung, EM Jan. 96, p10-18.

Development of a Solidification Method for Pulverized everopment of a Soliunication Method for Pulverizer Concrete Waste by Hydrothermal Hot-Pressing and Fiber Reinforcement, Kazuhiko Sato, Toshiyuki Hashida, Hideaki Takahashi and Nakamichi Yamasaki, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Dimensional Analysis of Bond Modulus in Fiber Pullout, Jyrki Kullaa, ST July 96, p783-787.

Durability and Long Term Performance of Cementitious Composites, A. Bentur, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1502.

Elastic Stability of Composite Plates with Wavy Fibers, Raouf A. Raouf, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1167-1170.

Electrical Tagging of Fiber Reinforced Cement Composites, Jong Seh Lee and Gordon Batson, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p887-896.

Evaluation of Bond Characteristics of Steel and Glass-Fiber Reinforcing Bars, James R. Lundy and Damian I. Ka-chlakev, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p638-647.

Evaluation of Bond Strength with Polypropylene Fiber Re-inforced Concrete, R. C. Zellers, V. Ramakrishnan, V. N. Rajpathak and S. Yu, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p123-132.

Failure of Unidirectionally Reinforced Composites with Frictional Matrix, Radoslaw L. Michalowski and Aigen Zhao, EM Nov. 96, p1086-1092.

Fire Resistance of Circular Steel Columns Filled with Fiber-Reinforced Concrete, V. K. R. Kodur and T. T. Lie, ST July 96, p776-782.

A Fracture Mechanics-Based Design Method for SFRC Tunnel Linings, Pruettha Nanakorn and Hideyuki Horii, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p819-828.

Heat and Moisture Absorption Effects in Composites; Theory and Experiments, A. Szekeres and R. A. Heller, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p63-72.

High Performance Fiber-Cement Composites by Extrusion Processing, Yixin Shao and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p251-260. HPFRCC - Extruded Pipes, Henrik Stang and Carsten

Pedersen, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p261-270. Investigation of the Use of Carpet Waste PP Fibers in Concrete, Antoine E. Nauman, Sandra Garcia, Marwan Kork-

crete, Antoine E. Naaman, Sandra Garcia, viatawan Kon-maz and Victor C. Li, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p782-791. Lateral Load Behavior of High Strength Fiber Reinforced Concrete Columns, Ramesh Nagarajah and David H. Sanders, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996, p396-407.

Matrix First Cracking Strength in Continuous Fiber Cement Composites, Jamil M. Alwan and Antoine E. Naaman, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

p474-483

Mechanical Behavior of Confined Reactive Powder Con cretes, Éric Dallaire, Olivier Bonneau, Mohamed Lachemi and Pierre-Claude Aitcin, (Materials for the

New Millennium, Ken P. Chong, ed., 1996), p555-563.
Micromechanics Based Design of FRCC Components,
Christopher K. Y. Leung and Y. Philip Geng, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p419-425.

Non Linear Computation of Fiber Reinforced Micro-Concrete Structures, Mouloud Behloul, Régis Adeline and Gérard Bernier, (Worldwide Advances in Structural and Gerard Bernet, (Worling Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p\$18-529. Nonlinear FE Solution for Thin-Walled Open-Section Composite Beams, B. Omidvar and A. Ghorbanpoor, ST

Nov. 96, p1369-1378.

On the Use of Fiber Reinforced Composites for Infrastructure Renewal— A Systems Approach, Vistasp M. Kar-bhari, Frieder Seible and Gilbert A. Hegemier, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1091-1100.

Performance Characteristics of Polyolefin Fiber Reinforced Concrete, V. Ramakrishnan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p93-102.

Pitch-Based Carbon Fibre Reinforced Concretes, A. M. Brandt and L. Kucharska, (Materials for the New Millen-

nium, Ken P. Chong, ed., 1996), p271-280. Polyolefin Fiber Reinforced Concrete, Billy D. Neeley and

Edward F. O'Neil, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p113-122. Probabilistic Analysis of Randomly Distributed Fiber Reinforced Soil, Gopal Ranjan, R. M. Vasan and H. D. Charan, GT June 96, p419-426.

Property Deterioration of Composites, Charles E. S. Ueng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p416-419.

Response of MMC Tubes with Internal Fiber Cracks, Sarah C. Baxter and Marek-Jerzy Pindera, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), 142-415.

Simplified Analysis of Thin-Walled Composite Members, A. Ghorbanpoor and B. Omidvar, ST Nov. 96, p1379-

1383. Size Effects in the Fracture of Fiber Reinforced Materials, Roberta Massabó and Alberto Carpinteri, (Worldwide Advances in Structural Concrete and Massonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p462-473.

Transition from Brittle to Quasi-Brittle Behavior in Fiber Reinforced Brittle Matrix Composites, Claudia P. Oster-tag, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1219-1227.

Uniaxial Cyclic Behavior of Discontinuous Fiber Reinforced Composites, Takashi Matsumoto and Victor C. Li, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p426-435.

Use of Fibers to Improve Cracking Characteristics of Concrete, P. Balaguru, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p183-192.
Utilization of Recycled Fibers in Concrete, H. C. Wu, Y.

M. Lim, V. C. Li and D. J. Foremsky, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p799-808.

Volume and Stress Heterogeneity Effects in Fiber-Reinforced Composites, François Hild and Pascal Feillard. (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p1026-1029.

SIMCON-A Novel High Performance Fiber-Mat Reinforced Cement Composite for Repair, Retrofit and New Construction", Neven Krstulovic-Opara, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p288-

Fiber reinforced plastics

Acoustic Emission Monitoring of Pultruded Bridge Members, Arup K. Maji, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p963-966.

Characterization of Pultruded FRP Wide-Flange Beams, Julio F. Davalos, Pizhong Qiao and Hani A. Salim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p223-232

Comparison of Static and Dynamic Performance of Poly-carbonate Filled and Unfilled Gears, V. P. Gosavi and P. P. Chikate, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p338-347.

Composite Applications in the Navy Waterfront Infrastruc-ture, L. J. Malvar, G. E. Warren and C. M. Inaba, (Materials for the New Millennium, Ken P. Chong, ed., 1996).

Composite Repair/Upgrade of Concrete Structures, Orange S. Marshall, Jr. and John P. Busel, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p932-938.

Concrete and Sand Confined with Composite Tubes, Srinivasa L. Iyer, A. Kortikere and A. Khubchnadani, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1308-1319.

Concrete Beams and Slabs Retrofitted with CFRP Lam-inates, M. Arockiasamy, Ahmed Amer and M. Shahawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p776-779.

Creep Behavior of FRP-Reinforced Wood Members, Nikolaos Plevris and Thanasis C. Triantafillou, ST Feb. 95,

Development of Tension Grips for GFRP Rebars, Hota V. S. GangaRao and Derek Altizer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p394-399.

Engineering Innovations Highlighted at Research Symposi-um, ET Mar./Apr. 96, p1,5.

Entity-Relationship Modeling of Composite Materials Data, Lisa K. Spainhour and William J. Rasdorf, CP July 96, p226-235

Evaluation of FRP Composites Bolted and Adhesive Joints, Sotiris Sotiropoulos, Hota V. S. GangaRao and Roberto Lopez-Anido, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p233-242.

Fatigue Strength of Externally Reinforced Concrete Beams, L. C. Muszynski and R. L. Sierakowski, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p648-

Fiber-Reinforced Bridges Studied, CE May 96, p8.

Field Performance of FRP Composite Prestressing Cables, Richard G. Lampo, David E. Hoy and Robert J. Odello, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p400-408.

FRP Applications in Geotechnical Engineering, J. A. R. Ortigao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p535-544.

Grouted Anchors for Carbon FRP Tendon, Antonio Nanni and Jay Thomas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p527-534.

Hybrid Columns of FRP and Concrete, Mohsen Shahawy, Amir Mirmiran and Michel Samaan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p73-82.

Hydrothermal Effects on the Bearing Strength of GFRP Composite Joint, Stephanie Hurd and Robert Yuan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p243-250.

Improving Design in Composite Thin-Walled Columns, Luis A. Godoy and Leonel I. Almánzar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1155-1158.

Local Buckling Experiments on Pultruded Composite Beams, Roberto Lopez-Anido, Rachid Berdidi, Hota V. S. GangaRao and Mohammed Al-Megdad, (Materials for the New Millennium, Ken P. Chong, ed., 1996). p914-923

Description of Concrete Columns with CFRP, M. Arockiasamy, Ahmed Amer, S. Chidambaram and M. Shahawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1050-1053.

Mode-I Fracture Toughness of Composite/Wood Interface Bond, Julio F. Davalos, Prabbu Madabhusi-Raman and Pizhong Qiao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1469-1478.

New Compression Based Design Principals for Reinforced Glulams, Daniel A. Tingley and Stephen Cegelka, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Non-Accelerated Creep-Rupture of Fiber-Reinforced-Plastics in a Concrete Environment, Andrew Hundley

rassics in a Concrete Environment, Andrew Hunding and Charles Dolan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p519-526.

Panel on Composites for Infrastructure, Srinivasa Iyer, Charles McClasky, Mark P. Henderson, Hota GangaRao and Peter Head, (Materials for the New Millennium, Ken

P. Chong, ed., 1996), p781.

Rehabilitation of a Concrete Bridge Using FRP Laminates, Joseph W. Tedesco, J. Michael Stallings, Mahmoud El-Mihilmy and Michael W. McCauley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p631-637.

Reinforced Glued Laminated Timber, Bruce D. Pooley,

P.E., CE Sept. 96, p50-53.

Smart Composite Rebars with Enhanced Ductility, A. Belarbi, K. Chandrashekhara and S. E. Watkins, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p788-791.

ing Mechanics, Y. K. Lin and T. C. Su, 1996), p788-791.
Strengthening Concrete Block Walls Using Carbon Fiber.
Dan Engebretson, Rajan Sen, Gray Mullins and Alfred Hartley. (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1592-1600.
Strengthening Steel Composite Beams with CFRP Laminates, Rajan Sen, Larry Liby, Gray Mullins and Ken Spillett. (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1601-1607.
Stress Laminated Timber Decks. Using Glass FRP Tensers.

Stress-Laminated Timber Decks Using Glass FRP Ten-dons, H. J. Dagher, B. Abdel-Magid, S. Iyer and W. Lu, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1458-1468.

Structural Design Forum, SC Aug. 96, p62-68.

Thermogravimetric Analysis of Fiber Reinforced Plastics, Luca Prian, Ritsuko Pollard and Aaron Barkatt, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p54-62.

Ultrasonic Characterization of FRP Composites for Bridge Applications, Jerrol W. Littles, Jr., Laurence J. Jacobs and Abdul-Hamid Zureick, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p959-962.

K. Lin and T. C. Su, 1996), p959-962.
A Unified Limit State Approach Using Deformability Factors in Concrete Beams Reinforced with GFRP Bars, P. V. Vijay and H. V. S. GangaRao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p657-665.
Warping Solution for Shear Lag in Thin-Walled Orthotropic Composite Beams, Roberto Lopez-Anido and Hota V. S. GangaRao, EM May 96, p449-457.

Fiberglass

Composite Materials Reinforcement of Existing Masonry Walls, J. Bradley Christensen, Jeremy Gilstrap and Charles W. Dolan, AE June 96, p63-70.

Charles W. Dolan, A.E. June 20, po3-70.
Environmentally Acceptable Piling for Use in Navy Pier Fender Systems, David Hoy, George Warren and Duane Davis, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1189-1198.
First Post Tensioned Deck Bridge with Composite Cables, Company of the Composite Cables, Company of Materials, for the

Srinivasa L. Iyer and Gopi Sripathy, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p375-385.

New Materials and Methods for Insitu Rehabilitation of Underground Pipe, Richard D. Blackmore, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1298-1307

Sewer Crossing of Creek with Bridge Widening, Surendra Anketell, (Pipeline Crossings 1996, Lawrence F. Ca-talano, ed., 1996), p275-281.

Fibers

Adhesion and Aerodynamic Resuspension of Fibrous Parti-cles, Nurtan A. Esmen, EE May 96, p379-383.

Bubbleless Fiber Aerator for Surface Waters, Peter T. Weiss, Bryan T. Oakley, John S. Gulliver and Michael J. Semmens, EE July 96, p631-639.

Dimensional Analysis of Bond Modulus in Fiber Pullout,

Jyrki Kullaa, ST July 96, p783-787.

Effect of Fiber Waviness on the Buckling of Composite Plates, Raouf A. Raouf, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pi 102-1107.

Effect of Sheet Bonding Condition on Concrete Members Having Externally Bonded Carbon Fiber Sheet, Hiroyuki Yoshizawa, Toru Myojo, Masayoshi Okoshi, Mutuki Mizukoshi and Howard S. Kliger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1608-1616.

Fiber Orientation in Composite Structures for Optimal Resistance to Creep Failure, David N. Robinson and Wei Wei, EM Sept. 96, p855-860.

Probabilistic Analysis of Randomly Distributed Fiber-Reinforced Soil, Gopal Ranjan, R. M. Vasan and H. D. Charan, GT June 96, p419-426.

These Straw Houses Won't Blow Down, CE Nov. 96, p13-

Field investigations

Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST May 94, p1471-1488.

Controlled Field Experiments for Assessment of Subsurface NAPL Behaviour and Remediation, J. A. Cherry and D. J. A. Smyth, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p3-24.

Dynamics of River Ice Jam Release, Hung Tao Shen and Shunan Lu, (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p594-605.

Electrical Construction Foreman Task Scheduling, Bolivar A. Senior, CO Dec. 96, p363-369.

Estimation of Leakage Quantity for Long Auxiliary Venti-lation Systems, Felipe Calizaya and Pierre Mousset-Jones, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p429-431.

Field Data Collection and Analysis for Verification of Estuarine Models, W. H. McAnally, T. C. Pratt, G. T. Stevens and T. M. Parchure, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p204-214.

Field Evaluation of Water and Solute Distribution from a Point Source, Akbar Ali Khan, Muluneh Yitayew and A. W. Warrick, IR July/Aug. 96, p221-227.

Field Investigation of Potential Contamination by Bitu-men-Coated Piles, Albert T. Yeung, Rajan Viswanathan and Jean-Louis Briaud, GT Sept. 96, p736-744.

Field Measurements of Streambed Scour at Bridge Piers in Ohio, K. Scott Jackson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3033-3042.

Field Observations of Instrumented Highway Sections with Different Frost Protections, J.-M. Konrad, G. Dore and M. Roy, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p652-663

Forensic Evaluation of Guyed Tower Collapses, David F. Mazurek and Jonathan C. Russell, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p510-517.

Geophysical Investigation of Karst Collapse Features for a Proposed Waste Rock Stockpile Irian Jaya, Indonesia, Philip H. Duoos and Rowland B. Cromwell, (Case Histo-ries of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p86-100.

Improving the Effectiveness of Post Earthquake Investigations, Susan K. Tubbesing, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p327-328.

Intracrystalline Diffusion in Clinoptilolite: Implications for Radionuclide Isolation, Sarah K. Roberts, Brian E. Viani and Douglas Phinney, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p48-49

Investigation of Bridge Floor-Truss Behavior in Tied-Arch Span, Thomas E. Cousins, J. Michael Stallings and Brad-

ley P. Christopher, CF May 96, p79-86.

Measuring and Modeling Time Dependent Soil Behavior, Geotechnical Special Publication No. 61, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996, 0-7844-0205-1, 288pp.

Modelling of Hydro- and Lithodynamic Processes in Kollobrzeg Region, Leonard Gajewski, Elżbieta Zawadzka, Juliusz Gajewski and Andrzej Lewandowski, (Coast-al Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p891-902.

Multiscale Shore Variability at Two Coasts, Pierluigi Am-inti, Zbigniew Pruszak and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p617-628.

Practical Formulas for Estimation of Cable Tension by Vi-bration Method, Hiroshi Zui, Tohru Shinke and Yoshio Namita, ST June 96, p651-656.

Scour Processes Observed in Field Data, Mark N. Landers and David S. Mueller, (North American Water and Environnent Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3052-3061.

Scour-hole Dimensions at Selected Bridge Piers in New York, Gerard K. Butch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3043-3051.

Seismic Performance of Confined Sill Plate Connections, Joseph M. Bracci, Rebecca F. Stromatt and David G. Pollock, ST Nov. 96, p1357-1363.

Site Characterization Process Saves Time and Money, ET

Mar./Apr. 96, p1,4. Solid Waste Management in Rural Alaska, Henriette Mol-berg Hansen and Howard P. Thomas, (Cold Regions En-gineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p769-779.

Spingat, Frank, Hans-H. Dette and Karsten Peters, (Coast Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p477-488.

Study of Wind Waves in Gulf Intracoastal Waterway at Aransas National Wildlife Refuge, Darla A. Hersberger and Francis C. K. Ting, WW Sept./Oct. 96, p239-244.

Vegetative Roughness in Flood Control Channels, Gary E. Freeman, David R. Derrick and William J. Rahmeyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1513-1518.

Velocity Profile in Shallow Coastal Waters, Habib D. Anwar, HY Apr. 96, p220-223.

3D Flow Structures - From Laboratory to Field Applica-tions, P. Mewis and K.-P. Holz, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3446-3451.

Air Force Planetary Defense System: Initial Field Test Re-sults, Grant Stokes, Robert Weber, Frank Shelly, David Beatty, Herbert Viggh, Eugene Rork and Byron Hays,

Beatty, Heroert Viggn, Eugene Roix and Byron Hays, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p46-53.
Analysis of Shoring Loads Using Field Data, T. W. Phil-brick, Jr. and D. V. Rosowsky, (Building an Internation-al Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p711-718.

Beach Profile Evolution Under Mean Conditions, José-María Medina V., Luis Moreno and José C. Santás, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p595-606.

Behavior of RC Bridge Decks with Flexible Girders, L. Cao, J. H. Allen, P. B. Shing and D. Woodham, ST Jan.

96, p11-19.

Bicycle-Wheel Spoke Patterns and Spoke Fatigue, Henri P. Gavin, EM Aug. 96, p736-742.

Bridge Strength Evaluation Based on Field Tests, Jonathan S. Reid, Michael J. Chajes, Dennis R. Mertz and Geoffrey H. Reichelt, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p294-297.

Coastal Engineering Laboratory and Field Measurements: Some Uncertainties in Measurement, Frederic Raichlen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1139-1143.

Comparison and Evaluation of Different Riprap Stability Formulas Using Field Performance, Mahrez Ben Belfadhel, Guy Lefebvre and Karol Rohan, WW Jan./Feb.

Condition Assessment for Bridge Management, A. Emin Aktan, Daniel N. Farhey, David L. Brown, Vikram Dalal, Arthur J. Helmicki, Victor J. Hunt and Stuart J. Shelley, IS Sept. 96, p108-117

Constitutive Modeling and Analysis of Creeping Slopes, Chandra S. Desai, Naresh C. Samtani and Laurent Vul-

liet, GT Jan. 95, p43-56.

Correlations Between a Simple Field Test and Relative Density Test Values, Danny K. McCook, GT Oct. 96.

- Discrete-Fracture Modeling of Thermal-Hydrological Proc-esses at G-Tunnel and Yucca Mountain, John J. Nitao and Thomas A. Buscheck, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p117-118.
- Dynamic Behavior of Glued Laminated Timber Girder Bridges, Terry J. Wipf, Michael A. Ritter and Douglas L. Wood, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p260-267.
- An Energetics Approach to Sand Transport on Beaches, Paul Russell, Yolanda Foote and David Huntley, (Coast-al Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p829-840.
- Evaluation and Rehabilitation of Victoria Bridge, G. Oommen, A. Lim and S. Tselios, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p207-214.
- Evaluation and Validation of the Mild Slope Evolution Equation Model Using Field Data, Suzana Ilić and Andrew Chadwick, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p149-160.

Feedback Service for Reducing Losses Due to Building Problems, D. E. Allen, CF May 96, p67-72.

- Field and Laboratory Measurements of Shoring Loads, Dryver R. Huston, Peter L. Fuhr and Jamie Willsey, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p704-710.
- Field Inspection Data Collection using Personal Digital Assistants and Digital Cameras, Anthony D. Songer and Eddy M. Rojas, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1047-
- Field Instrumentation to Study the Time-Dependent Behavior in Sunshine Skyway Bridge. I, Mohsen A. Shahawy and M. Arockiasamy, BE May 96, p76-86.
- Field Measurement of Boulder Flow Drag, James C. Bath-
- urst, HY Mar. 96, p167-169. Field Observations on Stabilization of Unpaved Roads with Geosynthetics, R. J. Fannin and O. Sigurdsson, GT July
- Field Performance of FRP Composite Prestressing Cables, Richard G. Lampo, David E. Hoy and Robert J. Odello, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p400-408.
- Field Performance of Stress-Laminated T and Box Beam Bridges, Barry Dickson and Hota GangaRao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p253-259.
- Field Study of Pretension in Large-Diameter A490 Bolts, Charles J. Oswald, Robert J. Dexter and Steven K. Brauer, BE Aug. 96, p121-126.

A Field Test of NAPL Removal by High Molecular Weight Alcohol Injection, Ronald W. Falta, Scott E. Brame, Cin-dy M. Lee, John T. Coates, Charles Wright, Sarah Price, Patrick Haskell and Eberhard Roeder, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p257-268.

1990), p231-208.
Field Testing & Evaluating Carbon Cable Prestressed Pile, Srinivasa L. Iyer, Sivakumar Ramabhadran and Brian S. Vulcan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p386-393.
Field Trial Results of VMS Travel Time Display on the

Corridor Peripherique of Paris, H. Haj Salem, S. Cohen, E. Sididki and M. Papageorgiou, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p368-372.

Field Verification of Dem-Derived Watershed Response, Randal F. Bodnar, Mark Michelini and Rafael G. Quimpo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p3206-3211.

Field-Scale Application of In-Situ Cosolvent Flushin Evaluation Approach, M. D. Annable, P. S. C. Rao, R. K. Sillan, K. Hatfield, W. D. Graham, A. L. Wood and C. G. Enfield, (Non-Aqueous Phase Liquids (NAPLs) in Sub-Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p212-220.

Full-Scale Resonance Tests of a Railway Bridge, E. Maragakis, B. M. Douglas, S. Haque and V. Sharma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996).

p183-190.

Fully Automated Rebar CAD/CAM System: Economic Evaluation and Field Implementation, Ronie Navon, Ya'acov Rubinovitz and Mendi Coffler, CO June 96, p101-108.

p101-108.
Gator Communicator Design of a Hand Held Digital Data Mapper, John F. Alexander, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1052-1057.
Ground-Water Remediation with Granular Collection System, Richard W. Frieseke and Erik R. Christensen, EE

June 96, p546-549.

Instrumentation for Field Measurement of Abutment Scour. J. D. Schall, G. R. Price and G. A. Fisher, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p931-939. Interaction Between Nearshore Natural Processes on

macro-Tidal Beaches. Case Study Along the Capricorn Coast, Australia, Jerzy Piorewicz and Paul Boswood, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p489-500. Interface Design for Pen-Based Computers in the FIRS

Project, Eddy M. Rojas and Anthony D. Songer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul

Chinowsky, ed., 1996), p1027-1033.

Irrigation of Grain Sorghum on the Delmarva Peninsula, W. F. Ritter and R. W. Scarborough, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3904-3909.

Laboratory and Field Electrochemical Monitoring Tech-niques of Reinforcement Corrosion, C. Andrade and C. Alonso, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1501.

Chong, ed., 1993, p.1301.
A Large-Scale Experiment on Breaching in Sand-Dikes, Paul J. Visser, Arie W. Kraak, Wim T. Bakker, Marion J. Smit, D. Wino Snip, Henk J. Steetzel and Jan van de Graaff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p583-594.

Laser Induced Fluorescence and Cone Penetrometer Test-ing for Delineation of Hydrocarbons, Benjamin J. Timerson and Donald M. Moran, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p115-126.

Lateral Distribution Factor from Bridge Field Testing, Chung C. Fu, Maged Elhelbawey, M. A. Sahin and David R. Schelling, ST Sept. 96, p1106-1109. Loading Tests on Circular and Ring Plates in Very Dense Cemented Sands, Nabil F. Ismael, GT Apr. 96, p281-

Longshore Currents Over Barred Beaches, A. J. H. M. Reniers, E. B. Thornton and T. C. Lippmann, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p413-424.

Microbiological Sorption and Transport: Field and Labora-tory Experiments, Larry E. Hersman, (High Level Radio-

active Waste Management, Technical Program Committee, 1996), p27-29.

Mobile Field Data Acquisition for Construction Quality Control and ISO 9000 Certification, Robert F. Cox and Raja R. A. Issa, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1041-

Modeling Coliform Mortality in Waste Stabilization Ponds, Aloice W. Mayo, EE Feb. 95, p140-152.

Modeling of Flow Through Fractured Tuff at Fran Ridge, Roger R. Eaton, Clifford K. Ho, Robert J. Glass, Michael J. Nicholl and Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p76-78.

Modelling of El Berrocal Field Tracer Tests, J. P. Humm, J. Guimera, P. Grindrod and S. P. Crompton, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p114-116.

Numerical Simulation of Field Air Sparging Operations, Andrew G. Larson and Ronald W. Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: As-sessment and Remediation, Lakshmi N. Reddi, ed., 1996), p551-562.

On Quantifying Inherent Soil Variability, Kok Kwang Phoon and Fred H. Kulhawy, (Uncertainty in the Geo-logic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.

Roth, ed., 1996), p326-340.

On Structural Identification of Constructed Facilities, A. Emin Aktan and James T. P. Yao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p651-658.

Optimizing Soil Vapor Extraction System Design and Op-erations for NAPL Remediation, John M. Farr, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p201-211

An Overview of Field Experiments on a Low-Rise Build-ing, Douglas A. Smith, Kishor C. Mehta and Praveen Sandri, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-

madi, ed., 1996), p1029-1036.

Performance of a Triodetic Foundation Near Fairbanks, Alaska, Thomas C. Kinney, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p291-302.

Pipe-Soil Interaction Analysis of Field Tests of Buried PVC Pipe, Senro Kuraoka, Balvant Rajani and Caizhao Zhan, IS Dec. 96, p119-120.

Predicting the Concentration of Trace Metals in Natural Waters: Application of Co-Precipitation and Co-Dissolution Models, Jordi Bruno and Lara Duro, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p64-66.

Preserving Williamsburg's Cables, Maria Grazia Bruschi and Terry L. Koglin, CE Mar. 96, p36-39.

PRIMAVERA: Integrated ATT Strategies for Urban Arteri-KIMAVEKA: Integrated A11 Strategies for Crossa Auter-als, F. O. Montgomery, A. D. May, K. A. Fox, F. Biora, V. Mauro and S. Jones, (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p685-689.

Fish Diversion Screen, F. C. Winchell, S. V. Amaral, E. P. Taft, T. C. Cook, A. W. Pitzga, E. M. Paolini and C. W. Sullivan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p881-886.

Scour Around Circular Piers, Prabhata K. Swamee and Chandra Shekhar P. Ojha, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2550-2555.

Ten Year Performance of a High Performance Concrete Used to Build Two Experimental Columns, Eric Dallaire, Michel Lessard and Pierre-Claude Aitcin, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p375-384.

Unsaturated Hydraulic Conductivity of Two Compacted Barrier Soils, J. S. Meerdink, C. H. Benson and M. V.

Khire, GT July 96, p565-576.

A User's Experience in Design and Field Quality Control With the Superpave System, Gerald Huber, Xishun Zhang and Robin Fontaine, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p711-720.

VARIA - Variable Message Sign Control Based on OD-Estimation in a Motorway Network, Thomas Sachse and Hubert Schmid, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p383-387.

Verification of Site-Specific Live Load on Bridges, Sangjin Kim, Andrzej S. Nowak and Roger Till, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p214-217.

Web Buckle at I-40 Bridge Test, John Minor and Clinton Woodward, BE Feb. 96, p34-36.

Winter Effects on Hydraulic Conductivity of Compacted Clay, C. H. Benson, T. H. Abichou, M. A. Olson and P. J. Bosscher, GT Jan. 95, p69-79.

"Suspicious" Implications Allayed, William F. Powers, III, Kerry B. Allen and Michael P. Bruen, CE Sept. 96, p31-

Filament wound materials

A Computer Controlled Filament Winding Technique for Manufacturing Cement Based Cross-Ply Laminates, B. Mobasher and A. Pivacek, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1347-1356.

Composite Action of Foamed and Lightweight Aggregate Concrete, Yasser M. Hunaiti, MT Aug. 96, p111-113.

Cyclic Tests of Concrete-Filled Steel Box Columns, Hanbin Ge and Tsutomu Usami, ST Oct. 96, p1169-1177.

Earthquake-Induced Ground Settlements of Bridge Abut-ment Fills, Raj V. Siddharthan and Mahmoud El-Gamal, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p100-123.

Experimental Evaluation of Masonry-Infilled RC Frames, Armin B. Mehrabi, P. Benson Shing, Michael P. Schuller and James L. Noland, ST Mar. 96, p228-237.

Failure of Desert View Drive Embankment, Robert W. Day, CF Feb. 96, p11-14.

Fire Resistance of Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie and V. K. R. Kodur, ST Jan. 96, p30-36.

High Density Polyethylene Pipe under High Fill: A Contin-uing Study, John J. Meyer and J. L. (Jack) Hilfiker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p77-87.

Interdependence of Beach Fill Volumes and Repetition Intervals, Hans-H. Dette, Alfred Fuehrboeter and Arved J. Raudkivi, WW Nov./Dec. 94, p580-593.

Representation of Concrete-Filled Steel Tube Cross-Section Strength, Jerome F. Hajjar and Brett C. Gourley, ST Nov. 96, p1327-1336.

Simplified Dean's Method for Beach-Fill Design, James R.

Houston, WW May/June 96, p143-146.

Stability of a Steep Slope Supporting a Building, Stephen G. Wright and Frank G. Bryant, Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p434-450.

Filter materials

Solute Breakthrough Curves for Processed Kaolin at Low Flow Rates, Charles D. Shackelford and Patrick L. Redmond, GT Jan. 95, p17-32.

Surface Water Pretreatment Using Floating Media Filter, C. Visvanathan, D. R. I. B. Werellagama and R. Ben Aim, EE Jan. 96, p25-33.

Filters

30-Inch Gas Pipeline Crossing of the San Juan River: Open Cut Excavation in Quality Water Area, James D. Evanoff and Neil P. Stockholm, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p186-193.

Comparison of Methods for Sizing Secondary Treatment Filters for Wastewater, Paily P. Paily, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p565-570.

Correlations Between a Simple Field Test and Relative Density Test Values, Danny K. McCook, GT Oct. 96,

p860-862.

Design Relationship for Filters in Bed Protection, K. J. Bakker, H. J. Verheij and M. B. de Groot, HY Sept. 94,

p1082-1088.

Hydraulic and Engineering Considerations in Designing Constructed Treatment Wetlands for a Lake Restoration, C. Charles Tai, Donthamsetti V. Rao and Jonathan Polinkas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p257-262

p23) 1-202.
Optimum Smoothing Filter for Geophysical Tomography by the Extended Bayesian Method, Yusuke Honjo, Toshiaki Yamaue and Nobuaki Kudo, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p942-945.

South American Dam Failure Studied, CE Aug. 96, p18.

Vibration Isolation for Space Station Micro-Gravity Using High Temperature Superconductors, W. K. Chu, K. Ma, H. Xia and T. L. Wilson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p540-544.

Filtration

Approximate Theory for Radial Filtration/Consolidation, Frank M. Tiller, J. M. Kirby and H. L. Nguyen, GT Oct.

Back to Bacteria: A More Natural Filtration, Bruce E. Rittmann, CE July 96, p50-52.

Indoor Air Quality Cost Comparisons in Three Typical Buildings, Peter Rojeski, Jr. and Harmohindar Singh, AE Sept. 96, p107-114.

Milwaukee's Ozone Upgrade, James C. Kaminski, P.E. and Paul W. Prendiville, P.E., CE Sept. 96, p62-64.

Modeling Pumping of Saline Water from Two-Layer Aqui-fer, Andrzej Sawicki, HY June 96, p341-347.

Protecting Drinking Water: Rapid Detection of Human Fecal Contamination, Injured, and Non-Culturable Pathogenic Microbes in Water Systems, D. C. White, D. E. Nivens, A. A. Arrage, B. M. Appelgate, S. R. Reardon and G. S. Sayler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1645-1650.

Scaling Bacterial Filtration Rates in Different Sized Porous Media, Michael J. Martin, Bruce E. Logan, William P. Johnson, David G. Jewett and Robert G. Arnold, EE May

96, p407-415.

Surface Water Pretreatment Using Floating Media Filter, C. Visvanathan, D. R. I. B. Werellagama and R. Ben Aim,

EE Jan. 96, p25-33.

Vapor Phase Biofiltration for Removal of VOCs, Malcolm K. Man, Badri N. Badriyha, Walter Den and Massoud Pirbazari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1209-1214.

CSFs in Competitive Tendering and Negotiation Model for BOT Projects, Robert L. K. Tiong, CO Sept. 96, p205-

Interface Problems between Building Owners and Designers, Abdul-Mohsen Al-Hammad and Ibrahim Al-Hammad, CF Aug. 96, p123-126.

Financial analysis

Financial Management Primer for New Project Managers, Gregory L. Magee, ME Sept./Oct. 96, p62-67.

Predicting Contractor Failure Using Stochastic Dynamics of Economic and Financial Variables, Jeffrey S. Russell and Huaming Zhai, CO June 96, p183-191.

The Strategic/Master Plan at Boeing Field: A Means of Op-timizing Airport Utilization at an Inner City Airport, Julie Rodwell, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p12-23. Use of Risk Models to Mitigate Financial Impacts from

Catastrophic Natural Events, Auguste Boissonnade, Peter Ulrich and Richard D. Wales, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p199-200.

Financial Incentive programs
Assessing ESOPs, Ed Carberry, ME Sept/Oct. 96, p17-19.
Storm-Water Utility User Fee Credits, Andrew J. Reese, WR Jan./Feb. 96, p49-56.

Financial management

Changing Times for Engineers Is Focus of Triennial Con-clave between U.S., Britain, Virginia Fairweather, NE Dec. 96, p1,10.

Delivering the Project in Technical Consulting, James L. Hawley and John Frauenhoffer, AE June 96, p55-62.

Hawley and John Frauenhofter, AE June 96, p52-62. Electronic Signatures Are Revolutionizing Highway Programs, Michael J. Vecchietti and Lawrence I. Neff, CP Oct. 96, p264-266. Financial Management Primer for New Project Managers, Gregory L. Magee, ME Sept./Oct. 96, p62-67. Free Checking, ME Jan./Feb. 96, p13.

Lower Overhead Responsible for Rise in Profits, ME Mar./ Apr. 96, p8.

Solving Collection Problems to Increase Revenue: The Houston Experience, Karen Philippi, (North American Water and Environment Congress & Destructive Water,

water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), P4282-4287.
Utilizing Coordinated Billing and Metering Systems Analysis to Enhance Utility Revenue on a Shared Revenue Basis, Randy P. Schuler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4275-4281.

Financial reports
ASFE Publishes Financial Performance Survey, ME July/ Aug. 96, p6.

Nationwide Survey of Civil Engineering-Related R&D, CERF Report #93-5006, Civil Engineering Research Foundation, 1993, 0-87262-970-8, 80pp. Software Acconts for Productivity Gain, ME Mar./Apr. 96,

Financial responsibility

Organizing and Managing a Finance-Design-Build Project in Turkey: Fourth Roebling Lecture, 1995, Donald K. Stager, CO Sept. 96, p199-204. Training as a Potential Profit Center, Matt O'Connell, ME

Sept./Oct. 96, p25-27.

Financing

Any New Address Stress? James Donald Strong, CE Nov. 96, p36.

Border Environment Cooperation Commission: 1995 Year End Status Report, Peter Silva, (North American Water

End Status Report, Peter Silva, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1819-1821.
Financing the Future of Storm Water, Patrick S. Collins, CE Mar, 96, p64-66.
Impacts of NAFTA on Environmental Engineering, Mark W. Killgore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2306-2311.
An Irresistible Offer, Max D. Crumit, P.E., Wafie M. Ar-

An Irresistible Offer, Max D. Crumit, P.E., Wafic M. Arnoush, P.E. and Scott L. Montgomery, P.E., CE Aug. 96,

p40-43. patt-43.
Joint Development Planning for Inner City Airport Capital Improvements, Orikaye G. Brown-West, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p199-211.
Subcontractor Gives His Side of Story, Charles J. Berkel,

CE May 96, p29-30.

Finegrained soils

Cumulative Plastic Deformation for Fine-Grained Subgrade Soils, Dingqing Li and Ernest T. Selig, GT Dec. 96,

Electrode Placement for Subsurface Electric Field Genera tion, William O. Rasmussen and Muniram Budhu, EE Aug. 96, p764-768.

Simulation of Pore Pressures in Triaxial Creep Tests, Horst G. Brandes and Armand J. Silva, (Measuring and Model-ing Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p96-108.

Finite difference method

Automated Tools for Spatially Distributed Rainfall/Runoff Modeling, E. James Nelson and Norman L. Jones, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2903-2908.

Depth-Averaged Boussinesq Equations Applied to Flow in a Converging Channel, Thomas Molls and Gang Zhao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p328-333.

p328-333.

Modeling of NOM-Facilitated PAH Transport Through Low-f., Sediment, William P. Johnson, Gary L. Amy and Steven C. Chapra, EE June 95, p438-446.

Multi-Scale Models of the Diffusivity of Concrete, Dale P. Bentz and Edward J. Garboczi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p574-582.

Multigrid Methods in GIS Grid-Cell-Based Modeling Environment Dange C. McKinney and Han-Lin Tsai. CP.

vironment, Daene C. McKinney and Han-Lin Tsai, CP

Jan. 96, p25-30.

Nondestructive Evaluation of Elastic Constants and Crack Noncestructive Evaluation of Teasitic Constants and Crack Depth in Concrete Using Transient Elastic Waves, T.-T. Wu and J.-S. Fang, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, p861-868. Numerical Simulation of Flow Field Around Buildings,

Da-hai Yu and Ahsan Kareem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p490-493.

Theory and Simulations of Relaxation and Cyclic Granular Flows, Marijan Babic and William J. Bocchieri, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p108-111.

Finite differences
The DOD Groundwater Modeling System: A Conceptual Model Approach, David R. Richards and Norman L. Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2589-2594.

Finite Analytic Method for Mild-Slope Wave Equation,

Xiping Yu, EM Feb. 96, p109-115.
Two-Dimensional Simulation of Basin Irrigation. I: Theory,
E. Playán, W. R. Walker and G. P. Merkley, IR Sept./ Oct. 94, p837-856.

Finite element analysis
Adaptive Diffuse Element-Finite Element Technique for Transient Analysis in Porous Media, Hormoz Modaressi and Philippe Aubert, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1082-1085.

Behavior of RC Bridge Decks with Flexible Girders, L. Cao, J. H. Allen, P. B. Shing and D. Woodham, ST Jan.

96, pl 1-19.

Buckling of Composite Panels with Central Holes, David H. Farnham and Walter J. Horn, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p374-377.

Collapse Analysis of Steel Frame Structures Under Earth-quake Loading, Scott C. Martin and Roberto Villaverde, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p370-373

Deflection of Beams with Integral Elastic Supports, Karl K. Stevens, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p343-346.

Editor's Note, David Darwin, ST Dec. 96, p1393.

Effect of Inclusion Strength and Geometry on Mortar Frac-ture, Mohsen A. Issa, A. B. Shafiq and A. Chudnovsky, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1038-1041

Experiments for Ultimate Strength of Reinforced Concrete Cylindrical Panels under Lateral Loading and Comparison with FEM Analysis, Makoto Takayama, Kazuhiko Mashita, Shiro Kato, Yasuhiko Hangai and Haruo Kunieda, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p310-321.

Finite Element Analysis of Discontinuities in Concrete, Hong D. Kang and Kaspar J. Willam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1054-1057.

Finite Element Analysis of Precast Concrete Box Culverts, K. M. Tarhini, G. R. Frederick and M. Mabsout, (Com puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p677-682.

Finite Element Computer Models for Analysis of Cold-Formed Steel Members, K. S. Sivakumaran and Nabil Abdel-Rahman, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p690-696.

Generalized Plane Strain Finite Element Analysis: Geome-chanical Applications, V. N. Kaliakin, L. Cui and A. H-D Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p289-292.

Intelligent Bridge Monitoring System, Pei-Ling Liu, Yun-Fu Luo and Shyh-Jang Sun, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p608-611.

Is No-Tension Design of Concrete or Rock Structures Always Safe?-Fracture Analysis, Zdeněk P. Bažant, ST Jan. 96, p2-10.

Looping Behavior and Strength of Prestressed Arches, Zefang Xu and Amir Mirmiran, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p366-369.

A New Software Architecture for Finite Element Analysis, Graham Archer, Christopher Thewalt and Gregory L. Fenves, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p683-689.

Nonlinear Finite Element Analysis of Masonry-Infilled Re-inforced Concrete Frames, Medhat A. Haroun and Essam H. Ghoneam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1022-1025.

On Buckling Analysis of Beams and Frame Structures by the Differential Quadrature Element Method, Xinwei Wang, Huizhi Gu and Bin Liu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p382-385.

Refined Finite Element Analysis of Geomaterials, Boris Jeremić and Stein Sture, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p555-558.

Shear Strength of Beams with Corrugated Webs, Mohamed Elgaaly, Robert W. Hamilton and Anand Seshadri, ST Apr. 96, p390-398.

A Stabilized Formulation of the Navier-Stokes Equations, Arif Masud, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1135-1138.

Structural Redundancy and Fracture in Composite Lattice/ Skin Structures, A. K. Maji, E. Fosness and D. Satpathi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p641-644.

Visualizing Global Force Distributions in Finite Element Models, Kirk Martini, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p697-703.

Finite element method

3D Flow Structures - From Laboratory to Field Applica-tions, P. Mewis and K.-P. Holz, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3446-3451. An Adaptive Finite Element Model for Saturated and Unsaturated Porous Media, D. W. Pepper, M. L. Lytle and D. B. Carrington, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p105-107.

Analysis and Design of Microirrigation Laterals, Yaohu Kang and Soichi Nishiyama, IR Mar/Apr. 96, p75-82. Analysis of Behavior of Sand Surrounding Pile Tips, P.

Simonini, GT Nov. 96, p897-905.

Analysis of Deep Excavation with Column Type of Ground Improvement in Soft Clay, Chang-Yu Ou, Tzong-Shiann Wu and Hsii-Sheng Hsieh, GT Sept. 96, p709-716. Analysis of Effect of Dead Loads on Natural Frequencies

of Beams Using Finite-Element Techniques, Shi-Jun Zhou and Xi Zhu, ST May 96, p512-516.

Analysis of Masonry Structures with Elastic/Viscoplastic Models, Teymour Manzouri, P. Benson Shing and Bernard Amadei, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p61-71.

An Analysis of Strong-Discontinuities in Inelastic Solids with Applications to the Finite Element Simulation of Strain Localization Problems, F. Armero and K. Garikipati, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p136-139. Analytical Model for Shear Critical Reinforced-Concrete Members, W. Chung and S. H. Ahmad, ST June 95,

p1023-1029.

Analyzing of Two Dimensional Slope Stability and Foun-dation Problems Considering Soil-Structure Interaction Effect, Stanley Z. He, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p832-837.

Application of the Concurrent Finite Element Method to Solution of the Fokker-Planck Equation, W. Yi, B. F. Spencer, Jr. and L. A. Bergman, (Probabilistic Mechan-ics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p10-13.

Assessment of Damage Identification Algorithms on Experimental and Numerical Bridge Data, David V. Jauregui and Charles R. Farrar, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p892-899.

Automated Tools for Spatially Distributed Rainfall/Runoff Modeling, E. James Nelson and Norman L. Jones, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2903-2908.

Bearing Capacity of Rectangular Footings on Geogrid-Reinforced Sand, Temel Yetimoglu, Jonathan T. H. Wu and Ahmet Saglamer, GT Dec. 94, p2083-2099. Behavior of Cold-Formed SHS Beam-Columns, Raef M.

Sully and Gregory J. Hancock, ST Mar. 96, p326-336. Buckle Propagation: Steady-State Finite-Element Analysis, André C. Nogueira and John L. Tassoulas, EM Sept. 94,

p1931-1944. Buckling Analysis of Curved Beams by Finite-Element Discretization, Chai H. Yoo, Young J. Kang and James S. Davidson, EM Aug. 96, p762-770.

Calculation of Stress Intensity Factors Using Finite Elements and the Compliance Approach, Hisham Abdelents and Sameer A. Hamoush, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p154-159.

A Comparative Study of the Transformed Methods for Solving Richards' Equation, M. Rashidul Islam, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1748-1753.

Comparison of Flow Around Circular Cylinder Using FE and FD Procedures, R. Panneer Selvam, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1021-1028.

Computer Analysis, Vincent Thomas Bridge, Raymond W. Wolfe and Hany J. Farran, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p311-312.

Consistent Infinitesimal Finite-Element Cell Method - A Boundary Finite-Element Procedure, Chongmin Song and John P. Wolf, (Engineering Mechanics, Y. K. Lin

and John P. Wolf, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p.176-179.
Consistent Infinitesimal Finite-Element Cell Method for an Anisotropic Unbounded Medium, Chongmin Song and John P. Wolf, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p.306-309.
A Corotational Total Lagrangian Finite Element Analysis with Application to the Aircraft Tire, James M. Greer, Jr. and Anthon, N. Palacotto, (Engineering, Construction) and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

and Operations in Space, Stewart W. Johnson, ed., 1996), p1108-1114.
Coupled Nonlinear Analysis of Airport Pavements, T. E. Fenske, K. P. Boone and D. Liu, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p435-443.
Critical State Model at Finite Strains, Ronaldo I. Borja and Claudio Tamagnini, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p148-151.

Cross-Frame Spacing and Parametric Effects in Horizontal-ly Curved 1-Girder Bridges, James S. Davidson, Mark A. Keller and Chai H. Yoo, ST Sept. 96, p1089-1096. Cyclic Analysis of Concrete-Filled Tubes and Design of

Cyclic Analysis of Concrete-Filled Tubes and Design of Composite Frames, Jerome F. Hajiar, Brett C. Gourley and Katherine A. Stillwell, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p43-54.Design and Analysis of Approach Terminal Sections Using Simulation, John D. Reid, Dean L. Sicking and Gene W.Baylor TE Seat One 406-2004 doi:

Paulsen, TE Sept./Oct. 96, p399-405.

Design of Microirrigation Submain Units, Yaohu Kang and Soichi Nishiyama, IR Mar./Apr. 96, p83-89.

Designers Use Analysis Software for Planned Zimbabwe Dam, CE Feb. 96, p83.

Developments in Sandwich Beam Theory and Practice, James C. LaBelle, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1017-1026.

A Domain Specific Equation Solver for Bridge Analysis, Gary Consolazio, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Dynamic Response Analysis of High Arch Dam-Water-Foundation System, Du Xiuli, Chen Houqun and Hou Shunzai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p987-988.

Dynamic Response of Hagia Sophia, A. S. Cakmak, C. L. Mullen and M. N. Natsis, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p200-210.

Editor's Note, David Darwin, ST July 96, p715.

Embedded Crack Approach to Regularize Finite Element Solutions of Concrete Structures, E. Pramono, J. Mould, Jr. and H. S. Levine, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p554-558.

Extension and Compression of Elastomeric Butt Joint Seals, Stephen A. Ketcham, Jan M. Niemiec and Gregory B. McKenna, EM July 96, p669-677.

Finite Analytic Method for Mild-Slope Wave Equation, Xiping Yu, EM Feb. 96, p109-115.

Finite Element Analysis of Fracture Behavior of ECC Shear Beams, Petr Kabele and Hideyuki Horii, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Finite Element Analysis of Longitudinally Stiffened Cylinders in Bending, Q. Chen, A. E. Elwi and G. L. Kulak, EM Nov. 96, p1060-1068.

A Finite Element Analysis of Mach Reflection by Using the Boussinesq Equation, Shoichiro Kato, Toshimitsu Takagi and Mutsuto Kawahara, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3440-3445.

A Finite Element Based Probability Contouring Method for Structural Analysis, David S. Riha, Harry R. Millwater, George Vellathottam and P. R. Perumalswami, (*Probabi*listic Mechanics & Structural Reliability, Dan M. Fran-gopol, ed. and Mircea D. Grigoriu, ed., 1996), p922-925.

gopon, ch. and witce D. Gigotti, ch., 1950, 1952-295.

A Finite Element Damage Model for the Evaluation and Rehabilitation of Brick Masonry Shear Walls, Luigi Gambarotta and Sergio Lagomarsino, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p72-81.

Finite Element Modeling of Settlements on Spatially Ran-dom Soil, G. M. Paice, D. V. Griffiths and G. A. Fenton, GT Sept. 96, p777-779.

Finite Element Transient Analysis (FETA) of Solids and Structures Including Soil-Fluid-Structure Interaction, D. C. Rizos, D. L. Karabalis, G. J. Cokkinides, J. L. Tassou-las and J. S. Mulliken, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p480-486.

Finite-Element Analysis of Temperature Effects on Plain-Jointed Concrete Pavements, Eyad Masad, Ramzi Taha and Balasingam Muhunthan, TE Sept./Oct. 96, p388-398.

Formal Specification of Concurrent Finite Element Systems, Harpreet S. Chadha and John W. Baugh, Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p166-176.

Free Vibration of Stiffened Composite Laminates, Meiwen Guo and Issam E. Harik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1163-1166.

Gabled Hyperbolic Paraboloid Roofs without Edge Beams, Tamara Jadik and David P. Billington, ST Feb. 95,

Girder Moments in Continuous Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE Feb. 96, p37-45. Going Down, CE July 96, p14.

A Graphical Environment for Multi-Dimensional Surface Water Modeling, Alan K. Zundel and Norman L. Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Ground Movement Prediction for Deep Excavations in Soft Clay, Youssef M. A. Hashash and Andrew J. Whittle,

GT June 96, p474-486.

High Performance Computing: Application to Highway Bridges, T. E. Fenske, Z. Yu, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed.,

1996), p444-452.

A Hydrodynamic FVM Algorithm on Arbitrary Grids, Jinglian J. Liu, Billy H. Johnson, Bharat K. Soni and Victor L. Zitta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3668-3673.

Identification of Conditional Stochastic Gaussian Field, Masaru Hoshiya and Ikumasa Yoshida, EM Feb. 96,

An Implementation of Finite Element Method on Distribut-ed Workstations, Eduardo De Santiago and Kincho H. Law, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p188-199.

Improving Robustness of Algorithms to Implement HiSS models in FEM, G. W. Wathugala and S. Pal, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p144-147.

Interference Assemblies, R. R. Little, G. R. Frederick and B. K. Park, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p240-241.

Large Strain Finite-Element Analysis of Snow, Günther Meschke, Changhong Liu and Herbert A. Mang, EM July 96, p591-602.

Lateral-Torsional Buckling of Nonprismatic I-Beams, Pra-tyoosh Gupta, S. T. Wang and G. E. Blandford, ST July 96, p748-755.

90, p/46-1/53.
A Layer-Wise Formulation for Progressive Failure Analysis of Laminated Composite Beams, Julio F. Davalos and Youngchan Kim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1150-1159.
Local Buckling of Curved I-Girder Flanges, James S. Da-

vidson and Chai H. Yoo, ST Aug. 96, p936-947.

Model to Incorporate Architectural Walls in Structural
Analyses, H. Allison Smith and Vicki L. Vance, ST Apr. 96, p431-438.

Modeling Overfalls Using Vertically Averaged and Moment Equations, Abdul A. Khan and Peter M. Steffler, HY July 96, p397-402.

HT July 96, p391-402. Multi Dimensional Modeling of Water Quality Using the Finite Element Method, Ian P. King and John F. De-George, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p340-354. Multiphase Flow in Deforming Porous Media by the Finite Element Method, Pedro Arduino and Emir J. Macari, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), av20-429.

p420-425.

A New Element Flexibility Based FEM for Stochastic Structures, Yongjian Ren and Isaac Elishakoff, (Probabilistic Mechanics & Structural Reliability, Dan M. Fran-

listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996, p918-921.
A New Method for Efficient Reliability-Based Design Optimization, Y.-T. Wu and W. Wang, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p274-277.
New Warping Function for Thin-Walled Beams. II: Finite Element Method and Applications, A. Prokić, ST Dec. 96, n1447-1452.

96, p1443-1452. A Non-Destructive Method for Prestress Evaluation, Ato-rod Azizinamini, Armin B. Mehrabi, Bruce Keeler and rod Azizinamini, Armin B. Mehrabi, Bruce Keeler and John Rohde, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p900-907.

Nonlinear Finite Element Reliability Analysis of Concrete, Dan M. Frangopol, Yong-Hak Lee and Kaspar J. Willam, EM Dec. 96, p1174-1182.

Nonlinear Finite-Element Model of Hollow Masonry, E. Y. Sayed-Ahmed and N. G. Shrive, ST June 96, p683-690.

Nonlinear Static and Dynamic Analysis from Research to Practice, Filip C. Filippou, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p31-42.

Numerical Methods in Structural Mechanics, Co-published

Numerical Methods in Structural Mechanics, Co-published with Thomas Telford, U.K., Zdenèk Bittnar and Jiří Šejnoha, 1996, 0-7844-0170-5, 422pp.
Numerical Simulation of Permanent Deformation in Flexi-ble Pavement Systems Subjected to Moving Loads, David J. Kirkner, Weixin Shen, Michael I. Hammons and Donald M. Smith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p430-433.

Numerical Simulation of Unsteady Flow at Po River Delta, D. Ambrosi, S. Corti, V. Pennati and F. Saleri, HY Dec.

96, p735-743

274

Observation and Conditional Stochastic FEM, M. Hoshiya and I. Yoshida, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p178-181.

One-Dimensional Finite-Element Model for High Flow Velocities in Porous Media, Blair T. Greenly and Douglas M. Joy, GT Oct. 96, p789-796.

Parameter Estimation of Structures from Static Strain Measurements, I: Formulation, Masoud Sanavei and Michael J. Saletnik, ST May 96, p555-562.

Parameter Estimation of Structures from Static Strain Measurements. II: Error Sensitivity Analysis, Masoud Sanayei and Michael J. Saletnik, ST May 96, p563-572.

Sanayer and michael J. Saletinik, 51 May 99, p505-572.
Parameters Affecting Distortional Buckling of Tapered
Steel Members, Hamid Reza Ronagh and Mark Andrew
Bradford, 5T Nov. 94, p3137-3155.
A Parametric Study of Strength of Tubular Multiplanar
KK-Joints, M. M. K. Lee and S. R. Wilmshurst, 5T Aug.

Parametric Thermal Evaluations of Waste Package Emplacement, Robert H. Bahney, III and Thomas W. Doering, (High Level Radioactive Waste Management, Tech-

meas rrogram Committee, 1996), p445-447.

Permanent Deformation on Preexisting Sliding Surfaces in Dams, George Gazetas and Nasim Uddin, GT Nov. 94, p2041-2061.

Postbuckling of Moderately Thick Circular Plates With Edge Elastic Restraint, G. Venkateswara Rao, N. Ra-jasekhara Naidu and K. Kanaka Raju, EM Oct. 94,

Prestress Loss Due to Creep in Post-Tensioned Clay Ma-sonry, Subhash C. Anand and Naresh Bhatia, (World-wife Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p49-60.

Probabilistic Creep Analysis of Underground Structure in Salt, A. F. Fossum and D. E. Munson, EM Mar. 96,

p209-217

Procedure for Time-Domain Seismic Analyses of Concrete Dams, R. Yang, C. S. Tsai and G. C. Lee, EM Feb. 96,

Rectangular Plates Resting on Tensionless Elastic Founda-tion: Some New Results, Ramesh C. Mishra and Sekhar

K. Chakrabarti, EM Apr. 96, p385-387. A Refined Numerical Approach for the Limit-Load Analysis of 3-D Steel Rod Structures, Norbert Gebbeken, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p92-95

Refined Three-Dimensional Finite Element Model for End-Plate Connection, Chang-Koon Choi and Gi-Taek Chung, ST Nov. 96, p1307-1316.

Response of Lime Mortar Joint Arches to Moving Loads, Barry T. Rosson, Thomas E. Boothby and Ketil Søyland, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p223-232.

ismic Pressures Against Rigid Walls, Guoxi Wu and W. D. Liam Finn, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed.,

1996), pl-18.

1970), p1-10.
Sensitivity Analysis of the Seismic Capacity for a RC Silo Due to Variance of Its Material Properties, Takeshi Kitahara and Hitoshi Seya, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p530-533.

Composite Materials Using the Microbond Test, W. M. Cross, L. Kjerengtoen, R. M. Winter, W. Jiang, W. Fan and J. J. Kellar, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p356-365.

Sensitivity Study of Waste Rollover Using Probabilistic Finite Element Analysis, Arshad Alfoqaha, William Cofer and M. A. Khaleel, (*Probabilistic Mechanics & Structur-*al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p914-917.

SFEM for Reliability of Structures with Material Nonlinearities, Jun Zhang and Bruce Ellingwood, ST June 96,

p701-704.

Shear Lag in Shear/Core Walls, A. K. H. Kwan, ST Sept. 96, p1097-1104.

Shear Stiffness D_{Qr} for C-Core Sandwich Panels, T. C. Fung, K. H. Tan and T. S. Lok, ST Aug. 96, p958-966.

Simulation of Perilithic Algae as a Biofilm and its Interaction with the Water Column, Stephen A. Breithaupt, Ian P. King and Gerald T. Orlob, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1620-1625.

Simulation of Pore Pressures in Triaxial Creep Tests, Horst G. Brandes and Armand J. Silva, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. ed. and Victor N. Kaliakin, ed., 1996), p96-108.

Smeared Crack Approaches—Material Modeling, Marco Petrangeli and Josko Ozbolt, EM June 96, p545-554. State of the Art: Limit Equilibrium and Finite-Element Analysis of Slopes, J. Michael Duncan, GT July 96,

Static Stiffness of Unbounded Soil by Finite-Element Method, John P. Wolf and Chongmin Song, GT Apr. 96,

Stochastic Finite Element Analysis for Multiphase Flow in Random Porous Media, S. Dham and R. Ghanem, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p661-669.

Stochastic Finite Element Method in Geomechanics, Gabriel Auvinet, Amine Bouayed, Sandra Orlandi and Arturo López, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1239-

Stochastic Finite-Element Analysis of Soil Layers with Random Interface, R. Ghanem and W. Brzakała, EM

Apr. 96, p361-369.

A Stochastic Model for Elastic-Plastic Fracture of Cracked Pipes, Sharif Rahman, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p764-767.

Strengthening Concrete Block Walls Using Carbon Fiber, Dan Engebretson, Rajan Sen, Gray Mullins and Alfred Hartley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), pl592-1600.

Strongly Nonlinear Stochastic Response of a System with Random Initial Imperfections, Jiří Náprstek, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p740-743.

Structural Behavior of End-Plate Bolted Connections to Stiffened Columns, Mohammed R. Bahaari and Archi-bald N. Sherbourne, ST Aug. 96, p926-935.

Structural Consequences of Imperfection in Thin-Walled Components, Luis A. Godoy and John Carrasquillo, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Structural Fragility Analysis Using Finite Element Compu-tational Models, Dan M. Ghiocel, Paul R. Wilson, Gary G. Thomas and John D. Stevenson, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p18-21.

Surface Response of a Cracked Layered Half-space Sub-jected to an Antiplane Impact, S. W. Liu, J. C. Sung and M. S. Lin, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p616-619.

Three-Dimensional Finite Element Analysis of Deep Excavations, Chang-Yu Ou, Dar-Chang Chiou and Tzong-Shiann Wu, GT May 96, p337-345.

Three-Dimensional Nonlinear Transient Dynamic Accident Analyses of Waste Packages, Scott M. Bennett, Zekai Ceylan and Thomas W. Doering, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p382-384.

Tubular Members. I: Stability Analysis and Preliminary Results, Spyros A. Karamanos and John L. Tassoulas, EM Jan. 96, p64-71.

Two Dimensional Modeling of the Mobile River Delta and the Mobile Bay System, Conor C. Shea, Charles D. Powell and Michael A. Ports. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3662-3667.

Updating of SFEM by Observation, M. Hoshiya and I. Yoshida, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p828-831.

Variability Response Functions for Random Eigenvalue Problems, George Deodatis and Lori Graham, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p681-684.

Very Low Cycle Failure Process of Steel Angle Members, Yeon-Soo Park, Satoshi Iwai, Hiroyuki Kameda and Taijiro Nonaka, ST Feb. 96, p133-141.

Vibration of Thin-Walled Box-Girder Bridges Excited by Vehicles, Dongzhou Huang, Ton-Lo Wang and Mohsen Shahawy, ST Sept. 95, p1330-1337.

Web Buckling in Thin Webbed Castellated Beams, Walid Zaarour and Richard Redwood, ST Aug. 96, p860-866.

Wind Tunnel and Water Flume Testing in the Design of High Rise and Long Span Structures, Charles H. Thorn-ton, Leonard M. Joseph and Thomas Z. Scarangello, Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p944-951.

"New" Method for Seismic Analysis is the Norm, Brian Grant, P.E., CE Sept. 96, p35-36.

Finite elements

3D Simulation of End-Plate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94,

Analysis of Bank Stabilization in Steep Complex Streams Using A Two-Dimensional Model, Raymond Walton, Wilfredo A. Moneda and Jeffrey B. Bradley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p352-357.

Analysis of Eigenvalue Variability for 2D Stochastic Struc-tural Systems Using Variability Response Functions, George Deodatis and Lori Graham, (*Probabilistic Me-chanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p600-603.

Choice of Input Fields in Stochastic Finite Elements, Ove Ditlevsen and Niels Jacob Tarp-Johansen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p820-837.

Computational Aspects of Dynamic Concrete Viscoplasticity, Olubayo O. R. Famiyesin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p282-285.

Constitutive Modeling and Analysis of Creeping Slopes, Chandra S. Desai, Naresh C. Samtani and Laurent Vul-

liet, GT Jan. 95, p43-56.

The DOD Groundwater Modeling System: A Conceptual Model Approach, David R. Richards and Norman L. Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2589-2594.

Dynamic Stiffness Analysis of Lattice Structure, Eldad Levy and Moshe Eisenberger, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, p526-533.

Effective Stiffness Model for Reinforced Concrete Slabs, Maria Anna Polak, ST Sept. 96, p1025-1030.

Element-Embedded Localization Band Based on Regularized Displacement Discontinuity, Ragnar Larsson and Kenneth Runesson, EM May 96, p402-411.

Evaluation of Dynamic Analysis Results using Full-Scale Lattice Tower Tests, Markus Ostendorp, (Building an In-ternational Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p518-525

Finite Element Analysis with Fuzzy Variables, Ru-Jen Chao and Bilal M. Ayyub, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p643-650. Finite Element Interval Estimation by Convex Model, Shi-geru Nakagiri and Nobuhiro Yoshikawa, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p278-281. A Finite Element Model for the Aeroelasticity Analysis of Hypersonic Panels, Part II: Determination of Flutter

Hypersonic Panets, Part II: Determination of Flutter Boundary, Ji Y. Shen and Lonnie Sharpe, Jr., (Engineer-ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl 148-1154. Finite-Displacement Analysis of Laminated Composite Strips with Extension-Twist Coupling, Erian A. Ar-manios, Andrew Makeev and David Hooke, AS July 96,

Finite-Element Graphic Objects in C++, Jianing Ju and M. U. Hosain, CP July 96, p258-260.

U. riosain, CP July 96, p258-260.

Finite-Volume Two-Dimensional Unsteady-Flow Model for River Basins, D. H. Zhao, H. W. Shen, G. Q. Tabios, III, J. S. Lai and W. Y. Tan, HY July 94, p863-883.

Frameview: Object-Oriented Visualization System for Frame Analysis, Sheloney Moni and Donald W. White, CP Oct. 96, p276-285.

Hybrid Inverse Mode Problems for FEM-Shear Models, Izuru Takewaki and Tsuneyoshi Nakamura, EM Aug. 95,

p873-880.

Load Space Formulation for Reliability Estimation of Complex Structures, X. L. Guan and R. E. Melchers, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p688-691.

Load Testing and Strength Evaluation of a Non-Composite Steel Plate Girder Bridge, Y. Edward Zhou, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p884-

Multiphase Distribution of Cohesive Sediments and Heavy Metals in Estuarine Systems, Parmeshwar L. Shrestha and Gerald T. Orlob, EE Aug. 96, p730-740. Nonlinear FE Solution for Thin-Walled Open-Section Composite Beams, B. Omidvar and A. Ghorbampoor, ST Nov. 96, p1369-1378.

Nov. 96, p1369-1378.
Probabilistic Cervical Spine Injury Analysis Methods, Ben H. Thacker, Y.-T. (Justin) Wu, Daniel P. Nicolella and Ronald C. Anderson, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p270-273.
Probabilistic Fatigue Life Analysis of High Density Electronics Packaging, N. R. Moore, E. A. Kolawa, S. Sutharshana, L. E. Newlin and M. Creager, (Probabilistic Menanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p886-889.
Probabilistic Finite Element Analysis of Aerospace Structural Reliabilistic Finite Element Analysis of Aerospace Structural Reliabilistics Finite Element Analysis of Aerospace Structural Reliabilistics.

probabilistic Finite Element Analysis of Aerospace Struc-tures, M. R. Khalessi, H.-Z. Lin, T. Y. Torng, Y. Zhang and A. D'Angelo, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p648-651.

Pseudo Three-Dimensional Finite Element, Michael H. Triche and James A. Richardson, ST July 96, p832-835.
Red River U-Frame Lock No. 1 Backfill-Structure-Foundation Interaction, Robert M. Ebeling and Reed L.

roungation Interaction, Robert M. Ebeling and Reed L. Mosher, GT Mar. 96, p216-225. Reliability Analysis of Nonlinear Structures Using Stochastic Finite Elements, C. E. Brenner and C. Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p596-599.

Reliability Evaluation Using SFEM, Achintya Haldar and Liwei Gao, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p166-169. SFE-Based Structural Reliability Analysis, Jun Zhang and Bruce Ellingwood, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p170-173. Simple and Effective Equilibrium Models for Vibration Analysis of Curved Rods, A. Benedetti, L. Deseri and A.

Tralli, EM Apr. 96, p291-299.

Simulation of Interaction between Canal Regulation and Groundwater, Hsin-Chi J. Lin and Hwai-Ping Cheng. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996). p1587-1591.

Simulations of the Maine Coastal Current, Monica J. Holboke and Daniel R. Lynch, (Estuarine and Coastal Mod-eling, Malcolm L. Spaulding and Ralph T. Cheng,

1996), p156-167.

1996), p156-107.
Stability Analysis of a Geometrically Imperfect Structure Using a Random Field Model, York Schorling and Christian Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p604-607.
Stability of Shear Deformable Thin-Walled Space France

Stability of Shear Deformable Finn-Walled Space Frames and Circular Arches, Sung-Pil Chang, Sung-Bo Kim and Moon-Young Kim, EM Sept. 96, p844-854. Stochastic Parallel-Brittle Networks for Modeling Materials, D. A. Gasparini, P. Bonacuse, L. Powers and A. Romeo, EM Feb. 96, p130-137. Strength of Struts and Nodes in Strut-Tie Model, Young

Mook Yun and Julio A. Ramirez, ST Jan. 96, p20-29.

Three-Dimensional Failure Analysis of Composite Mason-ry Walls, Subhash C. Anand and Kishore K. Yalaman-

ry waits, Subhash C. Anand and Kishore K. Yalaman-chili, ST Sept. 96, p1031-1039.

Three-Dimensional Finite-Element Simulation of FWD Loading on Pavement Systems, W. Uddin, R. M. Hack-ett, P. Noppakunwijai and Z. Pan, (Meeting the Chal-lenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p284-294.

Tubular Members. II: Local Buckling and Experimental Verification, Spyros A. Karamanos and John L. Tassou-las, EM Jan. 96, p72-78.

Ultimate Strength of Underwater Pipe-Soil Systems, Mehdi S. Zarghamee, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p230-236.

Groundwater Flow Modelling at the Olkiluoto Site, Fin-land, Jari Löfman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p141-

Pavement Design Applying Allowable Frost Heave, Seppo Saarelainen, (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p890-898.

Studded Tire Research in Norway, Finland and Sweden, Eric Johnson, Tony Barter and David Sterley, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p676-687.

The Tram Simulation in Helsinki - A New Research Method, Jarkko Niittymäki and Kari J. Sane, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p76-80.

Screening Hospitals and Fire Stations for Seismic Potentials in City of Tehran, F. Nateghi-A, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p349-350.

Supermaps Help Fight Fires, CE Dec. 96, p20.

Fire exposure

Time-Dependent Degradation of Structural Systems During Fire — A Method for Failure Prediction, Jiahong Jane Zuo and Jamshid Mohammadi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1042-1045.

Legal Weight Truck Cask Response to Regulatory Format Thermal Events, Part 2: Containment Seal, M. Greiner, Y. Jin and R. J. Faulkner, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p354-356.

Fire protection

Berkeley Fights Fire with Salt Water, CE Dec. 96, p18.

Fire resistance

Analysis of Structural Members Under Elevated Tempera-ture Conditions, K. W. Poh and I. D. Bennetts, ST Apr. 95, p664-675.

Bare Bones Buildings, William Baker, Hal Iyengar, Robert Sinn and Ronald Johnson, CE Nov. 96, p42-45.

European Experiences in Fire Design of Structural Steel, Yngve Anderberg, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, p357-364.

Fire Resistance of Circular Steel Columns Filled with Fiber-Reinforced Concrete, V. K. R. Kodur and T. T. Lie, ST July 96, p776-782.

Fire Resistance of Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie and V. K. R. Kodur, ST Jan. 96, p30-36.

Structural Fire Resistance - Past, Present and Future, T. T. Lie and V. K. R. Kodur, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p345-351.

Structural Safety for Fire Conditions, Fan Li and R. W. Fitzgerald, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p352-356.

Thermal Response of Bare Steel Roof Assemblies to Fire Environments in Aerosol Storage Facilities, S. P. Hunt, J. L. Scheffey and R. G. Gewain, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p365-372.

Fire safety

Architect Gives Precast Care to Nursing Center, CE Sept. 96. n96

Bare Bones Buildings, William Baker, Hal Iyengar, Robert Sinn and Ronald Johnson, CE Nov. 96, p42-45.

Blast Wall Bravura, Pieter J. van der Weijde and Paul H. L. Groenenboom, CE Dec. 96, p62-65.

Discussion of Environmental Engineering Forum: Backflow Prevention and Water Quality in Residential Sprinkler Systems (September/October 1993, Vol. 119, No. 5, by Thomas M. Walski (Environmental Engineering Forum)), Ralph E. Wilbur, EE Jan. 96, p80-82.

European Experiences in Fire Design of Structural Steel, Yngve Anderberg, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p357-364.

High-Temperature Properties of Stainless Steel for Build-ing Structures, Y. Sakumoto, T. Nakazato and A. Matsuzaki, ST Apr. 96, p399-406.

Bare Bones Buildings, William Baker, Hal Iyengar, Robert Sinn and Ronald Johnson, CE Nov. 96, p42-45.

Analysis of Structural Members Under Elevated Temperature Conditions, K. W. Poh and I. D. Bennetts, ST Apr.

Column Design in Fire Exposed Steel Frames, Ricardo Ramos Cabeza, Ali Saffar, Robert W. Fitzgerald and Hossein Davoodi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p906-909.

iscussion of Environmental Engineering Forum: Backflow Prevention and Water Quality in Residential Sprinkler Systems (September/October 1993, Vol. 119, No. 5, by Thomas M. Walski (Environmental Engineer-Discussion of ing Forum)), Harry Shaw, EE Jan. 96, p79-80.

The Effect of Moisture on Spalling of Normal and High Strength Concretes, N. Khoylou and G. L. England, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p559-570.

Fire Reliability at Earthquake Occasions, Mamoru Kohno, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p198-201.

Flood Hazard Zonation in a Multihazard Environment, James E. Beavers and Frank H. Thomas, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p345-346.

Land-Use Policy Decisions Based on a Probabilistic Assessment of Landslide and Debris Flow Risks after the 1991 Oakland Hills Firestorm, Scott R. Huntsman and Ram B. Kulkarni, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p535-549.

A New Hydrogen Microsensor for Space Applications, Jessica Knoll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1285-1289.

Subcontractor Not Responsible, CE Mar. 96, p24. Supermaps Help Fight Fires, CE Dec. 96, p20.

Fiscal policies
Fiscal '97 Budget Likes Infrastructure, Martin Hight, CE Nov. 96, pl 16.

This Year's Budget, with Only Five Months Left, Is a Done Deal, NE June 96, p2.

Identifying Potential Trophic Relationships and Bioaccumulation Pathways Between Fish and Invertebrates, Mike Moore, Don Maurer, George Robertson, Hai Nguyen and Tom Gerlinger, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1699-1704.

A Modified Dam for Fish Up the River, CE Dec. 96, p16-

Reader Remembers Cost, Not Fish, Charles C. McCloskey, P.E., CE Nov. 96, p32,36.

Fish conservation

A Modified Dam for Fish Up the River, CE Dec. 96, p16-

Spawning a Hydroelectric Plant, Zbigniew R. Matus and Ronald E. Israelsen, CE Mar. 96, p56-58.

A Surface Collection Design Approach on the Lower Co-lumbia River, Donald R. Chambers and John H. Plump, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p667-672.

Three Dimensional Particle Tracking Model for the Sacra mento-San Joaquin Delta, Tara A. Smith and Gilbert V. Bogle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., gress & Desiral. 1996), p4329-4334.

Fish habitats

The Costs and Benefits of Dam Removal on the Elwha River, Paula M. Engel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4288-4293.

Dependence of Water Quality and Fish Habitat on Lake Morphometry and Meteorology, Midhat Hondzo and Heinz G. Stefan, WR Sept./Oct. 96, p364-373.

Modeling Combined Stresses on Aquatic Ecosystems, Jam-ie D. Anderson, Ian P. King and Gerald T. Orlob, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3998-4003.

Modeling the Ecological Impacts of Flaming Gorge Dam Operations, S. C. L. Yin, K. E. LaGory, J. W. Hayse, I. Hlohowskyj, R. A. Van Lonkhuyzen and H. E. Cho, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1911-1917.

A Modified Dam for Fish Up the River, CE Dec. 96, p16-

Restoration Design for Urban Streams: Anacostia River Basin, Maryland, Meg Burns, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4198-4201.

Spawning a Hydroelectric Plant, Zbigniew R. Matus and Ronald E. Israelsen, CE Mar. 96, p56-58.

Fish management

Fish Passage Pool Bedding Analysis, Louis S. Coletta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3818-3823.

Juvenile Fish Separator Design, Daniel M. Katz, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1117-1122.

A Surface Collection Design Approach on the Lower Co-lumbia River, Donald R. Chambers and John H. Plump, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p667-672.

Fish protection

Chandler Canal Fish Screen Facilities, Arthur Glickman and Rick Christensen, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p887-892.

Developments in the Use of Infrasound for Protecting Fish at Water Intakes, E. P. Taft, N. A. Brown, T. C. Cook, J. P. Ronafalvy and M. W. Haberland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl71-176.

Engineering Features of the Red Bluff Research Pumping Plant, K. Warren Frizell, Charles R. Liston and Stephen Atkinson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p316-321.

Entrainment of Eggs and Larval Fish Into Propeller Jets, Stephen T. Maynord, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3147-3152.

Mitigation of Predation at a Juvenile Bypass Outfall Site, J. DenBleyker and L. J. Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p893-898.

Reader Remembers Cost, Not Fish, Charles C. McCloskey,

P.E., CE Nov. 96, p32,36.

Sound Way to Save Fish, John Nestler and Gene Ploskey, CE Sept. 96, p58-61.

Surface Bypass-Collector Concepts and Performance, Peter C. Klingernan, Lisa M. Wieland, Kenneth R. Elbert and Thomas K. Lorz, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p673-678.

A Surface Collection Design Approach on the Lower Columbia River, Donald R. Chambers and John H. Plump, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p667-672

Surface Oriented Fishway and Fish Guidance Curtain, Lynn A. Reese, (North American Water and Environment Co gress & Destructive Water, Chenchayya Bathala, ed., 1996), p165-170.

Three-Dimensional Numerical Model for Fish Bypass Studies, E. A. Meselhe, A. J. Odgaard and V. C. Patal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p159-164.

Chandler Canal Fish Screen Facilities, Arthur Glickman and Rick Christensen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p887-892.

Comparison of Water Backwash and Brush Cleaning Sys-tems for Vertical Panel Fish Screens, Morton D. McMillen and Clint W. Smith, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1129-1134.

Juvenile Fish Separator Design, Daniel M. Katz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1117-1122.

Mitigation of Predation at a Juvenile Bypass Outfall Site, J. DenBleyker and L. J. Weber, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p893-898.

Results of Field Evaluations of the New Modular Inclined Fish Diversion Screen, F. C. Winchell, S. V. Amaral, E. P. Taft, T. C. Cook, A. W. Plizga, E. M. Paolini and C. W. Sullivan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p881-886.

Sediment Transport Modeling for the Glen-Colusa Irriga-tion District Fish Screen Modifications, Cassie Klumpp, Mark Sailer, Arthur Glickman and Brent Mefford, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1027-1032.

Surface Oriented Fishway and Fish Guidance Curtain, Lynn A. Reese, (North American Water and Environment Co gress & Destructive Water, Chenchayya Bathala, ed., 1996), p165-170.

White River Fish Screen Project - Hydraulic Modeling, Dennis Dorratcague, Wayne Porter and Larry Swenson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

278

Destructive Protect Planning and Design, White River Fish Screen Project Planning and Design, Morton D. McMillen and Wayne Porter, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1123-1128.

Fish stocking A Modified Dam for Fish Up the River, CE Dec. 96, p16-

Fishing

This Is Not Good News, Percival A. Miller, CE May 96, p29.

Fishing rights

The Costs and Benefits of Dam Removal on the Elwha River, Paula M. Engel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4288-4293.

A Modified Dam for Fish Up the River, CE Dec. 96, p16-

Spawning a Hydroelectric Plant, Zbigniew R. Matus and Ronald E. Israelsen, CE Mar. 96, p56-58. Surface Oriented Fishway and Fish Guidance Curtain, Lynn A. Reese, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p165-170.

Three-Dimensional Numerical Model for Fish Bypass Studies, E. A. Meselhe, A. J. Odgaard and V. C. Patal, (North American Water and Environment Congress &

Destructive Water, Chenchayya Bathala, ed., 1996), p159-164.

Fissures

Clay Liner Crack Propagation, Joseph F. Boward and Luis

Clay Liner Crack Propagation, Joseph F. Boward and Luis E. Vallejo, (Engineered Contaminated Soils and Interac-tion of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p97-113. Defects in Soft Clays: A Challenge to Site Characterization for Stability Analysis, G. A. Leonards and R. J. Deschamps, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p. 1347-1368. p1347-1366.

Fixed-bed operations
Predicting Dynamic Response of Adsorption Columns with
Neural Nets, Imad A. Basheer and Yacoub M. Najjar, CP Jan. 96, p31-39.

Deflection of Beams with Integral Elastic Supports, Karl K. Stevens, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p343-346.

Fixed-film process Editor's Note, Thomas L. Theis, EE July 96, p556.

Oxygen Utilization of Trickling Filter Biofilms, Steven W. Hinton and H. David Stensel, EE Sept./Oct. 94, p1284-1297.

Bolted Field Splices for Steel Bridges, Firas Sheikh-Ibrahim and Karl H. Frank, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p290-297.

Characterization of Pultruded FRP Wide-Flange Beams, Ju-lio F. Davalos, Pizhong Qiao and Hani A. Salim, (Mate-rials for the New Millennium, Ken P. Chong, ed., 1996), p223-232.

Local Buckling Experiments on Pultruded Composite Beams, Roberto Lopez-Anido, Rachid Bendidi, Hota V. S. GangaRao and Mohammed Al-Megdad, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p914-923.

Local Buckling of Curved I-Girder Flanges, James S. Davidson and Chai H. Yoo, ST Aug. 96, p936-947.

Flash floods

Estimation of Flash Flood Potential for Large Areas, K. P. Georgakakos, A. K. Guetter and J. A. Sperfslage, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p. 147. Flash Floods and Their Control in the Indian Arid Zone, K. D. Sharma, (North American Water and Environment

Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2539.

Plash Floods and Their Warning in Vietnam, Cao Dang Du, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Prediction of Bed-Load Transport by Desert Flash Floods, Ian Reid, D. Mark Powell and Jonathan B. Laronne, HY Mar. 96, p170-173.

Computation of Structural Flexibility for Bridge Health Monitoring Using Ambient Modal Data, Scott W. Doe-bling and Charles R. Farrar, (Engineering Mechanics, Y.

K. Lin and T. C. Su, 1996), p1114-1117.

Dynamic Response of Flexible Retaining Walls, A. H. Younan and A. S. Veletsos, (Engineering Mechanics, Y.

K. Lin and T. C. Su, 1996), p310-313.

Flexible Boundary for Discrete Element Simulation of Granular Assemblies, Runing Zhang and Stein Sture, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p723-726.

Lining the Line, Walter Mergelsberg, Vojtech Gall and Gerhard Sauer, CE Mar. 96, p50-52.

Localized Load Effects in High-Order Bending of Sand-wich Panels with Flexible Core, Y. Frostig and M. Bar-

uch, EM Nov. 96, p1069-1076.

Minimizing Floor Vibrations from Occupant Activities,
Sarah E. Mouring and Bruce R. Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p405-

Modified Janssen Theory for Flexible Circular Bins, Y. T.

Feng and Y. L. Hua, ST Apr. 96, p454-456. New Element Flexibility Based FEM for Stochastic Structures, Yongjian Ren and Isaac Elishakoff, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p918-921. Numerical Simulation of Permanent Deformation in Flexi-

ble Pavement Systems Subjected to Moving Loads, David J. Kirkner, Weixin Shen, Michael I. Hammons and Donald M. Smith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p430-433.

Optimized Input Shaping for a Single Flexible Robot Link,
David G. Wilson, Dennis Stokes, Gregory Starr and Rush D. Robinett, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1225-1229.

Seismic Behavior of Structures with Flexible Diaphragms, Arturo Tena-Colunga and Daniel P. Abrams, ST Apr. 96,

Structural Analysis Model for Mat Foundations, Gin-Show Liou and S. C. Lai, ST Sept. 96, p1114-1117.

Flexible connections

Algebraic Methods For Creep Analysis of Continuous Composite Beams, Luigino Dezi, Graziano Leoni and

Angelo Marcello Tarantino, ST Apr. 96, p423-430.
Minimum-Time Design of a Slewing Flexible Beam, Xiao-jian Liu and David W. Begg, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1205-1214.

Flexible pavements

Comparison of Load Restriction Timings Determined Using FHWA Guidelines and Frost Tubes, Nazli Yesiller, Craig H. Benson and Peter J. Bosscher, CR Mar. 96, p6-24.

Effect of Geogrid Reinforcement in Model Track Tests on

Effect of Geogral Reinforcement in Model Track Tests on Pavements, Fereidoon Moghaddas-Nejad and John C. Small, TE Nov./Dec. 96, p468-474.

An Open Graded Base to Reduce Thaw Weakening in Flexible Pavements, Maureen A. Kestler, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p878-889.

Stiffness Reductions of Flexible Pavements due to Cumula tive Fatigue Damage, A. C. Collop and D. Cebon, TE Mar./Apr. 96, p131-139.

Flexible pipes
1500 mm Corrugated HDPE Pipe Installation and Performance, David J. Mailhot, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p69-76.

High Density Polyethylene Pipe under High Fill: A Contin-uing Study, John J. Meyer and J. L. (Jack) Hilfiker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p77-87.

Flexural strength

Development of Column Curve for Steel Angles, Seshu Madhava Rao Adluri and Murty K. S. Madugula, ST

Mar. 96, p318-325.

Effect of Reinforcement Corrosion on Flexural Behavior of Concrete Slabs, Abdullah A. Almusallam, Ahmad S. Al-Gahtani, Abdur Rauf Aziz, Fahd H. Dakhil and Rasheeduzzafar, MT Aug. 96, p123-127.

Flexural Buckling of Steel Angles: Experimental Investiga-tion, Seshu Madhava Rao Adluri and Murty K. S. Ma-

dugula, ST Mar. 96, p309-317.

Flexural Characteristics of Two-Dimensional Advanced Composite Grid Reinforced Concrete, David W. Jensen and Craig W. Smart, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p398-401.

Flexure for Polymer Concrete Using PET Waste, K. S. Re-beiz and D. W. Fowler, P.E., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1037-1044.

Influence of the Yield Strength of Steel Fibres on the Toughness of Fibre Reinforced High Strength Concrete, Lucie Vandewalle, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p496-505.

Lateral Load Behavior of High Strength Fiber Reinforced Concrete Columns, Ramesh Nagarajah and David H. Sanders, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed.,

1996), p396-407.

Micromechanics Based Design of FRCC Components, Christopher K. Y. Leung and Y. Philip Geng, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p419-425.

Micromechanics Based Design of Optical Fiber Crack Sen-sor, Christopher K. Y. Leung and Neill Elvin, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p236-239. Repair and Retrofit of Reinforced Concrete Columns,

Rivad S. Aboutaha, (Natural Disaster Reduction, George Housner, ed. and Riley M. Chung, ed., 1997), p313-

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-1849.

Structural Behaviour of High Strength Concrete Columns, Robert Park, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p365-374.

Deflection Serviceability Design for Wood Members and Systems, D. Rosowsky and K. Fridley. (Building an In-ternational Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p452-

Design Considerations for Post-Tensioned Integral Pier Caps, Sami W. Tabsh, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p444-451.

Flexure for Polymer Concrete Using PET Waste, K. S. Rebeiz and D. W. Fowler, P.E., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1037-1044.

On the Shoulders of Giants-Part Three, Francis E. Griggs, Jr., EI Apr. 96, p55-64.

Sectional Depth of Prestressed Concrete Beams with Excess Capacity, Y. H. Chai, ST July 96, p788-793.

Cess Capacity, 1. H. Char, of Pary So, preserving Static Behavior of Noncomposite Concrete Bridge Decks under Concentrated Loads, Michael F. Petrou, Philip C. Perdikaris and Mingzhu Duan, BE Nov. 96, p143-154.

Structural Strength of Bridge Decks Reinforced with Weld-ed Wire Fabric, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Sept. 96, p989-997.

Floating breakwaters

A Dynamic Submerged Breakwater, A. N. Williams and W. G. McDougal, WW Nov./Dec. 96, p288-296.

Flash-Setting Lightweight Material—A First Step to Float-ing Island Construction, Sumio Horiuchi, Noburu Uchiyama, Takuro Odawara and Kazuya Yasuhara, MT Aug. 96, p138-146.

Instability Analysis of an Inclined Tower in Waves, Subrata K. Chakrabarti, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p836-839.

Project Blue Revolution, Patrick K. Takahashi, EY Dec. 96,

p114-124.

Response Statistics of Moored Floating Structures Subjected to General Nonlinear Random Wave Forces, Shunji Kato and Takashi Okasaki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p158-161.

3D Numerical Modeling of Cohesive Sediments, Scott A. Yost and Nikolaos D. Katopodes, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p478-489.

Application of an Optical Monitor in Automatic Control of Coagulation Dosing in Water Treatment Operations, Chihpin Huang and Chi-Bing Liu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2450-2455.

Automatic Control of Flocculation Processes, Anders O. Wistrom and Jay A. Farrell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p997-1002.

Design of Flocculating Baffled Channel, Prabhata K. Swamee, EE Nov. 96, p1046-1048.

Interactions Between Ozone, AOM, and Particles in Water Treatment, Mysore S. Chandrakanth, Sadasivam Krish-nan and Gary L. Amy, EE June 96, p459-468.

Moment Analysis of Tracer Experiments, Charles N. Haas, EE Dec. 96, p1121-1123.

The Role of Macroflocs in Estuarine Sediment Dynamics and its Numerical Modeling, A. Malcherek and W. Zielke, (Estuarine and Coastal Modeling, Malcom L. Spaulding and Ralph T. Cheng, 1996), p695-706.

Surface Water Pretreatment Using Floating Media Filter, C. Visvanathan, D. R. I. B. Werellagama and R. Ben Aim,

EE Jan. 96, p25-33.

Flood control

The 1993 Flood: A Vindication of Federal Levees and Reservoirs or A Call for "Back to Nature"? Richard J. Di-Buono and Gary R. Dyhouse, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p163-164.

1994 Alaska Flood Recovery Project Management of a Dis-aster Recovery by a General Contractor, David S. Westhaver and Alison H. Boyce, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung,

ed., 1997), p111-112

The 1995 Floods of Rhine and Meuse - How Predictable are Water Levels in the Netherlands, Bart Parmet, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p249-250.

Advanced Hydrologic Forecasting for Flood and Drought Mitigation, John J. Ingram, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p455.

Alternative Urban Flood Control, Parviz Monadjemi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2540.

Application of GIS Technology to Floodplain & Habitat Analyses, Scott E. Stonestreet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1393-1398.

Benefits and Costs Associated with Flood Mitigation in the United States, Eugene A. Stallings, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p153-154. Benefits of the Santa Ana River Mainstern Project, William

Benefits of the Santa Ana River Mainstem Project, William L. Zaun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2176.
Combined Flood Hazard Mitigation Techniques for Comprehensive Planning - the Saugus River Coastal Flood Risk Reduction Plan, Barbara D. Hayes, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2312-2317.
Computing Flood Damage Reduction Accomplishment, Jo Ann Duman and Donna Lydon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2312-2317.

Ann Duman and Donna Lydon, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2318-2323. A Constructive Act, CE Dec. 96, p13.

A Comstuctive Approaches in Achieving Additional Water Conservation at Prado Dam, James A. Van Haun, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2352-2353.

Corps Begins Work on California Dam, CE Feb. 96, p17,19. Corps Estimates \$4 Billion in Flood Protection Savings, CE

280

Corp Estimates 39 Billion in Prood Protection Savings, CE Apr. 96, p.8.
Design of Riparian Habitat Replacement in Active Floodplains, Bruce M. Phillips, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1406-1412.

Development of the San Joaquin County Hydrology Manual, T. V. Hromadka, J. J. DeVries, M. Callahan and J. Pulver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2078-2083.

1990), p2010-2003. Porlaining Himalayan Glacial Lakes Before They Burst, Richard Kattelmann and Teiji Watanabe, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1978.

Water, Chenchayya Bathala, ed., 1996), p1978.
Drop Structures in the Real World: Guidelines for Drop Structures in Grass Lined and Wetlands Channels, William C. Taggart, William G. DeGroot, Katherine J. Chase and Peter L. Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p594-599.

Effective Management and Control of Urban Flood Disas-ters in West Africa, S. O. Ojo, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3703.

Engineering Vietnam's Waterways, CE July 96, p8. Environmental Considerations for Water Resources Development in Haor Areas of Northeastern Bangladesh, G. M. Akram Hossain and Ainun Nishat, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1063-1068.

Estimate the Hazards of Bank Burst in the Lower Yellow River, Changxing Shi and Qingchao Ye, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p920.

Evaluation of Modelling Needs for Central Valley Project Operations, John Burke and Donald Frevert, (North Operations, John Burke and Political American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p806-811.

Flash Floods and Their Control in the Indian Arid Zone, K. D. Sharma, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2539.

Flood Control in the Brazilian Electric System Reservoirs at Parana River Basin, A. L. Lopes and V. F. Rocha, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1979.

Flood Control Studies for Arizona Communities, Philip O.
Lowe and Sam Arrowood, (North American Water and
Environment Congress & Destructive Water, Chen-

Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1870-1874.

Flood Damage Estimates Using GIS Spatial Analysis, Craig R. Wilkening, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3405-3410.

Flood Destruction and Abatement in China, Zhixin Liang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3017. p3017.

281

Flood Forecasting Model for an Alpine Drainage Basin -River Drau in Austria, D. Gutknecht, W. Kugi and F. Nobilis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p718.

Flood Protection Using Inflatable Dams, R. H. Plaut, S. Liapis and D. P. Telionis, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p264-265.

Flood Risk Management: New Concepts for an Objective Negotiation, O. Gilard, P. Givone and G. Oberlin, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3918-3919.

Habitat Preservation and Enhancement Associated with San Diego Creek Flood Control Channel Improvement, Yen-Hsu Chen and Ruh-Ming Li, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p530-535.

Hazard Assessment of Extreme Earthquakes and Floods Using the Theory of Outstanding Values, Reza Noubary, (Natural Disaster Reduction, George W. Housner, ed.

and Riley M. Chung, ed., 1997), p66-67.

Hydraulic Effects of Habitat Structures in Flood Control Channels, Rebecca Seal, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1519-1524.

Hydraulic Model Study of the Prado Dam Spillway, Chris D. Bahner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3800-3805.

Hydrological Analysis of High Flows and Floods in the Sava River Near Zagreb (Croatia), Dusan Trninic, Lidija Tadic and Zdenko Tadic, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p918.

Impact of Anthropogenic Activities in Rivers Upon Accuracy of Hydrological Forecasts and on Development of Forecasting Methodologies—Experiences From the Slovak-Hungarian Reach of Danube, K. Hajtasova and A. Svoboda, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1718.

Impact of Reservoir Flood-Control Operation on Interiordrainage Facilities, Michael Lindquist, David Ford and Pete Hall, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2939-2944.

Impacts of Sea Level Rise on Coastal Water Resources Management, Chin Y. Kuo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1822-1827.

The Integrated Flood Control System of the Great Miami Valley, M. Zoghi and K. A. Rinehart, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p384-385.

Inundation Scenarios and Inundation Risk, M. P. C. Frijters and B. P. van den Bunt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p62-63.

Investigation of Some Heavy Flood Hazards in Small Alpine Catchments in Austria, A. Watzinger, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p715.

The Largest Water Reservoirs of Russia in Flood Control, S. E. Bednarouk, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2538.

The Last Two Extreme Floods in Germany - Analyses and Consequences, K. Wilke, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1716.

Local Sponsorship and Floodplain Management, Herb Nakasone, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2350-2351.

A Look at Technological Risk and Uncertainties in Flood Disaster Reduction, Shou-shan Fan and Nicholas C. Matalas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p253-255. Looking Back At The Great Flood of 1993, Gary R. Dyhouse, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p375-376.

Mitigating Losses in Bangladesh's Active Floodplains, Paul Thompson and Ian Tod, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p23-24.

Mitigation of Flood Hazard on Alluvial Fans, Julianne J. Miller and Richard H. French, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2324-2329.

Modeling Groundwater Response to a Perimeter Flood, Jeff Leighton and Michel Genoud, (North American Water and Environment Congress & Destructive Water, Chen-

and Environment Congress as Destrictive Water, Chen-chayya Bathala, ed., 1996), p748-752. NA River Project Environmental Compliance with the N-tional Environmental Policy Act (NEPA), Ruth B. Vil-lalobos, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

A National Standard for Flood-Resistant Design and Con-struction, Christopher P. Jones, Vernon K. Hagen, Chris-topher S. Hanson, Thomas C. MacAllen, David Green-wood and Clifford E. Oliver, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p339-340.

1997), p339-340.
Non-Federal Flood Control Works Inspection Program, Jim Crum, Ruh-Ming Li and Henry M. Fehlman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1796-1800.
Optimum Storage Reallocation and Gate Operation in Multipurpose Reservoirs, Abbass Afshar and Hamid Morat Khani, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p162-1967. 1996), p1962-1967.

Overview of the US Army Corps of Engineers Flood Con-trol Channels Research Program, Ronald R. Copeland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1501-1506.

Predicting Stage-Discharge Curves in Channels with Bank Vegetation, Stephen E. Darby and Colin R. Thorne, HY Oct. 96, p583-586.

Probability Based Estimation of Expected Annual Benefits, Eric D. Loucks, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p298-303.

Protecting an American Folklore Legend, Arthur J. Sortet, III and Harry B. Thomas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p274-275.

Protection Against Flooding: A New Delta Plan in the Netherlands, Frank P. Hallie and Richard E. Jorissen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3019-3020.

Quasi Two-Dimensional Hydraulic Analysis of Drop Struc-L. Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p600-605.

Reclaiming Denver's Central South Platte River, Nick Ski-falides, Leo Eisel, Brian Kolstad and Ben Urbonas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3527-3532

Reduction of Sediment Loads in DEC Streams, Chester C. Watson, Tom Pokrefke and Daniel Gessler, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2885-2890.

Reliability of a Box Culvert Structure under a Levee during Project Floods, Robert C. Patev and Mary Ann Leggett, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), pl 18-133.

Reservoir Sediment Management Practices of the Los Angeles County Department of Public Works, Sree Kumar and Martin Moreno, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1651-1656. Response to Floods and Mitigation Measures in Bangla-desh, Paul Thompson and Mustafa Alam. (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p103-104.

Retrofitting for Flood Protection: A Status Report, French Wetmore, (Natural Disaster Reduction, George W Housner, ed. and Riley M. Chung, ed., 1997), p278-279.

Risk Analysis of Levee Closures Using Range/Confidence Estimates, W. D. Rowe and Michael Burnham, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p367-387.

Roanoke Valley Flood Hazard Mitigation, Edward G. Beadenkopf, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1976-1977.

Santa Ana River Mainstern Project, Brian M. Moore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2169-2175.

Santa Clara River Fluvial Analysis, Jun Wang, Ruh-Ming Li and Sree Kumar, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p358-363.

Sims Bayou: The Public Speaks - The Corps Listens, Don R. Allen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3314-3319.

Siting of Grade Control Structures, Chester C. Watson, John Smith and David S. Biedenharn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p286-291.

Social Consequences of Flood Mitigation, Elliott Mittler, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p369-370.

Stochastic Determination of Wave Heights for Flood Control Channels, Scott E. Stonestreet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4058-4063.

The System for the Hydrological Forecasting in Serbia, Bo-jan Palmar and Borjanka Palmar, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p716-717.

Use of Channel Forming Discharge Concepts for Flood Control Channel Design, Brad R. Hall and Richard D. Hey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1507-1512.

Vegetative Roughness in Flood Control Channels, Gary E. Freeman, David R. Derrick and William J. Rahmeyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1513-1518.

Water Wisdom of the Ancients, L. Michael Trapasso, CE Jan. 96, p64-65.

Water-Related Hazards: India's Experiences, K. S. Murty, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3275.

Zonification of Areas with Inundation Risk by Means of Mathematical Modeling in the Rosario Region, Argenti-na, G. A. Riccardi, E. D. Zimmermann and R. A. Navarto, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3704.

The 1993 Flood: A Vindication of Federal Levees and Reservoirs or A Call for "Back to Nature"? Richard J. Di-Buono and Gary R. Dyhouse, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p163-164.

The 1995 Floods of Rhine and Meuse - How Predictable are Water Levels in the Netherlands, Bart Parmet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p249-250.

Alternative Urban Flood Control, Parviz Monadjemi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Computing Flood Damage Reduction Accomplishment, Jo Ann Duman and Donna Lydon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2318-2323.

Corps Estimates \$4 Billion in Flood Protection Savings, CE

Apr. 96, p8.

Development of Flood Hazard Boundary Information, R. Cris Hughes and Gregory W. Lowe, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Reduction, George W. Ho Chung, ed., 1997), p365-366.

Draining Himalayan Glacial Lakes Before They Burst, Richard Kattelmann and Teiji Watanabe, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1978.

Effective Management and Control of Urban Flood Disas-ters in West Africa, S. O. Ojo, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3703.

Environmental Considerations for Water Resources Development in Haor Areas of Northeastern Bangladesh, G. M. Akram Hossain and Ainun Nishat, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1063-1068.

Environmental Engineering Forum, Dee Ann Sanders, EE

Nov. 96, p957

Flash Floods and Their Warning in Vietnam, Cao Dang Du, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1717.

Flood Control Studies for Arizona Communities, Fhilip O. Lowe and Sam Arrowood, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1870-1874.

Flood Damage Estimates Using GIS Spatial Analysis, Craig R. Wilkening, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3405-3410.

Flood Destruction and Abatement in China, Zhixin Liang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3017

Flood Management Strategies for the Rhine and Maas Rivers in the Netherlands, Jos Dijkman and Rob Klomp, (North American Water and Environment Congress Destructive Water, Chenchayya Bathala, ed., 1996), p3021-3022

Flooding from Rain-on-Snow Events in the Sierra Nevada, Richard Kattelmann, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1145-1146.

Flooding in Southeastern United States From Tropical Storm Alberto, July 1994, T. C. Stamey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p245-246.

Floodplain analysis of the Lower Santa Margarita River in Camp Pendleton Marine Air Base, California, Ruh-Ming Li, Anna Lantin and Hank Fehlman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1870-1874.

Floodplain Management in Los Angeles County, Allen Ma, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p4131-4135.

quency Analyses for Recent Regional Floods in the United States, Nick B. Melcher and Patsy G. Martinez, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p59-61.

Geo-data System for Landslide Hazard Assessment, Cassandra T. Rogers, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p70-

The Great USA flood of 1993, Lee W. Larson, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2.

Influence of Flooding Events on Suspended Matter Quality of the Meuse River (The Netherlands), J. J. G. Zwolsman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3273-3274.

Mitigating Losses in Bangladesh's Active Floodplains, Paul Thompson and Ian Tod, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p23-24.

Mitigation of Flood Hazard on Alluvial Fans, Julianne J. Miller and Richard H. French, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2324-2329.

Modeling Groundwater Response to a Perimeter Flood, Jeff Leighton and Michel Genoud, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p748-752.

A New, Low-Cost Ice Control Structure. Part 1: Concept Development, J. H. Lever, G. Gooch and A. Tuthill, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p617-628.

Next Generation Flood Damage Analysis Program, Michael W. Burnham, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3788-3793.

Cu., 1990, p. 198-3793.
Non-Federal Flood Control Works Inspection Program, Jim Crum, Ruh-Ming Li and Henry M. Fehlman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996, p. 1796-1800.

Response to Floods and Mitigation Measures in Bangladesh, Paul Thompson and Mustafa Alam, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p103-104.

Retrofitting for Flood Protection: A Status Report, French Wetmore, (Natural Disaster Reduction, George Housner, ed. and Riley M. Chung, ed., 1997), p278-279.

Risk Analysis of Levee Closures Using Range/Confidence Estimates, W. D. Rowe and Michael Burnham, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p367-387.

Roanoke Valley Flood Hazard Mitigation, Edward G. Beadenkopf, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1976-1977.

Storm-Surge Flooding in Chittagong City and Associated Risk, M. Mozzammel Hoque, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3701.

System of River Floods Warning in Ukraine, V. Manukalo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Water-Related Hazards: India's Experiences, K. S. Murty, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3275.

Flood drainage

Roosevelt Dam Reaches a New Height of Safety, CE May 96, p10.

Flood forecasting

The 1995 Flood in Southeastern Norway - Operational Forecasting, Warning, and Monitoring of a 200-year Flood, K. Repp, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2537

Advanced Hydrologic Forecasting Products for Flood and Drought Mitigation, John J. Ingram, Edwin Welles and Dean T. Braatz, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p227-228.

Application of Mathematical Models for Flood Forecasting in Sri Lanka, G. T. Dharmasena, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1549.

Catastrophic Floods and Their "Risk" in the Rivers of Albania, Miriam Bogdani, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p919.

Comparison of Multi-Layer Perceptron and Radial Basis Function Network as Tools for Flood Forecasting, A. W. Jayawardena and D. A. K. Fernando, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p457-458.

Estimation of Flood Forecasting Errors and Flow-Duration Joint Probabilities of Exceedance, Debdas Mukherjee and Nada Monsour, HY Mar. 96, p130-140.

Estimation of High Spring Floods Causing Inundation in Non-Studied Rivers of the West Siberian Plain, E. A. Asabina, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3702-3703.

Flash Floods and Their Warning in Vietnam, Cao Dang Du, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

Flood Forecasting Based on Radar Rainfall Measurements, M. A. Mirnikou and E. A. Baltas, WR May/June 96, p151-156.

Flood Forecasting Model for an Alpine Drainage Basin -River Drau in Austria, D. Gutknecht, W. Kugi and F. Nobilis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Flood Quantiles for Small Watersheds Using Peak Eleva-tion to Volume Method, Michael C. Morgan and Eric D. Loucks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p146-151.

Fuzzy Rule-Based Estimation of Flood Probabilities under Climatic Fluctuations, Istvan Bogardi, Roland Reiter and Peter Nachtnebel, (Risk-Based Decision Making in Water Resources VII, Yacov Y, Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996, p61-79. The Great USA flood of 1993, Lee W. Larson, (North

American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2.

How to Manage Floodwaves in the Dutch Meuse: Future Measures to Reduce the Inconvenience of Inundations, J. H. Gerretsen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996). p3271-3272.

The Last Two Extreme Floods in Germany - Analyses and Consequences, K. Wilke, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1716.

A Look at Technological Risk and Uncertainties in Flood Disaster Reduction, Shou-shan Fan and Nicholas C. Matalas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p253-255.

Operational Aspects of Warning, D. D. Nurbaev and N. S. Gavrilova, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1552.

The Predictability of Extreme Floods and the Role of the Coupled Land-Atmosphere-Ocean System, Ana Paula Barros and Rajat Bindlish, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p229-230.

Probabilistic Flood Forecast-Warning System, Roman Krzysztofowicz, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p231-

Quantitative Monitoring of Plata River Basin Waters, V. F. de sa e Benevides and R. M. Coimbra, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1719.

Runoff Forecasting Using a Local Approximation Method, A. W. Jayawardena, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2535.

System of River Floods Warning in Ukraine, V. Manukalo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1340.

Water-Related Hazards: India's Experiences, K. S. Murty, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

n Procedures for Rational and USSCS Design Flood Methods, G. W. Titmarsh, I. Cordery and D. H. Pilgrim, HY Jan. 95, p61-70.

Detection of Outliers in Pearson Type III Data, Colleen S. Spencer and Richard H. McCuen, HE Jan. 96, p2-10. Evaluation of Sampling Properties of General Extreme Value (GEV) Distribution-L-Moments Vs Conventional Moments, A. Sankarasubramanian and K. Srinivasan, North American Water, and Exchanges Convents. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p152-158.

pi32-138.

Expected Moments Alogrithms for Flood Frequency Analysis, William L. Lane and Timothy A. Cohn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2185-2190.

FLODRO 2.0: A User Friendly Personal Computer Package for Flood and Drought Frequency Analyses, Jose A. Raynal-Villasenor, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p304-309.

Floodplain Mapping Using Continuous Hydrologic and Hydraulic Simulation Models, A. Allen Bradley, Paula J. Cooper, Kenneth W. Potter and Thomas Price, HE Apr.

96, p63-68

Frequency Analyses for Recent Regional Floods in the United States, Nick B. Melcher and Patsy G. Martinez, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p59-61.

Probability Distribution of Annual Maximum, Mean, and Minimum Streamflows in the United States, Richard M.

Vogel and Ian Wilson, HE Apr. 96, p69-76. Probability-Weighted Moments without Plotting Position

Formula, Tefaruk Haktanir, HE Apr. 96, p89-91.
Regional Flood Frequency with Hierarchical Region of Influence, Zolt Zrinji and Donald H. Burn, WR July/Aug.

Flood hydrology 1995: Where the Past (Paleoflood Hydrology) Meets the Present, Understanding Maximum Flooding, Robert D. Jarrett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl 148.

Alternative Urban Flood Control, Parviz Monadjemi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p2540.

Estimation of Flood Forecasting Errors and Flow-Duration Joint Probabilities of Exceedance, Debdas Mukherjee

and Nada Monsour, HY Mar. 96, p130-140.

Hydrological Analysis of High Flows and Floods in the Sava River Near Zagreb (Croatia), Dusan Trainic, Lidija Tadic and Zdenko Tadic, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p918. Risk Assessment of Nambe Falls Dam, J. Lawrence Von

Thun, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p604-635

0.33.
Runoff Curve Number: Has It Reached Maturity? Victor M. Ponce and Richard H. Hawkins, HE Jan. 96, pl1-19.
System of River Floods Warning in Ukraine, V. Manukalo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl. 1340. p1340.

Flood level

GIS Applications in Modern Stormwater Management, Charles G. Boehm, (North American Water and Environ ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3633-3638. Mammoth Well Gurgles to Life, CE July 96, p11-12.

Flood Management
The 1993 Flood: A Vindication of Federal Levees and Reservoirs or A Call for "Back to Nature"? Richard J. Di-Buono and Gary R. Dyhouse, (Natural Pisaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p163-164.

Chambers System Helps Developers Level Floodplain, CE

Apr. 96, p96.

Combined Structural and Non-Structural Flood Hazard Mit-igation, Barbara D. Hayes, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p25-26.

County-Wide Drainage Study Using GIS, J. J. DeVries and T. V. Hromadka, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3623-3628.

Effective Management and Control of Urban Flood Disas-ters in West Africa, S. O. Ojo, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3705.

Flood Management Strategies for the Rhine and Maas Rivers in the Netherlands, Jos Dijkman and Rob Klomp, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3021-3022.

Flood Risk Management: New Concepts for an Objective Negotiation, O. Gilard, P. Givone and G. Oberlin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3918-3919.

Local Sponsorship and Floodplain Management, Herb Nakasone, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2350-2351.

Retrofitting for Flood Protection: A Status Report, French Wetmore, (Natural Disaster Reduction, George Housner, ed. and Riley M. Chung, ed., 1997), p278-279.

Water and Sanitation Intervention in Flood Mitigation Programs, Bilquis A. Hoque, Bradley R. Sack, Nahid A. Ali and J. T. A. Chowdhury, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3916.

Flood peaks

Flooding in Southeastern United States From Tropical Storm Alberto, July 1994, T. C. Stamey, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p245-246.

Floodplain Mapping Using Continuous Hydrologic and Hydraulic Simulation Models, A. Allen Bradley, Paula J. Cooper, Kenneth W. Potter and Thomas Price, HE Apr.

The Rhine Flood Events in December 1993/January 1994 and in January 1995, H. Engel, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p243-244.

Flood plain insurance

Benefits of the Santa Ana River Mainstern Project, William L. Zaun, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2176.

Flood Hazard Zonation in a Multihazard Environment, James E. Beavers and Frank H. Thomas, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p345-346.

Flood plain planning GIS Applications in Modern Stormwater Management, Charles G. Boehm, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3633-3638.

Integrating Drainage, Water Quality, Wetlands, and Habitat in a Planned Community Development, Michael R. Galuzzi and John M. Pflaum, UP Sept. 96, p101-108.

Local Sponsorship and Floodplain Management, Herb Nakasone, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2350-2351.

Flood plain regulation 1995: Where the Past (Paleoflood Hydrology) Meets the Present, Understanding Maximum Flooding, Robert D. Jarrett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl 148.

Flood plain studies

Application of GIS Technology to Floodplain & Habitat Analyses, Scott E. Stonestreet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1393-1398.

Assessment of Risks of Flooding by Use of a Two-Dimensional Model, A. Paquier and P. Farissier, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3915-3916.

Benefits and Costs Associated with Flood Mitigation in the United States, Eugene A. Stallings, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p153-154.

County-Wide Drainage Study Using GIS, J. J. DeVries and T. V. Hromadka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3623-3628.

Flood Control Studies for Arizona Communities, Philip O. Lowe and Sam Arrowood, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1870-1874.

Clany a Bathala, co. Though a management of the Lower Santa Margarita River in Camp Pendleton Marine Air Base, California, Ruh-Ming Li, Anna Lantin and Hank Fehlman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1870-1874.

Floodplain Management in Los Angeles County, Allen Ma, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pd. 131.4135.

Floodplain Mapping Using Continuous Hydrologic and Hydraulic Simulation Models, A. Allen Bradley, Paula J. Cooper, Kenneth W. Potter and Thomas Price, HE Apr. 96, p63-68.

Joint Effort by ASCE and FEMA to Develop Flood Hazard Mitigation Standards, Clifford E. Oliver and Harry B. Thomas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p337-338.

Mitigating Losses in Bangladesh's Active Floodplains, Paul Thompson and Ian Tod, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p23-24.

The Predictability of Extreme Floods and the Role of the Coupled Land-Atmosphere-Ocean System, Ana Paula Barros and Rajat Bindlish, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p229-230.

Flood plain zoning

Floodplain Management in Los Angeles County, Allen Ma, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4131-4135.

Flood plains

Bridge Abutment Scour in Floodplain with Backwater, Terry W. Sturm and Aftab Sadiq, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p921-930.

Chambers System Helps Developers Level Floodplain, CE Apr. 96, p96.

Design and Construction of the Santa Ana River Wash Crossing of the Inland Feeder. Burt Yu. Jay Arabshahi, Birger Schmidt and Roy Cook, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1789-1795.

Design of a Floodplain Road Crossing Using Two Dimensional Modeling, Nathan R. South, Andrzej J. Kosicki and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4300-4305.

Design of Riparian Habitat Replacement in Active Floodplains, Bruce M. Phillips, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1406-1412.

Environmental Considerations for Water Resources Development in Haor Areas of Northeastern Bangladesh, G. M. Akram Hossain and Ainun Nishat, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1063-1068.

Hydraulic Performance of Open Channel Breaching, Juan A. González and Ben Chie Yen. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p334-339.

Impacts due to Density Current Deposition in Reservoirs, Jiahua Fan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2097-2102.

Modeling 30 Free Surface Flow in Compound Channels: A Validation Case Study, Fraincisco J. M. Simões and Sam S.-Y. Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2719-2724.

A New Technique for Measuring Vegetation Density, Syndi J. Dudley, Steven R. Abt, Charles D. Bonham and J. Craig Fischenich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), 93656-3661.

River Meander Zones and Floodplain Reconnection, David A. Bella, Peter C. Klingerman and Hiram W. Li, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2613-2618.

River Restoration Considerations Beyond Channel Design, William T. Fullerton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3091-3096.

Swimming in Style, Gary Steficek, P.E., CE Aug. 96, p36-

Uncertainty and Risk Analyses for FEMA Alluvial Fan Method, Bing Zhao and Larry Mays, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p180-190.

Vegetative Roughness in Flood Control Channels, Gary E. Freeman, David R. Derrick and William J. Rahmeyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1513-1518.

Water Surface Profiles in Compound Channel with Multiple Critical Depths, Terry W. Sturm and Aftab Sadiq, HY Dec. 96, p703-709.

Flood routin

285

Channel Routing with Flow Losses, Ming Jin and Danny L. Fread, HY Oct. 96, p580-582.

An Extended Relaxation Technique for Unsteady Flows in Networks, J. M. Lewis, D. L. Fread and Ming Jin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p195-200.

Large River Diversion Optimization Considering the Uncertainties Involved, M. H. Afshar, A. Afshar and H. Parvazian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4347-4352.

The Largest Water Reservoirs of Russia in Flood Control, S. E. Bednarouk, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2538.

The Last Two Extreme Floods in Germany - Analyses and Consequences, K. Wilke, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1716.

An LPI Numerical Implicit Solution for Unsteady Mixed-Flow Simulation, D. L. Fread, Ming Jin and Janice M. Lewis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3222-327.

Retrofitting for Flood Protection: A Status Report, French Wetmore, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p278-279.

Watershed Modeling and Flood Routing for Safety Assessment of an Existing Dam, C. F. Lee, WR Sept./Oct. 96, p334-341.

Flood stages

Frequency Analyses for Recent Regional Floods in the United States, Nick B. Melcher and Patsy G. Martinez, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p59-61.

Hydraulic Performance of Open Channel Breaching, Juan A. González and Ben Chie Yen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p334-339.

Catastrophic Riverine Flooding: Rapid Evaluation with a Robust Numerical Model, David C. Froehlich and Mi-chael A. Ports, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p225-226.

Estimation of Flash Flood Potential for Large Areas, K. P. Georgakakos, A. K. Guetter and J. A. Sperfslage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl 147.

Flooding from Rain-on-Snow Events in the Sierra Nevada, Richard Kattelmann, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1145-1146.

Flooding of an Underground Facility at Yucca Mountain: A Summary of NRC Review Plans, Neil M. Coleman, Rex G. Wescott and Terry L. Johnson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p205-207

Hydraulic and Sediment Models for Design of Restoration of Former Tidal Marshland, Guang-dou Hu, M. L. John-son and R. B. Krone, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p215-228.

Ice Jam Mitigation Using Setback Dykes: Coldwater River at Merritt, B.C. Spyros Beltaos and Paul F. Doyle, CR

Dec. 96, p190-206

Impacts of Reservoir Sedimentation on Decommissioning of Dams, George W. Annandale, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2114-2119.

The Importance of Plant Community Structure on Form and Function of Created Wetland Systems, Richard A. Orson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1197-1202.

Inundation Studies in Case of Failure of King Talal Dam, Ahmed Kassem, M. Hanif Chaudhry and Muhammad R. Shatanawi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1924-1929.

Peak Outflow from Breached Embankment Dam, David C. Froehlich, WR Jan./Feb. 95, p90-97.

Peru's Program for Disaster Mitigation 1992-1995, Julio Kuroiwa and Dusan Zupka, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p84-85.

Ponding Study of January 1993 Storm Event within Airport Industrial Park, Oceanside, California, George Hsu and Yen-Hsu Chen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2282-2287.

Probability Distributions for Peak Stage on Rivers Affected by Ice Jams, Andrew M. Tuthill, James L. Wuebben, Steven F. Daly and Kathleen D. White, CR Mar. 96,

p36-57.

Reliability Analysis in Support of Risk Assessment for Non-Routine Closure/Shutdown of Hydroelectric Gener-ating Stations, T. V. Vo, T. R. Blackburn, L. O. Casazza, P. G. Heasler, N. L. Mara, T. M. Mitts and H. K. Phan, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p326-345.

Response to Floods and Mitigation Measures in Bangla-desh, Paul Thompson and Mustafa Alam, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p103-104.

A Shoreline Risk Index for Northeasters, David Kriebel, Robert Dalrymple, Anthony Pratt and Vincent Sakovich, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p251-252.

Uncertainty and Risk Analyses for FEMA Alluvial-Fan Method, Bing Zhao and Larry W. Mays, HY June 96, p325-332.

'96 Extraordinary Flood in the Middle Reach of the Yang-tze River, Xuewu Ji, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p377-378.

ne 1593 Flood: A Vindication of Federal Levees and Reservoirs or A Call for "Back to Nature"? Richard J. Di-Buono and Gary R. Dyhouse, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p163-164. The 1993 Flood: A Vindication of Federal Levees and Res-

Analysis of Exceptional Meteorological Conditions on July and August in Conakry, Mamadou Tounkara, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl 144.

Aspects of River House Cleaning During Floods, Parviz Monadjemi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2192.

At-A-Station Temporal Variations in Flow Under Drought and Flood Conditions and Associated Sediment Problems, Muhammad Ashiq, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1881-1886.

Beneficial Aspects of Flood and Rain in Countries Where the Drinking Water is Naturally Contaminated with Fluo-ride Where Fluorosis is a Major Public Health Problem, Sushcela Andezhath Kumaran, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2191.

Biopositive City as Means for Natural Disaster Reduction, Alexandr Tetior, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p329-

330.

Bridge Hydraulic and Scour Analysis Using FESWMS-2DH, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1555-1564.

Calibration Procedures for Rational and USSCS Design Flood Methods, G. W. Titmarsh, I. Cordery and D. H. Pilgrim, HY Jan. 95, p61-70.

Catastrophic Floods and Their "Risk" in the Rivers of Albania, Miriam Bogdani, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p919.

Coastal Flood Hazard Analysis Using Digital Photogram-metry, Margery Overton, Cheryl Petrina and John Fisher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p187-188.

Comparison of Hazard and Acceptable Risk Criteria, David S. Bowles, Loren R. Anderson and Terry F. Glover, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p346-366.

Dam Safety Policy for Spillway Design Floods, James R. Dubler and Neil S. Grigg, El Oct. 96, p163-169.

Education: Pathway to Mitigation, James W. Russell, (Nat-ural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p35-36.

Effect of Surface Water and Ground Water Interaction on Atrazine Transport to Pumping Wells, Chittaranjan Ray, David Soong, Deva K. Borah and George R. Roadcap, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1575-1580.

Extraordinary Flood Disaster in Tai Lake Basin of China in 1991, Ruiju Liang, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p48-

Flood Hazard Zonation in a Multihazard Environment, James E. Beavers and Frank H. Thomas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p345-346.

Flood Trends in Austria, F. Nobilis and P. Lorenz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p917.

Glacier-Generated Floods and Debris Flows, Andrew G. Fountain and Joseph S. Walder, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2449.

The Great USA flood of 1993, Lee W. Larson, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2. Guist Creek Dam Spillway Upgrade: A Maze (Labyrinth) of Difficulties, David C. Froehlich, Michael A. Woolum and W. Keith Crim, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1918-1923.

Hydrologic Impact of Great Flood of 1993 in South-Central Kansas, Marios Sophocleous, A. J. Stern and S. P. Per-kins, IR July/Aug. 96, p203-210.

kms, ns. July/raug. 20, p203-210.

Hysteresis Effect of Karst Vadose Zone in Spring Kr5, Mt.

Kräuterin, Austria, Dachang Zhang, Rudolf Pavuza, Karl

Mais and Hans Fischer, (North American Water and En
vironment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1754-1759.

Institutionel Lease in March 1996.

Institutional Issues in Natural Hazard Mitigation, Daniel J. Alesch, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p367-368.

Joint Effort by ASCE and FEMA to Develop Flood Hazard Mitigation Standards, Clifford E. Oliver and Harry B. Thomas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p337-338.

Looking Back At The Great Flood of 1993, Gary R. Dy-house. (Natural Disaster Reduction, George W. Housner. ed. and Riley M. Chung, ed., 1997), p375-376.

ed. and Kiley M. Chung, ed., 1997), p.73-70.

A Multi-Objective Analysis for Cyclone Shelter Planning in Bangladesh, Jahir U. Chowdhury, Rezaur Rahman, Fazlul Karim and David W. Watkins, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p213-214.

Natural Hazard Zonation, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p361-362.

Natural Hazards Mitigation in South Carolina, Charles Lindbergh and Maurice R. Harlan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p86-87.

Periodic Variation in Karst Stream Losses, C. Warren Campbell, Mohamed Abd El Latif and Larry Foster, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Probability Distribution of Annual Maximum, Mean, and Minimum Streamflows in the United States, Richard M. Vogel and Ian Wilson, HE Apr. 96, p69-76.

Range of Impacts of Some Recent U.S. Disasters and The Implications for Housing Recovery, Claire B. Rubin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p168-170.

Reducing Glacial-Lake Outburst Hazards in the Khumbu Himal, Richard Kattelmann and Teiji Watanabe, (Nan-ral Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p258-259.

Selection of the Form of Calculated Flood Hydrograph in Projecting Water Release Facilities, D. M. Yaroshevskii, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2446.

Statistical Distributions and Natural Hydrograph, Nazeer Ahmed, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p292-297.

Stormwater Management for San Joaquin Hills Transporta-tion Corridor, Orange County, California, Lan-Yin Li Weber, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2826-2830.

Two Dimensional Modeling of the Mobile River Delta and the Mobile Bay System, Conor C. Shea, Charles D. Powell and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3662-3667.

Water in the International Decade for Natural Disaster Reduction, A. J. Askew, (North American Water and Enviment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), pl.

Water Resources Investigation Along Salt River in Phoenix and Tempe Area, James Chieh, Jody Fischer and Dennis Marfice, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1399-1405. Wave Field in the Efflux of River Water, Akira Mano and Subandono Diposaptono, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

'A Comprehensive Strategy for Mitigation', R. T. Severn, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p13-14.

287

Design of Sheet Pile Walls, U.S. Army Corps of Engineers, 1996, 0-7844-0135-7, 75pp.

Floodplain analysis of the Lower Santa Margarita River in Camp Pendleton Marine Air Base, California, Ruh-Ming Li, Anna Lantin and Hank Fehlman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1870-1874.

Floodwaves

How to Manage Floodwaves in the Dutch Meuse: Future Measures to Reduce the Inconvenience of Inundations, J. H. Gerretsen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3271-3272.

Architect Gives Precast Care to Nursing Center, CE Sept.

A Comparison of Seismic Design Using ASD and LRFD, Jeffrey R. Soulages, Jon A. Heintz and James O. Malley, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p542-549.

Control of Floor Vibrations, Linda Morley Hanagan, Cheryl Rottmann and Thomas M. Murray, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p428-

Deflection Serviceability Design for Wood Members and Systems, D. Rosowsky and K. Fridley, (Building an In-ternational Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p452-

Dynamic Service Actions for Floor Systems - Human Activity, Per-Erik Eriksson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p413-419.

Fatigue Cracks at Stringer-Floorbeam Connections, Leon Lev Lai, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p483-490.

Laying Sequence Planning for Continuous Girder Rein-forced Concrete Floor System by Genetic Algorithms, Y. Natsuaki, S. Mukandai, K. Yasuda and H. Furuta, (Anal-ysis and Computation, Franklin Y. Cheng, ed., 1996), p79-90.

Minimizing Floor Vibrations from Occupant Activities, Sarah E. Mouring and Bruce R. Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p405-

Moisture Penetration of Concrete Floor Slabs, Basement Walls, and Flat Slab Ceilings, Robert W. Day, SC Nov. 96, p104-107.

Probabilistic Evaluation of Wood-Joist Floor Vibrations. Omar A. Jaradat, Arshad A. Al-Foqaha'a and Kenneth J. Fridley, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p342-345.

Proposed Specification and Commentary for Composite Joists and Composite Trusses, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Apr. 96, p350-358.

Retail-Grocery-Floor Failure, Raymond S. Rollings, CF May 95, p137-145.

Seismic Base Isolation Study for a Kentucky Building, John P. Miller and Nathan C. Gould, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p.389-

Structural Design Forum, SC Feb. 96, p3-8.

Time-Dependent Degradation of Structural Systems During Fire — A Method for Failure Prediction, Jiahong Jane Zuo and Jamshid Mohammadi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1042-1045.

Florida

Architectural Engineering Program at University of Miami, David A. Chin and Michael K. Phang, AE June 96, p78-

ASCE Regulated Riparian Code and Florida's Regulated Riparian Experience: The Role for Voluntary Realloca-tion, Phyllis Park Saarinen and Mark D. Farrell, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2927-2932.

Comparison of Commonly Used Odor Control Technologies, Kartik Vaith, Mike Cannon, Darrell Milligan and James Heydorn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p64-74.

Concept Ecology Integrated Project Engineering and Envi-ronment; Relating a Project to the Surroundings, David S. Reutter, Roger J. Menendez, Peter J. Bottone and Robert L. Whitman, Ir., (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p753-758.

Discharge Measurements and Predictions in Wetlands, Vassilios A. Tsihrintzis, David A. Sikkema, Marcia Levinson and Jose L. Oliveros, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p274-279.

Ecosystem Management in the State of Florida, Ernest L. Barnett and Jim Lewis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3586-3591.

Evaluation of Cracking of the Miami Marine Stadium Hy-perbolic Paraboloid Roof Structure, Michael L. Brainerd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1659-1668.

Financing the Future of Storm Water, Patrick S. Collins, CE Mar. 96, p64-66.

Flooding in Southeastern United States From Tropical Storm Alberto, July 1994, T. C. Starney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p245-246.

Geophysical Characterization of Florida Limestone-Investigative Case History, D. S. Saxena, R. M. Dickin-son and A. Saxena, (Case Histories of Geophysics Ap-plied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p73-85.

GIS Application for Miami Transportation System Hurri-cane Emergency Preparedness, Kangming Xu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p107-108.

Glascrete? - Disposing of Non-Recyclable Glass, Venkata S. Panchakarla and Millard W. Hall, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p509-518.

High-Speed Rail Moves Ahead, CE Jan. 96, p8.

The Integrated Flood Control System of the Great Miami Valley, M. Zoghi and K. A. Rinehart, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p384-385.

An Irresistible Offer, Max D. Crumit, P.E., Wafic M. Ar-noush, P.E. and Scott L. Montgomery, P.E., CE Aug. 96,

p40-43.

Modeling Changing Freshwater Delivery to Apalachicola Bay, FL, W. K. Jones and Wenrui Huang, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T.

Cheng, 1996), pl 16-127.

- Modeling the Effect of Reduced Nitrogen Loading on Water Quality, Y. Peter Sheng, Eduardo A. Yassuda and Changlu Yang, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p644-
- No-Dig Gains Ground, Luis Aguiar, Thomas G. Scheller, P.E., James T. Cowgill, P.E. and Iqbal Noor, CE Aug. 96, p54-57.
- Object-Oriented Analysis of South Florida Hydrologic Sys-tems, Todd S. Tisdale, CP Oct. 96, p318-326.

Resolution of the ACT-ACF Water dispute with a Federal-State Partnership, N. D. McClure, IV, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3417-3422.

Scour Monitoring at Johns Pass and Nassau Sound, Florida, J. D. Schall, G. A. Fisher and G. R. Price, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1990-1998

South Florida Water Management District: Reconstructing the Everglades Ecosystem, James Phillip Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1190-1196.

Telling Florida's Water Story, David W. Landis and Blair

K. Hanuschak, CE Feb. 96, p40-43.

Water Control Structure Choice for Wetland Restoration/ Creation, Roger C. Smith, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p268-273.

Wellhead Protection Area Predictions and Implications for the Biscayne Aquifer in Miami, Florida, Hector R. Fuentes, Vassilios A. Tsibrintzis and Jose H. Olivo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p960-965

Wetland Mitigation Evaluation Ten Years After Florida Keys Bridge Replacement, Roy R. Lewis, III, Curtis R. Kruer, Saliy F. Treat and Stephanie M. Morris, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p759-763.

Seepage Assessments and Control Associated with Florida's Phosphale Industry". Wayne A. Ericson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p866-880.

Analysis of Rainfall-Induced Debris Flows, Scott A. Anderson and Nicholas Sitar, GT July 95, p544-552.

Analysis Tools of Transitioning and Turbulent Flows, M. R. Hajj, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p434-437.

Bifurcation of Line Thermals, M. Dehghani and V. H. Chu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Biomechanics and Testing of Mechanical Circulatory Sup-port Devices, Harvey Borovetz, James Antaki, William Wagner, Marina Kameneva, John Pristas, Stephen Winowich, William Mandarino, Philip Litwak, Robert Kormos and Bartley Griffith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p35.

Centrifugal, Gravity and Side-wall Effects in Annular Shear Cells, Cliff K. K. Lun, (Engineering Mechanics, Y. K.

Lin and T. C. Su, 1996), p104-107.

Channel Routing with Flow Losses, Ming Jin and Danny L. Fread, HY Oct. 96, p580-582.

Computation of Velocity Fields of Intravenous Balloon Pumping, Huaqiang Li, Tin-Kan Hung, Chiuping Chang and Pat Sawzik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p326-329.

Computational Modeling of Fluid Dynamics in Aortopulmonary Shunts: Comparison to In Vitro Studies, Kevin K. Whitehead, Theresa A. Tacy and Edward G. Cape, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p334

Determination of Force and Surface Pressure Coefficients of High Reynolds Number Flow over Circular Cylinder by Discrete Vortex Method, Fusen He and Tsung-chow Su. (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p979-982

Dilution of Dense Bottom Plumes, Ole Petersen and Torben Larsen, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p906-909.

Dominant Eddy Simulation in Turbulent Flow, J.-B. Zhang and V. H. Chu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p438-441.

The Effect of Diameter Mismatch Upon Hemodynamics in the Distal Anastomoses of Vascular Bypass Grafts, Robert S. Keynton, Mary M. Evancho, Rick L. Sims and Stanley E. Rittgers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p196-199.

Effect of Grade Control Structures on DEC Streams, R. L. Bingner, E. J. Langendoon, L. Li and C. V. Alonso, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Energy Transfer Rates in Unsteady Plane Mixing Layers, M. R. Hajj and I. M. Janajreh, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1066-1069.

Engineering a Novel Intravenous Oxygenator, William Federspiel, Frank Walters, Pat Sawzik, Gary Reeder, Harvey Borovetz and Brack Hattler, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p43.

Engineering Design Considerations for Artificial Lungs, L. F. Mockros and K. E. Cook, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p33-34.

Estimation of Mean Flow Velocity in Ice-Covered Chan-nels, Martin J. Teal, Robert Ettema and John F. Walker, HY Dec. 94, p1385-1400.

- Experimental Study of Steady and Pulsatile Flows in Models of Abdominal Aortic Aneurysms, Robert A. Peattie, Tiffany J. Riehle, Matthew L. Parsons, Brian P. Giles and Edward I. Bluth, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p318-321.
- Flow Induced Charging of Liquids in Reduced Gravity, Donald Pettit, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p545-
- Fluid Vortices edited by S.I. Green, J. S. Marshall, HY July
- Granular Flow Based on Non-Newtonian Fluid Mechanics, Sergio A. Elaskar, Luis A. Godoy and Alejandro T. Brewer, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p394-397.
- Investigation of On-Orbit Servicing Robot, T. Matsue and Y. Wakabayashi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p533-
- Jamming of the Flow of Granular Materials, Yi Sun and Oleg Vinogradov, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p265-268.
- Magnetic Fluid Dynamics of Blood Flow, Yousef Haik, Ching Jen Chen and Vinay Pai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p458-461.
- Mixing of a Bent-over Jet in Crossflow, Paul C. K. Chu and Joseph H. W. Lee, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p910-913.
- Modeling Dry Weather Wastewater Flow in Sewer Net-works, D. Butler and N. J. D. Graham, EE Feb. 95,
- Multiphase Flow in Deforming Porous Media by the Finite Element Method, Pedro Arduino and Emir J. Macari, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p420-425
- Numerical Modeling of Turbidity Currents, Scott F. Brad-ford and Nikolaos D. Katopodes, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p404-415.
- Platelet Activation in Time Varying Shear Flow Field, C. Cornelius Glismann and Ned H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p39-42.
- Pulsatile Flow Circuitry for Dynamic Study of a Volume Plethysmograph, Alex A. Yu, Jeff Raines and Ned H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p204-207.
- Segregation in Hopper Flows, Masami Nakagawa, Xiaoshan Lin and G. G. W. Mustoe, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p386-389.
- Selection of Sediment Transport Relations Part III: Numeri-cal Ranking of Sediment Transport Relations, David T. Williams and Pierre Y. Julien, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2843-2848.

Simulation of Dilute Gas-Solid Flows in Horizontal Chan-nels, Cliff K. K. Lun and Hong S. Liu, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p390-393.

Simulation of Pulsatile Flow Past a St. Jude Valve, L. Niu, D. Bluestein and R. T. Schoephoerster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p330-333.

- Simulation of Suspended Particles Transport in the Entrance Region of Tube Flow, Shi-kang Wang and N. H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p462-465.
- Stability of Shallow Shear Flows, Vincent H. Chu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1074-1077.
- A Stabilized Formulation of the Navier-Stokes Equations, Arif Masud, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), pl 135-1138.
- Studying Mixed Granular Flows by Image Analysis, Lennart Gustafsson and Peter Gustafsson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p100-103.
- Theory and Simulations of Relaxation and Cyclic Granular Flows, Marijan Babic and William J. Bocchieri, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),
- Thermohaline Buoyancy Effects on Turbulent Flows, R. E. Baddour, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p454-457.
- Turbulence Measurements in Saline Gravity Current Fronts, Jeffrey D. Parsons and Marcelo H. García, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),
- Two-dimensional Sheetflow Modeling for Wetland Resto-ration, Robert A. Laura and Ananta K. Nath. (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p263-267.
- Validation of a 3-D Numerical Model of LV Ejection, Tong Ding and Richard T. Schoephoerster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p322-325.

Flow characteristics

- Can Numerical Estuarine Models be Driven at the Estuary Mouth, B. H. Johnson, H. V. Wang and K. W. Kim, (Es-tuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p255-267.
- Comprehensive Modelling of Water Distribution Networks, Bryan W. Karney, Samuel S. Kpo and Kai-Wah Tang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4107-4112.
- Direct Measurement of Turbulence Structures in a Standard Jar Test Tank Using PIV System, Chen-Yu Cheng, Joseph F. Atkinson and Marcus I. Bursik, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3746-3751.
- Discharge Coefficient of Rectangular Side Weirs, R. Singh, D. Manivannan and T. Satyanarayana, IR July/Aug. 94, p814-819.
- Dividing Rectangular Closed Conduit Flows, A. S. Ramamurthy, Weimin Zhu and B. L. Carballada, HY Dec. 96, p687-691.
- Effects of Approach Flow Conditions on Pump Sump Design, Gustavo Arboleda and Mutasem El-Fadel, HY Sept. 96, p489-494.
- Evaluating Hydraulic Roughness in Tunnels, Thomas C. MacDonald and Ken J. Susilo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3645-3650.
- Hydraulic Jump in Sloping Channels, Mustafa Gunal and Rangaswami Narayanan, HY Aug. 96, p436-442.
- A Knowledge Based System for the Design of Open Chan-nels, James M. Crum and Michael E. Mulvihill, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4125-4130.
- McAlpine Intake Model Study for Innovative Lock Design, n E. Hite, Jr. and Larry Dalton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3135-3140.
- A Method to Study Suspended Sediment Induced Flow Characteristics Changes, D. Zhou and C. Mendoza, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),
- A Network Transfer Function Model with a Markovian Prior for Tracer Tests Evaluation, Nela Zavaljevski and Alvin Shapiro, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p70-72.

Strange Attractors and Chaos in Wastewater Flow, Donald I. Angelbeck and Rafic Y. Minkara, EE Jan./Feb. 94, p122-137.

Flow control

Developing a Rating Table for the Central Diversion Dam Radial Gates, Michael A. Drain, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3598-3603.

Discharge Characteristics of Overshot Gates, Brian Wahlin and John Replogle, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3604-3609.

Evaluation of System Constant Volume Control, Zihui Lin and David H. Manz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4353-4358.

Field Determination of Flow through a Pressure Regulating Valve, Jorge A. Garcia and Antonia M. Romero, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3610-3616.

Increasing Computational Accuracy of Radial Gate Flows, Brian Henning and Timothy F. Kacerek, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3592-3597.

Performance of Baffle-Sluice Modules with Changed Mod-ule Dimensions, B. Maheswara Babu, P. K. Mishra and T. Satyanarayana, IR Sept/Oct. 96, p310-313.

Simulation of Interaction between Canal Regulation and Groundwater, Hsin-Chi J. Lin and Hwai-Ping Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1587-1591

Swirl Technology: Enhancement of Design, Evaluation, and Application, Richard Field and Thomas P. O'Connor, EE Aug. 96, p741-748.

Estimation of Flood Forecasting Errors and Flow-Duration Joint Probabilities of Exceedance, Debdas Mukherjee and Nada Monsour, HY Mar. 96, p130-140.

Abwasser-Hydraulik: Theorie Und Praxis (Sewer Hydraulics: Theory and Practice) by Willi H. Hager, Ben Chie Yen, HY Oct. 96, p591.

Discharge Measurements and Predictions in Wetlands, Vassilios A. Tsihrintzis, David A. Sikkema, Marcia Levinson and Jose L. Oliveros, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p274-279.

Estimation of Leakage Quantity for Long Auxiliary Venti-lation Systems, Felipe Calizaya and Pierre Mousset-Jones, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p429-431.

Field Determination of Flow through a Pressure Regulating Valve, Jorge A. Garcia and Antonia M. Romero, (North American Water and Environment Congress & Destruc tive Water, Chenchayya Bathala, ed., 1996), p3610-3616.

Modeling Dry Weather Wastewater Flow in Sewer Net-works, D. Butler and N. J. D. Graham, EE Feb. 95, p161-173.

Portable Flumes with Adjustable Throats, John Replogle and Brian Wahlin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2409-2414.

Regional Flood Frequency with Hierarchical Region of Influence, Zolt Zrinji and Donald H. Burn, WR July/Aug. 96, p245-252.

Rheology of Fresh Concrete, Leslie Struble and Richard Szecsy, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1121-1128.

Synchronized Measurements of Bed-Shear Stress and Flow Velocity in Open Channels with Simulated Vegetation, Fabian López and Marcelo García, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3651-3655.

Waste of Water is Costly. Why Not Use an Accurate Flow Monitoring System? Hans-Peter Vaterlaus, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3617-3622. X-ray Radiography of Fracture Flow and Matrix Imbibi-tion, Jeffery J. Roberts and Wunan Lin, (High Level Ra-dioactive Waste Management, Technical Program Committee, 1996), p89-91.

Flow patterns

290

Anticyclonic Upper Layer Residual Circulation and Estua-rine Circulation in Osaka Bay, Keiji Nakatsuji and Tateki Fujiwara, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p128-142.

Application of Artificial Neural Networks to the Sacramento-San Joaquin Delta, Nicky Sandhu and Ralph Finch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p490-504.

At-A-Station Temporal Variations in Flow Under Drought and Flood Conditions and Associated Sediment Prob-lems, Muhammad Ashiq, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1881-1886.

A Combined Physical and Mathematical Modeling Scheme for Kapichira Hydropower Project, Malawi, K. Siyakumaran and E. Cole, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3806-3811.

Direct Measurement of Turbulence Structures in a Standard Jar Test Tank Using PIV System, Chen-Yu Cheng, Jo-seph F. Atkinson and Marcus I. Bursik, (North American ater and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3746-3751.

Discussion of Some Grid-Independence Issues in the Context of K—E and K—Go Models of Turbulence, Nabi IElkouh, Simone Sebben and B. Rabi Baliga, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p297-300.

Effect of Recharge Duration on Water-Table Response, Subramania I. Sritharan and Henry R. Gee, IR July/Aug. 96, p228-234.

Effects of Approach Flow Conditions on Pump Sump De-sign, Gustavo Arboleda and Mutasem El-Fadel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p376-381

Effects of Rectangular Foundation Geometry on Local Pier Scour, A. C. Parola, S. K. Mahavadi, B. M. Brown and A. El Khoury, HY Jan. 96, p35-40.

Experimental Study of One-Dimensional Immiscible Fluid Drainage in Layered Sands, Calvin D. Miller and Deanna S. Durnford, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p628-638.

Geometry of Sand Ripples due to Combined Wave-Current Flows, Hitoshi Tanaka and Van To Dang, WW Nov./ Dec. 96, p298-300.

Impacts due to Density Current Deposition in Reservoirs, Jiahua Fan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2097-2102.

Instrumentation for Field Measurement of Abutment Scour, J. D. Schall, G. R. Price and G. A. Fisher, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p931-939.

Modeling the Ecological Impacts of Flaming Gorge Dam Operations, S. C. L. Yin, K. E. LaGory, J. W. Hayse, I. Hlohowskyj, R. A. Van Lonkhuyzen and H. E. Cho, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Observations of Tidal Circulation in Mamala Bay, Hawaii, Peter Hamilton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3880-3885.

On Conductivity of Soils with Preferential Flow Paths, R. S. Govindaraju and J. Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1730-1735.

Pier Width and Local-Scour Depth, Robert Ettema, Bruce W. Melville and Brian Barkdoll, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p251-256.

A Review of NAPL Modeling Approaches for Remedia-tion, James W. Mercer, Zafar Adeel and Charles R. Faust, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p46-65.

A Secondary Flow Correction for Depth-Averaged Flow Calculations, John Finnie, Barbara Donnell, Joe Letter and Robert S. Bernard, (Engineering Mechanics, Y. K.

Lin and T. C. Su, 1996), p301-305.

Significance of Lateral Elevation Gradients in Tidally Affected Tributaries, Frederick E. Schuepfer, Guy A. Apicella and Vincent J. DeSantis, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p.229-239.

Subcatchment Parameterization for Runoff Modeling Using ubcatchment Parameterization for Runoff Modeling Using Digital Elevation Models, Jurgen Garbrecht, Lawrence W. Martz and David C. Goodrich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2689-2694.

Turbulence Model for Depth-Averaged Flows in Naviga tion Installations, Hector R. Bravo and Forrest M. Holly,

Jr., HY Dec. 96, p718-727.

Verification of Vertically Rotating Flume Using Non-Newtonian Fluids, Richard J. Huizinga, HY Aug. 96,

Flow profiles

Nonunique Water-Surface Profiles in Open Channels, Sub-hash C. Jain, HY Dec. 93, p1427-1434.

Velocity and Turbulence Distribution in Unsteady Open-Channel Flows, T. Song and W. H. Graf, HY Mar. 96, p141-154.

Analysis of Air Permeability Tests at Yucca Mountain, Nevada, Dave O. Cox and Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p160-162.

Assessment of Risks of Flooding by Use of a Two-Dimensional Model, A. Paquier and P. Farissier, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3915-3916.

Characterization and Remediation of a Fuel Oil Plume, Dorinda L. Clause and Stacey R. Leake, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p762-775.

Designing Concrete Culverts to Resist Scour Damage, John Kurdziel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p3942-3949.

Designing SVE to Remove Volatile LNAPLs, Richard Haimann, Kathleen Schoen, Mark Underwood, Jeff Munic and Jim Hartley, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p431-441.

Discharge Characteristics of Overshot Gates, Brian Wahlin and John Replogle, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3604-3609.

Discussion of Environmental Engineering Forum: Long-Term Effects of Wetland Treatment of Mine Drainage (November/December 1993, Vol. 119, No. 6, by Thomas M. Walski (Environmental Engineering Forum)), Frederick M. Williams and Lloyd R. Stark, EE Jan. 96, p84-85.

The Effects of Water Surface Profiles on Manning's Roughness Coefficient, P. Michael DePue, II and Ta Wei Soong, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3639-3644.

Lyzroj, p.30.39-3644.
 Evaluating Hydraulic Roughness in Tunnels, Thomas C. MacDonald and Ken J. Susilo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.3645-3650.
 Flow Investigation for Landfill Leachate (FILL), Reza M. Khanbilvardi, Shabbir Ahmed and Phillip J. Gleason, EE Jan. 95, p.45-57.
 Initial-Inflow, Varietica Leachate (FILL)

Initial-Inflow-Variation Impacts on Furrow Irrigation Eval-uation, D. Renault and W. W. Wallender, IR Jan./Feb. 96, p7-14.

Modeling Concentration-Polarization in Reverse Osmosis Spiral-Wound Elements, Benito J. Mariñas and Richard I. Urama, EE Apr. 96, p292-298

Near Field Modeling, Philip J. W. Roberts, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3892-3897.

Normal-Depth Equations for Irrigation Canals, Prabhata K. Swamee, IR Sept./Oct. 94, p942-948.

Optimum Simulation and Control of Fixed-Speed Pumping Stations, Mark T. Yin, John F. Andrews and Michael K.

Stenstrom, EE Mar. 96, p205-211.

Rational-Method Equation and HEC TD-15, T. V. Hromad-ka, II and R. J. Whitley, IR Jan/Feb. 96, p15-18.

Review of Factors Affecting In Situ Air Sparging, Daniel M. Baker and Craig H. Benson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p292-310.

Scour Processes Observed in Field Data, Mark N. Landers and David S. Mueller, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3052-3061.

Simulating Atrazine Transport with HSPF in an Agricultur-al Watershed, Anne-Marie Laroche, Jacques Gallichand, Robert Lagacé and Alain Pesant, EE July 96, p622-630.

Soil-Limiting Flow from Subsurface Emitters. 1: Pressure Measurements, U. Shani, S. Xue, R. Gordin-Katz and A. W. Warrick, IR Sept./Oct. 96, p291-295.

Soil-Limiting Flow from Subsurface Emitters. II: Effect on Uniformity, A. W. Warrick and U. Shani, IR Sept./Oct. 96, p296-300.

Statistics of Free Surface Flow through Stochastic Earth Dam, Gordon A. Fenton and D. V. Griffiths, GT June 96, p427-436.

Substrate Consumption Kinetics in Anaerobic Biofilm Flu-idized Bed Reactor, Enrique J. La Motta and Patricio Cascante, EE Mar. 96, p198-204.

Synchronized Measurements of Bed-Shear Stress and Flow Velocity in Open Channels with Simulated Vegetation, Fabián López and Marcelo García, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3651-3655.

Flow resistance

Drying of a Heated Porous Medium at Sub-Residual Saturations, Y.-T. Chen, A. K. Sathappan and R. Boehm, (High Level Radioactive Waste Management, Technical

Program Committee, 1996), p119-121.

Program Committee, 1990, p119-121.
Evaluation of Flow Resistance in Ice-Covered Channels, Florin Braileanu, Robert Ettema and James Wuebben, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p606-616.
Field Measurement of Boulder Flow Drag, James C. Bath-

urst, HY Mar. 96, p167-169.

Friction-Term Response to Boundary-Condition Type in Flow Models, Raymond W. Schaffranek and Chintu Lai, HY Feb. 96, p73-81.

Jamming of the Flow of Granular Materials, Yi Sun and Oleg Vinogradov, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p265-268. Manning's Roughness Coefficient for Coarse-Bed Chan-nels With High In-Bank Flows, David Froehlich and Craig A. Benson, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p436-441.

A New Technique for Measuring Vegetation Density, Syn-di J. Dudley, Steven R. Abt, Charles D. Bonham and J. Craig Fischenich, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3656-3661.

Predicting Stage-Discharge Curves in Channels with Bank Vegetation, Stephen E. Darby and Colin R. Thorne, HY Oct. 96, p583-586.

Prediction of Effects of Woody Debris Removal on Flow Resistance, F. Douglas Shields, Jr. and Christopher J. Gippel, HY Apr. 95, p341-354.

Vegetation-Induced Drag: An Experimental Study, Chad Dunn, Fabián López and Marcelo García, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3824-3828.

Velocity and Concentration Profiles in Sheet-Flow Layer of Movable Bed, B. M. Sumer, A. Kozakiewicz, J. Fredsøe and R. Deigaard, HY Oct. 96, p549-558.

Water Surface Profiles in Compound Channel with Multi-ple Critical Depths, Terry W. Sturm and Aftab Sadiq, HY Dec. 96, p703-709.

Flow separation Dividing Rectangular Closed Conduit Flows, A. S. Ramamurthy, Weimin Zhu and B. L. Carballada, HY Dec. 96, p687-691.

Effects of Bed Discordance on Flow Dynamics at Open Channel Confluences, Pascale Biron, James L. Best and André G. Roy, HY Dec. 96, p676-682.

A 3-D NAPL Flow and Biodegradation Model, Phillip C. de Blanc, Daene C. McKinney, Gerald E. Speitel, Jr., Kamy Sepehrnoori and Mojdeh Delshad, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p478-489.

Coupled Modelling of Groundwater Flow and Hydrochem-istry in the Sellafield Area, A. K. Littleboy, R. Metcalfe and D. J. Noy, *(High Level Radioactive Waste Manage-*ment, Technical Program Committee, 1996), p135-140.

Ensuring Consistency of Groundwater Modeling Results with Indirect Evidence, S. Vomvoris, A. Scholtis and P. Vinard, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p133-134.

Experimental Study of One-Dimensional Immiscible Fluid Drainage in Layered Sands, Calvin D. Miller and Deans S. Durnford, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p628-638.

Geostatistical Simulation, Parameter Development and Property Scaling for GWTT-95, Sean A. McKenna and Susan J. Altman, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), p181-183.

Groundwater Flow Modelling at the Olkiluoto Site, Fin-land, Jari Löfman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p141-

Hydrodynamic Flow Modeling at Confluence of Two Streams, K.-H. Wang, T. G. Cleveland, S. Fitzgerald and X. Ren, EM Oct. 96, p994-1002.

Implementation of Runtime Visualization for Tough2, H. Xin Yang and Srikanta Mishra, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p308-309.

Indirect Evidences for Quantification of Groundwater Flow: direct Evidences for Quantification of Groundwater Flow:
Assessment of the Consistency of Geobydrological
Groundwater Flow Models and Hydrochemical Mixing/
Reaction Models of the Aspö Hard Rock Laboratory,
Peter Wikberg and Ingvar Rhen, (High Level Radioactive
Waste Management, Technical Program Committee, 1996), p145-147.

Lateral Diversion in the PTn Unit: Capillary-Barrier Analysis, Michael L. Wilson, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Modeling Ground-Water Remediation at an Oil Refinery, Ko-Hui Liu and Greg McNulty, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p824-

Modeling of Flow Through Fractured Tuff at Fran Ridge, Roger R. Eaton, Clifford K. Ho, Robert J. Glass, Michael J. Nicholl and Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p76-78.

1990), p10-10.

Numerical Modeling for Saturated-Zone Groundwater
Travel Time Analysis at Yucca Mountain, Bill W. Arnold and George E. Barr, (High Level Radioactive Waste
Management, Technical Program Committee, 1996), p187-189.

Numerical Modeling of Flows in Ultraviolet Disinfection Channels, D. A. Lyn, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3005-3009.

Optimization of Water Distribution System with Blending Requirements, Yung-Hsin Sun, Shu-li Yang, William W-G. Yeh, Ali Diba and Timothy A. Blair, (North Amer-

ican Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4359-4364. Preliminary Validation of the MAC3D Numerical Flow Model, Robert S. Bernard, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3434-3439. Radwaste Disposal in Granite-E.C. Everest Project, IPSN Contribution, P. Baudoin and C. Serres, (High Level Ra-dioactive Waste Management, Technical Program Com-mittee, 1996), p168-169.

Reducing Model Study Time and Improving Reliability, Ralph Finch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p4341-4346. SAMS: Software for Simulating Streamflow Series, J. D. Salas, N. Saada, D. Frevert and W. Lane, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3387-3392.

Sedimentation Dynamics of Tidal Inlets, Clifford R. Merz and Panagiotis D. Scarlatos, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4377-4382

Sensitivity Studies of Unsaturated Groundwater Flow Modeling for Groundwater Travel Time Calculations at Yucca Mountain, Nevada, Susan J. Altman, Clifford K. Ho, Bill W. Arnold and Sean A. McKenna, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p190-192.

Stochastic Finite Element Analysis for Multiphase Flow in Random Porous Media, S. Dham and R. Ghanem, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p661-669.

cc., 1990), p001-009.
Swelling of DNAPL by Cosolvent Flooding to allow its Removal as an LNAPL, Eberhard Roeder, Scott Eppes Brame and Ronald William Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p333-

Testing of Abstractions for Total System Performance Assessment, Vinod Vallikat, Srikanta Mishra, Yanyong Xi-ang and David Sevougian, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p293-294.

The Use of an Equivalent Porosity Method to Model Flow in Marshes, Ian P. King and Lisa C. Roig, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3734-3739.

Flow visualization

Animation Techniques for Visualizing Coastal Flow Dynamics, Brian King, Patrick Collins, Duncan Galloway and Eric Wolanski, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p192-203.

Field Data Collection and Analysis for Verification of Estu-arine Models, W. H. McAnally, T. C. Pratt, G. T. Stevens and T. M. Parchure, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p204-214.

Fluid Vortices edited by S.I. Green, J. S. Marshall, HY July 96, p423.

Historical Perspective of Spatial Flow Data Visualization Techniques in Gls. Young-Kyun Lee and Sang-Ki Hong. (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p167-173.

Fluid dynamics

Applications of CFD Flow Modelling in Building Design, J. R. Sinclair, P. A. Irwin, K. M. Matsui, M. Vanderhey-den and F. Kriksic, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p997-1004.

Comparison of Flow Around Circular Cylinder Using FE and FD Procedures, R. Panneer Selvam, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1021-1028.

Computational Modeling of Fluid Dynamics in Aortopul-monary Shunts: Comparison to In Vitro Studies, Kevin K. Whitehead, Theresa A. Tacy and Edward G. Cape, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p334

Flow Induced Charging of Liquids in Reduced Gravity, Donald Pettit, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p545-

Fluid Management in Space-Based Systems, Jack A. Salzman, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p521-526.

Incipient Instability Criterion of Two Confined Superposed Fluids, Chin-Hwa Kong and I-Chung Liu, EM Feb. 95.

Magnetic Fluid Dynamics of Blood Flow, Yousef Haik, Ching Jen Chen and Vinay Pai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p458-461.

New Modeling Method Aims to Better Scout Scour, ET Mar/Apr. 96, p6.

Simulation of Suspended Particles Transport in the Entrance Region of Tube Flow, Shi-kang Wang and N. H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p462-465.

Use of Neural Networks for Fluid Resistance Prediction, Jonathan T. Su, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1139-1142.

Analysis and Design of ER Damper for Seismic Protection of Structures, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, EM Oct. 96, p1003-1011.

Another Person Cures Galloping, Ray G. Barney, CE June 96, p27-28.

Design of Multistage Pumping Main, Prabhata K. Swamee, TE Jan./Feb. 96, p1-4.

Development of Localization in Undrained Deformation, J. W. Rudnicki, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p939-942.

Error Estimate in Einstein's Suspended Sediment Load Method, Nadim M. Aziz, HY May 96, p282-285.

Flow through Slit in Dam, Yakun Guo, Xianyun Wen and Chigong Wu, HY Nov. 96, p662-669.

Gravity Current of Fluid Mud on Sloping Bed, Thijs van Kessel and C. Kranenburg, HY Dec. 96, p710-717.

Newtonian Fluid Mechanics Treatment of Debris Flows and Avalanches, Bruce Hunt, HY Dec. 94, p1350-1363.

Potential Flow Instability Theory and Bed Forms, Stephen E. Coleman and John D. Fenton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p442-447.

A Proposed Poroelastic Model for Hydraulic Fracturing Breakdown Pressure in Porous Rocks, Xiaofeng Huang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Pulsatile Blood Flows in Stenotic Artery, Tin-Kan Hung and Tommy M.-C. Tsai, EM Sept. 96, p890-896.

A Review of NAPL Modeling Approaches for Remedia-tion, James W. Mercer, Zafar Adeel and Charles R. Faust, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p46-65.

Three-Dimensional Moving Contact Line for an Accelerat-ing Vertical Cylinder, K.-H. Wang, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p848-851.

Three-Fluid Phase Flow in Heterogeneous Subsurface: Perturbation and Numerical Analyses, Alaa E. Abdin and Jagath J. Kaluarachchi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p513-525.

Time-Dependent Fluid Fracture Interaction in Concrete, Volker Slowik and Victor E. Saouma, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p865-868.

Verification of Vertically Rotating Flume Using Non-Newtonian Fluids, Richard J. Huizinga, HY Aug. 96, p456-459.

Fluid mechanics

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Biomechanics and Testing of Mechanical Circulatory Sup-port Devices, Harvey Borovetz, James Antaki, William Wagner, Marina Kameneva, John Pristas, Stephen Winowich, William Mandarino, Philip Litwak, Robert Kormos and Bartley Griffith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p35.

Computation of Velocity Fields of Intravenous Balloon Pumping, Huaqiang Li, Tin-Kan Hung, Chiuping Chang and Pat Sawzik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p326-329.

Editorial, A. Jacob Odgaard, HY July 96, p366.

The Effect of Diameter Mismatch Upon Hemodynamics in the Distal Anastomoses of Vascular Bypass Grafts, Robert S. Keynton, Mary M. Evancho, Rick L. Sims and Stanley E. Rittgers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p196-199.

Engineering a Novel Intravenous Oxygenator, William Federspiel, Frank Walters, Pat Sawzik, Gary Reeder, Harvey Borovetz and Brack Hattler, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p43.

Engineering Design Considerations for Artificial Lungs, L. F. Mockros and K. E. Cook, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p33-34.

Engineering Mechanics, 2 vols., Y. K. Lin and T. C. Su, 1996, 0-7844-0172-1, 1240pp.

Environmental Fluid Mechanics — A Review of Some Recent Results, Robert L. Street, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p30-32.

Environmental Hydraulics: New Research Directions for the 21st Century, ASCE Task Committee on Hydraulic Engineering Research Advocacy, HY Apr. 96, p180-183.

Experimental Study of Steady and Pulsatile Flows in Models of Abdominal Aortic Aneurysms, Robert A. Peattie, Tiffany J. Riehle, Matthew L. Parsons, Brian P. Giles and Edward I. Bluth, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p318-321.

Granular Flow Based on Non-Newtonian Fluid Mechanics, Sergio A. Elaskar, Luis A. Godoy and Alejandro T. Brewer, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p394-397.

Newtonian Fluid Mechanics Treatment of Debris Flows and Avalanches, Bruce Hunt, HY Dec. 94, p1350-1363.

Platelet Activation in Time Varying Shear Flow Field, C. Cornelius Glismann and Ned H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p39-42.

Pulsatile Flow Circuitry for Dynamic Study of a Volume Plethysmograph, Alex A. Yu, Jeff Raines and Ned H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p204-207

Simulation of Pulsatile Flow Past a St. Jude Valve, L. Niu, D. Bluestein and R. T. Schoephoerster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p330-333.

Use of Neural Networks for Fluid Resistance Prediction, Jonathan T. Su, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1139-1142.

Fluid-structure interaction

A Complete Three Dimensional Analysis of Pressures on a Vertical Cylinder by Earthquakes Including Fluid-Structure Interaction, Bang-Fuh Chen, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p519-522.

Dynamic Response of Rectangular Flexible Fluid Containers, Jae Kwan Kim, Hyun Moo Koh and Im Jong Kwahk, EM Sept. 96, p807-817

Investigation of Nonlinear Fluid-Structure Interaction, T. E. Fenske, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p407-415.

Laterally Excited Flexible Tanks with Nonuniform Density Liquid, Yu Tang, EM Oct. 96, p948-956.

New Trends in Biomechanics, Y. C. Fung, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1-15.

Fluidized bed combustion

Mixer Viscometer Characterization of AFBC Ash Grout, Donald D. Gray and Scott J. Putnam, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p816-819.

Fluidized bed processing Aerobic Fluidized Bed Reactor with Internal Media Cleaning, Steven I. Safferman and Paul L. Bishop, EE Apr. 96,

Digital Image Analysis of Two-Dimensional Fluidized Beds at Lunar Gravity, D. J. Brueneman, L. L. Sorge, M. A. Gibson, C. W. Knudsen and H. Kanamori, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p769-775.

Fluidized Bed Denitrification of Secondary Effluent During Wastewater Reclamation in Southern California, Roger w. Babcock, Jr., Kapal Madireddi and Michael K. Stenstrom, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p788-793.

Standpipe Solids Transfer Behavior in a Lunar Gravity Fluandpipe Solius Franster Beravior in a Luna Gravity Fid-dized Bed, Les L. Sorge, David J. Brueneman, J. Dale Ortego, Jr., Michael A. Gibson, Christian W. Knudsen, Hiroshi Kanamori and B. Kent Joosten, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p776-782.

Fluidized bed processors

Substrate Consumption Kinetics in Anaerobic Biofilm Flu-idized Bed Reactor, Enrique J. La Motta and Patricio Cascante, EE Mar. 96, p198-204.

Fluidized beds

Parametric Sensitivity of Comprehensive Model of Aerobic Fluidized-Bed Biofilm Process, A. B. Shahalam, R. El-Samra, G. M. Ayoub and A. Acra, EE Dec. 96, p1085-1003

Flumes

Hydraulic Effects of Habitat Structures in Flood Control Channels, Rebecca Seal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1519-1524.

A Note on the Incipient Motion of Sediment Particles, A. Papanicolaou, P. Diplas, M. Balakrishnan and C. Dancey, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p657-660.

Portable Flumes with Adjustable Throats, John Replogle and Brian Wahlin, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2409-2414.

la, ed., 1996), p2409-2414.

San Diego's Historic Dulzura Conduit: New Solutions, Hans H. Torabi and Harold B. Tennant, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p340-347.

Scour Around Exposed Pile Foundations, Mohammad Salim and J. Sterling Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2202-2211.

Sediment Transport Fluxes as Determined from Wave Breaker Induced Suspended Sediment and Flow Fields, G. Smith, G. Mocke and L. Engelbrecht, (Costal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p783-794.

Simulating Nature Wind Waves in a Wave Flume. John Z.

Simulating Nature Wind Waves in a Wave Flume, John Z. Yim, C.-R. Chou and M.-Y. Lai, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1990).

1996), p45-56.

Vegetative Roughness in Flood Control Channels, Gary E. Freeman, David R. Derrick and William J. Rahmeyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1513-1518.

Verification of Vertically Rotating Flume Using Non-Newtonian Fluids, Richard J. Huizinga, HY Aug. 96,

p456-459.

Wave Run-Up: Recent IBW PAN Investigations, Jerzy Kolodko, Jarosław Kapiński, Marek Szmytkiewicz and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p197-208.

Daniy, ed. and Ryszard B. Zeidler, ed., 1996), p197-208.
Wind Tunnel and Water Flume Testing in the Design of High Rise and Long Span Structures, Charles H. Thorn-ton, Leonard M. Joseph and Thomas Z. Scarangello, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p944-951.

Fluoridation Editor's Note, Thomas L. Theis, EE Feb. 96, p91.

Use of Fluorspar in Water Fluoridation, Ching-Gang Peng, Jian Oi and Alan J. Rubin, EE Feb. 96, p132-140.

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Beneficial Aspects of Flood and Rain in Countries Where the Drinking Water is Naturally Contaminated with Fluo-ride Where Fluorosis is a Major Public Health Problem, Susheela Andezhath Kumaran, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2191.

Desilting Basin System of the Dul Hasti Hydroelectric Project, Daniel Develay, Jean Binquet, E. Divatia and C. R. Venkatesha, HY Oct. 96, p565-572.

Field-Scale Application of In-Situ Cosolvent Flushing: Evaluation Approach, M. D. Annable, P. S. C. Rao, R. K. Sillan, K. Hatfield, W. D. Graham, A. L. Wood and C. G. Enfield, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p212-220.

Flushing and Recharge of Inlet Channel for an Ephemeral Coastal River, Howard H. Chang and Daniel Pearson, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Raiph T. Cheng, 1996), p659-668.

Flushing Criteria in Estuarine and Laboratory Experiments, Walter Debler and Jorg Imberger, HY Dec. 96, p728-

Flushing of a Pb(II) Contaminated Soil Using HCl, EDTA, and CaCl₂, Brian E. Reed, Patrick C. Carriere and Roderic Moore, EE Jan. 96, p48-50.

Model for Efficiency of Soil Flushing Using PVD-Enhanced System, M. A. Gabr, J. Wang and J. J. Bowders, GT Nov. 96, p914-919.

Modeling the Behavior of LNAPLs Under Hydraulic Flushing, S. Ratnam, P. J. Culligan-Hensley and J. T. Ger-maine, (Non-Aqueous Phase Liquids (NAPLs) in Subsur-face Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p595-606.

Multicomponent NAPL Composition Dynamics and Risk, Catherine A. Peters, Paula A. Labieniec and Christopher D. Knightes, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p681-692.

Optimization of a Ground-Water Injection/Extraction System, Anand Prakash, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1167-1172.

The Use of Surfactants to Remediate NAPL-Contaminated Aquifers, Kurt D. Pennell, Linda M. Abriola and Laura E. Loverde, (Non-Aqueous Phase Liquids (NAPLs) in

Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p221-232.

Cape Girardeau Bridge Over the Mississippi River, Steven T. Hague, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p952-959.

Coupled Flutter and Buffeting Analysis of Long-Span Bridges, Anurag Jain, Nicholas P. Jones and Robert H. Scanlan, ST July 96, p716-725.

A Finite Element Model for the Aeroelasticity Analysis of Hypersonic Panels, Part II: Determination of Flutter Boundary, Ji Y. Shen and Lonnie Sharpe, Jr., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1148-1154.

Measuring Flutter Derivatives for Bridge Sectional Models in Water Channel, Q. C. Li, EM Jan. 95, p90-101.

Mechanism of Bluff Body Aerodynamics and Its Stabilization, Masaru Matsumoto and Fumitaka Yoshizumi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p74-77

The Response of Long Span Bridges to Wind Action, Robert L. Wardlaw, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p66-69.

Fluvial hydraulics

Pluvial hydraulics
Deciphering LNAPL Migration Pathways in a Heterogeneous Hydrogeologic Setting, Mark K. Levorsen and Christine Dreier Bynum, (Non-Aqueous Phase Liquids
(NAPLs) in Subsurface Environment: Assessment and
Remediation, Lakshmi N. Reddi, ed., 1996), p836-847.
Design Guidelines for Bioengineered Bank Stabilization,

Dale E. Miller, (North American Water and Environ Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3085-3090. Stochastic Modelling of River Geometry, J. Dalsgaard Sørensen and K. Schaarup-Jensen, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed.

and Mircea D. Grigoriu, ed., 1996), p898-901. Use of Geomorphic Data for Assessing Stream Stability at Bridge Structures, Jonathan Fuller and Steven R. Walker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3294-3299.

ASR Behavior of Class C Fly Ash Modified Cement, Anil Misra, H. P. Niu, Bryan R. Becker and Jinshi Liu, (Mate-rials for the New Millennium, Ken P. Chong, ed., 1996), p348-355.

Boltzmann-Matano Analysis of Chloride Diffusion into Blended Cement Concrete, P. J. Tumidajski and G. W. Chan, MT Nov. 96, p195-200.

Chan, MT Nov. 96, p195-200.
Editor's Note, Thomas L. Theis, EE Oct. 96, p888.
Environmental Impacts of Autoclaved Cellular Concrete,
M. C. Latona, R. D. Neufeld, L. E. Vallejo, W. Hu and
C. Kelly, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E.
Vallejo, ed. and L. N. Reddi, ed., 1996), p57-69.
Evaluation of Lead-Bearing Phases in Municipal Waste
Combustor Fly Ash, J. F. Sandell, G. R. Dewey, L. L.
Sutter and J. A. Willemin, EE Jan. 96, p34-40.
Fly Ash and Tire Chips for Highway Embankments, M.
Basheer, C. Vipulanandan and M. W. O'Neill, (Materials
for the New Millennium, Ken P. Chong, ed., 1996),
p593-602.

p593-602.

Freeze-Thaw Durability of Concretes With and Without Class C Fly Ash, C. Ouyang and O. J. Lane, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

From Sediment to Solid, James R. Donnelly and William C.

From Sediment to Solid, James R. Donnelly and William C. Webster, CE May 96, p41-43.
Frost Resistance of Roller-Compacted High-Volume Fly Ash Concrete, Michael Pigeon and V. Mohan Malhort, MT Nov. 95, p208-211.
High-Strength, Rapid-Setting Concrete with Blended Cement, Billy D. Neeley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1627-1636.

Mechanistic Evaluation of Fly Ash Asphalt Concrete Mix-tures, N. Ali, J. S. Chan, S. Simms, R. Bushman and A. T. Bergan, MT Feb. 96, p19-25.

T. Bergan, MT Feb. 96, p19-25.

Mixing Influences on Cement-Based Waste Forms, James B. Stong, James R. Weber and Kevin J. Hull, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1597-1601.

Permeability of High-Strength Concrete Containing Low Cement Factor, Tarun R. Naik, Shiw S. Singh and Mohammad M. Hossain, EY Apr. 96, p21-39.

Retention of Multiple Heavy Metal Ions by Fly Ash, A. Sridharan, N. S. Pandian and C. Rajasekhar, (North American Water and Environment Congress & Destructions of Multiple Parking Congress & Destruction of Multiple Parking Parking Congress & Destruction of Multiple Parking Parking Congress & Destruction of Multiple Parking
American Water and Environment Congress & Destruc-

control water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996, p. 1608-1613. Soil Stabilization Utilizing Alternative Waste Materials, Greg Heckel and Riyad Wahab, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p. 318-327. Stabilization/Solidification of Hazardous Wastes Using Fly Ash, Infer Deess, Stupet H. Munoun, McGes-and Behavior

Ash, Jafar Parsa, Stuart H. Munson-McGee and Robert

Steiner, EE Oct. 96, p935-940.
Strength Properties of Polyester Mortar Using PET and Fly
Ash Wastes, Karim S. Rebeiz, Julia W. Rosett and An-

drew P. Craft, EY Apr. 96, p10-20.
Treatment of Metal Industrial Wastewater by Fly Ash and Cement Fixation, C. H. Weng and C. P. Huang, EE Nov. Dec. 94, p1470-1487.

Bike Trail Gets Lift, CE Nov. 96, p23-24.

Mechanisms of Removal of Residual Dodecane Using Surfactant Foam, HsienShen S. Chu, Amir Salehzadeh, Avery H. Demond and Richard D. Woods. (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi. ed., 1996), p269-280.

Food processing

Water Conservation for Boilers and Steam Systems, Joann Casey, Stuart Cooley and Marekat C. Joseph, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2685-2688.

Food supply

Flight Crew Equipment Development and Integration with the International Partners, Rod Jones, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p467-472.

Foot bridges

Kentucky Researchers Complete Composite Foot Bridge, CE Dec. 96, p14-15.

Footings

Application of Numerical Limit Analyses for Shallow Foundations on Clay, Andrew J. Whittle and Boonchai Ukritchon, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p132-135.

Bearing Capacity of Footings over Two-Layer Foundation Soils, Radoslaw L. Michalowski and Lei Shi, GT May

95, p421-428.

Bearing Capacity of Rectangular Footings on Geogrid-Reinforced Sand, Ternel Yetimoglu, Jonathan T. H. Wu and Ahmet Saglamer, GT Dec. 94, p2083-2099.

Bridge-Column Footings: An Improved Design Procedure, Lian Duan, SC Feb. 96, p20-24.

Explicit Stresses under Rectangular Footings, R. Irles and F. Irles, GT Feb. 94, p444-450.

Finite Element Modeling of Settlements on Spatially Ran-dom Soil, G. M. Paice, D. V. Griffiths and G. A. Fenton, GT Sept. 96, p777-779.

Foundation Retrofit at Savoonga "A Retrospective Study G. Scott Crowther, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p278-290.

Probabilistic Analysis of Foundation Settlement, Gordon A. Fenton, G. M. Paice and D. V. Griffiths, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p651-665.

Scour Protection in Bottomless Culverts, D. V. Halvorson and F. J. Laumann, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3932-3941.

Forces on a Vertical Wall due to Long Waves, Bores, and Dry-Bed Surges, Jerald D. Ramsden, WW May/June 96, p134-141.

A Melnikov Theoretic Bound on Probability of Escape from a Potential Well, Michael R. Frey, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p510-513

Modal Analysis of Linear Dynamic Systems: Physical In-terpretation, Anil K. Chopra, ST May 96, p517-527.

Visualizing Global Force Distributions in Finite Element Models, Kirk Martini, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Forced vibration

Measuring Flutter Derivatives for Bridge Sectional Models in Water Channel, Q. C. Li, EM Jan. 95, p90-101. Stable Forced Vibrations Near Unstable Positions, Michael Zakrzhevsky, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p384-387.

Forecasting

Advanced Hydrologic Forecasting for Flood and Drought Mitigation, John J. Ingram, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p455. Aid-to-Decision for Variable Message Sign Control in Mo-torway Networks during Incident Condition, Jean-Marc Morin, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p378–382. Company-Level Cash-Flow Management, R. Navon, CO Mar. 96, p22-29. Development of a Large-Scale Tidal Circulation Metal.

Development of a Large-Scale Tidal Circulation Model for the Mediterranean, Adriatic and Aegean Seas, D.J. Mark and N. W. Scheffner, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Distributed Parameter Hydrologic Modeling and NEX-RAD for River Forecasting: Scale Issues Facing the Na-tional Weather Service, Michael Smith, Dong Jun Seo, tional weather service, winched simility, body Jun service, Bryce Finnerty and Victor Koren, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p140-145.

Estimating Trenching Productivity Using Neural Networks,

Simaan AbouRizk, Brenda McCabe and Wissam Saad (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p220-226.

Forecasting House Rental Levels: Analytical Rent Model versus Neural Network, Heng Li and Vera Li, UP Dec.

96, p118-127. High-Resolution, Short-Term Lake Forecasts for Lake Erie, John G. W. Kelley, David J. S. Welsh, Keith W. Bed-ford, David J. Schwab, Jay S. Hobgood and Brendon Hoch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p367-378. Identification of a General Linear Model for Reservoir Inflows Forecasting, J. Ribeiro, J. Rousselle, J. D. Salas and H. Ta. Tunna (Moth American Water and Environ.

and H. Ta Trung, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2354-2359.

Impact of Anthropogenic Activities in Rivers Upon Accuracy of Hydrological Forecasts and on Development of Forecasting Methodologies— Experiences From the SD-vak-Hungarian Reach of Danube, K. Hajiasova and A. Svoboda, (North American Water and Environment Consess & Destructive Water Chamber Barbara and Consess & Destructive Water Chamber Barbara gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1718.

1996), p.1718. Methodological Framework for Air-Travel Demand Fore-casting, Matthew G. Karlaftis, Konstantinos G. Zografos, Jason D. Papastravrou and John M. Charnes, TE Mar/Apr. 96, p96-104.
Reservoir Operating Rules with Fuzzy Programming, Samuel O. Russell and Paul F. Campbell, WR May/June

96, p165-170.

96, p165-170.
A Short Term Forecasting Model for Freeway Traffic Monitoring, and Control, R. Carnus, G. Longo and F. Santorini, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p418-422.
Spatial Statistics for Rainfall Forecasts Assessment, Lynn E. Johnson and Billy Olson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2897-2902.
The System for the Hydrological Forecasting in Serbia, Bojan Palmar and Borjanka Palmar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p716-717.
Systems for Forecasting Flows and Their Uncertainty, Konstructive Florecasting Florecast Florecasting Florecast Florecasting Florecast Floreca

chayya Bathana, ed., 1990, pt 0-117.
Systems for Forecasting Flows and Their Uncertainty, Konstantine P. Georgakakos, Alexandre K. Guetter and Jason A. Sperfslage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2360-2365. Using NOAA's New Climate Outlooks in Operational Hydrology, Thomas E. Croley, II, HE July 96, p93-102.

USAID Efforts in Mitigating Natural Disasters, Tej Mathur and Nathalie Valette-Silver. (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p82-83.

Foreign engineering Global Expansion: A Growing Dilemma, Howard Schirm-er, Jr., ME Sept./Oct. 96, p28-31.

Need to Understand Foreign Education in Evaluating for P.E. Licensure, Joe O. Akinmusuru and Bosede O. Akinmusuru, EI Jan. 96, p26-30.

Foreign projects

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Application of BOT System for Infrastructure Projects in China, Liyin Shen, Rowson K. H. Lee and Zhihui Zhang, CO Dec. 96, p319-323.

ASCE Group Is Off to Berlin This Month, CE June 96, p72-73.

Global Expansion: A Growing Dilemma, Howard Schirm-er, Jr., ME Sept./Oct. 96, p28-31.

Going Global: A CEO's Perspective, Vincent A. Rocco, ME Mar/Apr. 96, p21-24.

Organizing and Managing a Finance-Design-Build Project in Turkey: Fourth Roebling Lecture, 1995, Donald K. Stager, CO Sept. 96, p199-204.

Forensic engineering

Diagnosis and Treatment of Structures in Distress by R. N. Raikar, Kenneth L. Carper, CF Feb. 96, p42.

Editor's Note, Kenneth L. Carper, CF Feb. 96, p1. Editor's Note, Kenneth L. Carper, CF Aug. 96, p89.

Failures in Civil Engineering: Structural, Foundation and Geoenvironmental Case Studies by Robin Shepherd and J. David Frost, Kenneth L. Carper, CF May 96, p87.

Guest Editorial, David H. Nicastro, P.E., CF Feb. 96, p2-4. Guest Editorial, Ruben J. Baer, CF May 96, p46.

Licensed to Practice, CE July 96, p27.

The Dying of the Trees: The Pandemic in America's Forests by Charles E. Little, Brian R. Brenner, El July 96, p136-137.

Formwork, construction

Analysis of Shoring Loads Using Field Data, T. W. Phil-brick, Jr. and D. V. Rosowsky. (Building an Internation-al Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p711-718.

Investigation of Structural Properties of Used Formwork Stringers, Saeed Karshenas and Eyad Mizian, MT Feb. 96, p51-56.

Safety Evaluation of Current Concrete Slab Formwork Practices, Saeed Karshenas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p656-659

Standard Specifications for Structural Concrete (ACI 301-96) by ACI Committee 301, AE Sept. 96, p120.

Adhesion Kinetics of Fuel Oil #6 and Oil-in-Water Emulsions on Marine Sediments under Turbulent Mixing Conditions, Rudolf Jaffé, Hector R. Fuentes, Vassilios A. Gillons, Rudolf Jaffe, Flector R. Fuentes, Vassinos A. Tsihrintzis and Liduo Shen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4389-4394.

California Unveils Fuel Cell Plant, CE Nov. 96, p20-21.

Attachment Strength of Zebra Mussels on Natural, Polymeric, and Metallic Materials, Josef Daniel Ackerman, Catherine M. Cottrell, C. Ross Ethier, D. Grant Allen and Jan K. Spelt, EE Feb. 96, p141-148.

Copper and Copper-Nickel Alloys as Zebra Mussel Anti-foulants, Jane M. Dormon, Catherine M. Cottrell, D. Grant Allen, Joseph D. Ackerman and Jan K. Spelt, EE Apr. 96, p276-283.

Foundation construction

Building on Sinkholes: Design and Construction of Founda-tions in Karst Terrain, George Sowers, 1996, 0-7844-0176-4, 208pp

Foundation design

Building on Sinkholes: Design and Construction of Foundations in Karst Terrain, George Sowers, 1996, 0-78440176-4, 208pp.

For Full Scale Transmission Line Test

Capacity Predictions for Full Scale Transmission Line Test Foundations, Robert E. Kondziolka and Peter M. Kan-daris, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p695-

Chicago's Micropile Debut, Steven D. Scherer, William H. Walton and Ron Johnson, CE Aug. 96, p51-53.

Engineering Judgment in the Evolution from Deterministic to Reliability-Based Foundation Design, Fred H. Kulhawy and Kok Kwang Phoon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p29-48.
Foundation Design Considerations for Construction on

Marshlands, A. Rhett Whitlock and Shahzad S. Moosa,

CF Feb. 96, p15-22.

Foundations for Permafrost and Other Problem Soils, William J. Vangool, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p303-314

A Multi-Agent Architecture for Foundation Design Envi-ronments, M. R. Halfawy, N. A. B. Yehia, A. S. Bazaraa, A. Dessouki, F. C. Hadipriono and J. W. Duane, (Com-

A. Dessouki, F. C. Hadipriono and J. W. Duane, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p200-206.
Performance of a Passively Refrigerated Gravel Pad Foundation in Fairbanks, Stephen Adamczak, Jr., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p13-22.
Rethinking Foundation Design in Karst Residuum Ray-

Rethinking Foundation Design in Karst Residuum, Ray-mond A. DeStephen and Steven E. Conner, (Design with Residual Materials: Geotechnical and Construction Con-

Residual Materials: Geotechnical and Construction Con-siderations, Gordon Matheson, ed., 1996), p49-56.
West Dock Causeway Bridge Piers, A. B. Christopherson, T. Nottingham, J. W. Pickering and K. W. Braun, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p315-326.

Foundation investigations

Case of Residential Foundation Failure and Preservation by
Grouting, A. Khalilian and F. Amini, CF Nov. 96, p159-

Defect Detection (Available only in Geo/Environmental Special Issue), Tracy Brettmann and Larry Olson, CE

July 96, p2A-6A.

July 96, p.ZA-OA.
Dynamic Effects of Sediment and Foundation on Dam Hydrodynamic Pressure Under Vertical Ground Accelerations, Kuo-Chyang Chang, Tin-Kan Hung, David A. Margo and Jeen-Shang Lin, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p511-514.
Purpose Processes Analysis of High Arch Dam, Water.

Dynamic Response Analysis of High Arch Dam-Water-Foundation System, Du Xiuli, Chen Houqun and Hou Shunzai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996, p987-988. Effect of Soil-Structure Interaction on Structural Response,

Y. Yong, R. C. Zhang and J. Yu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1098-1101. Stability of Beams in an Elastic Foundation, Fady F. Barsoum and William F. Carroll, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1143-1146.

Foundation performance
Effects of Ground Subsidence on a House, R. M. Bennett,
E. C. Drumm, G. Lin, T. Triplett and L. Powell, CF Nov.

96, p152-158.

90, p132-138.
Performance of a Passively Refrigerated Gravel Pad Foundation in Fairbanks, Stephen Adamczak, Jr., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p13-22.

Foundation settlement
Case of Residential Foundation Failure and Preservation by
Grouting, A. Khalilian and F. Amini, CF Nov. 96, p159-

Foundations for Permafrost and Other Problem Soils, William J. Vangool, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p303-314

Probabilistic Analysis of Foundation Settlement, Gordon A. Fenton, G. M. Paice and D. V. Griffiths, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and

Mary J. S. Roth, ed., 1996), p651-665. Settlement of Shallow Foundations on Uncontrolled Mine Spoil Fill, J. Richard Cheeks, CF Nov. 96, p143-151.

Foundation stability analysis

Analyzing of Two Dimensional Slope Stability and Foun-dation Problems Considering Soil-Structure Interaction Effect, Stanley Z. He, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p832-837.

Application of Numerical Limit Analyses for Shallow Foundations on Clay, Andrew J. Whittle and Boonchai Ukritchon, (Engineering Mechanics, Y. K. Lin and T. C.

Su. 1996), p132-135.

Foundations

Bearing Capacity of Footings over Two-Layer Foundation Soils, Radoslaw L. Michalowski and Lei Shi, GT May 95, p421-428.

Case History of Swimming Pool Foundation Failure, Bernard H. Hertlein, CF Feb. 96, p33-34.

Centrifuge Modeling of Geotextile-Reinforced Cohesive Soil Retaining Walls, A. Porbaha and D. J. Goodings, GT Oct. 96, p840-848.

Chicago's Micropile Debut, Steven D. Scherer, William H. Walton and Ron Johnson, CE Aug. 96, p51-53.

Dynamic Interaction Between Embedded Foundations by the Substructure Deletion Method, Raimondo Betti, Euneering Mechanics, Y. K. Lin and T. C. Su, 1996), p314-317. clides de Mesquita Neto and Edivaldo Romanini, (Engi-

The Effects of Construction Joint in Mass Concrete, Donald D. Liou, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p193-202.

Effects of Foundation Geometry on Bridge Pier Scour, Bruce W. Melville and Arved J. Raudkivi, HY Apr. 96.

p203-209.

Effects of Pier and Foundation Stiffness for Bridges Subjected to Nonstationary Seismic Input, Gongkang Fu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p708-711.

Firm Serves As a Model for its Piers, CE Oct. 96, p97.

Iron(II) Amine Complex Soil Stabilization, David A. Hem-street and Ted S. Vinson, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p447-458.

Lunar Regolith, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p630-638.

Performance of a Triodetic Foundation Near Fairbanks, Alaska, Thomas C. Kinney, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p291-302.

Performance of Single Family House Foundations During Northridge Earthquake, Robert W. Day, SC May 96,

p85-88

Photoelastic Determination of Contact Stresses of Foundations, G. U. Müller, GT Aug. 96, p692-696.

Probabilistic Risk Assessment for Tailings Impoundment Founded on Paleokarst, Dirk Van Zyl, Ian Miller, Victor Milligan and W. James Tilson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p563-585.

Reliability Analysis for Deep-Seated Stability of Pile-Supported Structures, William M. Isenhower, (Probabi-listic Mechanics & Structural Reliability, Dan M. Fran-

gopol, ed. and Mircea D. Grigoriu, ed., 1996), p870-873. Repair of Damaged Slab-on-Grade Foundations, Robert W. Day, SC May 96, p69-73.

Rock Foundations, U.S. Army Corps of Engineers, 1996, 0-7844-0136-5, 130pp.

Route Location/Siting: A Review of Practices, Robert L. Schraeder, Charles H. Riddle and Willard H. Slater, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p23-56.

Scale Effects of Shallow Foundations on Lunar Regolith, Steven W. Perkins and Craig R. Madson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p963-972.

Simplified Method for Design of Underpinning Piles, M. Makarchian and H. G. Poulos, GT Sept. 96, p745-751. Structural Analysis Model for Mat Foundations, Gin-Show Liou and S. C. Lai, ST Sept. 96, p1114-1117.

Structures Firm Adds Industrial Focus, CE Dec. 96, p22.

Undrained Multidirectional Direct Simple Shear Behavior of Cohesive Soil, Don J. DeGroot, Charles C. Ladd and John T. Germaine, GT Feb. 96, p91-98.

Wind Protection Tie-Downs for Manufactured Homes, John E. Pearson, Anatol Longinow and Donald F. Meinheit, SC Nov. 96, p126-140.

"Acts of God": The Symbolic and Technical Significance of Foundation Failures, Jane Morley, CF Feb. 96, p23-

Fourier series

Interference Assemblies, R. R. Little, G. R. Frederick and B. K. Park, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p240-241.

Analysis of Damped and Undamped Systems Using DFT, Fady F. Barsoum and William F. Carroll, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p951-954.

Characterization of Granular Material by Low Strain Dy-namic Excitation and ANN, Salome Romero and Sibel Pamukcu, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1134-1148.

Characterization of Turbulent Scales in Atmospheric Wind by Orthonormal Wavelets, M. R. Hajj, H. W. Tieleman and M. Bikdash, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p971-974.

Dynamic Effects from the Space Shuttle Liftoff, Fady F. Barsoum and William F. Carroll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1190-1196.

Probability Analysis Method Using Fast Fourier Transform, Yasuhiro Mori, Jun Sakamoto and Takayoshi Sekioka, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p696-699

Semianalytical Solutions to Griffith Fracture Under Variable Pressure, Albert T. Yeung, EM June 96, p580-584. Simulation of Ergodic Multivariate Stochastic Processes, George Deodatis, EM Aug. 96, p778-787.

Spaceborne Fourier Transform Hyperspectral Imager, Leonard John Otten, III, Andrew D. Meigs and R. Glenn Sellar, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p224–230.

Evaluating the Variability of Engineering Properties of Soil Deposits Using Fractals, Luis E. Vallejo, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p353-367

Fractals of Aggregates Correlated with Creep in Asphalt Concrete, Mohan Yeggoni, Joe W. Button and Dan G. Zollinger, TE Jan./Feb. 96, p22-28.

Fracture mechanics

Analysis of Work-of-Fracture Method for Measuring Frac-ture Energy of Concrete, Zdeněk P. Bažant, EM Feb. 96, p138-144.

Assessing Bridge Cracks, ET Mar./Apr. 96, p2.

Calculation of Stress Intensity Factors Using Finite Elements and the Compliance Approach, Hisham Abdel-Fattah and Sameer A. Hamoush, (Computing in Civil En-gineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p154-139.

Clay Liner Crack Propagation, Joseph F. Boward and Luis E. Vallejo, (Engineered Contaminated Soils and Interac-tion of Soil Geomembranes, Jay N. Moegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p97-113.

Composite Beam Analogy Fracture Model for Concrete, Mohammed E. Haque and Farhad Ansari, EM Oct. 96, p957-965.

onstitutive Modeling of Composites in Opto-Mechatronics, Tau C. Fan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p632-636. Constitutive

Constitutive Relationships of Mortar-Aggregate Interfaces in High Performance Concrete, Oral Büyüköztürk and Brian Hearing, (Worldwide Advances in Structural Con-crete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p452-461.

Continuous and Discontinuous Failure Modes, Z. Chen,

EM Jan. 96, p80-82.

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Cracking Analysis of Arch Dams by 3D Boundary Element Method, L. M. Feng, O. A. Pekau and C. H. Zhang, ST June 96, p691-699.

Dynamic Brittle Material Response Based on a Nonlocal Damage Model, E. P. Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p580-583.

A Fracture Mechanics Model for Shrinkage Cracking Ring, C. Ouyang, W. Yang and S. P. Shah, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p861-864.

Fracture Mechanics Modeling with Fracture Surface Image Data, Anne B. Abell and David A. Lange, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p741-

Fracture Mechanics of Concrete: Applications of Fracture Mechanics to Concrete, Rock and Other Quasi-Brittle Materials by Surendra P. Shah, Stuart E. Swartz, and Chengsheng Ouyang, Walter H. Gerstle, ST Nov. 96, p1390-1391.

A Fracture Mechanics-Based Design Method for SFRC Tunnel Linings, Pruettha Nanakorn and Hideyuki Horii, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p819-828.

Griffith Energy Balance Model for Crack-Growth Prediction in Reinforced Concrete, Kamel Ben Amara, EM July 96, p683-689.

Implementation and Application of Parallel Processing Computer Methods for Probabilistic Analysis, Harry R. Millwater, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p266-269

Is No-Tension Design of Concrete or Rock Structures Always Safe?-Fracture Analysis, Zdeněk P. Bažant, ST

Jan. 96, p2-10.

Matrix First Cracking Strength in Continuous Fiber Cement Composites, Jamil M. Alwan and Antoine E. Naaman, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996).

Mode-I Fracture Toughness of Composite/Wood Interface Bond, Julio F. Davalos, Prabhu Madabhusi-Raman and Pizhong Qiao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1469-1478.

Modelling of Randomly Meandering Fatigue Crack Growth, Kazimierz Sobczyk and Jerzy Trębicki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p478-481.

Observations of Internal Fracture in Mortar using X-Ray Microtomography, Eric N. Landis, Edwin N. Nagy, Denis T. Keane and Nhan Huynh, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p637-640.

Possibilities of Fracture Mechanics Models Application to Optimisation of Operational Use of Large-Size Machine Components, Lech Bukowski and Piotr Artymiak. (Prob-abilistic Mechanics & Structural Reliability. Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p780-783.

Prediction of Concrete Cracking Under Coupled Shrinkage and Creep Conditions, Wei Yang, Kejin Wang and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p564-573.

Probabilistic Aspects of Material Failure, David F. Bizup and Nozer D. Singpurwalla, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p474-477.

Probabilistic Fatigue Life Analysis of High Density Elec-tronics Packaging, N. R. Moore, E. A. Kolawa, S. Sutharshana, L. E. Newlin and M. Creager, (*Probabilis-*tic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p886-889

Probabilistic Fracture Mechanics of Nuclear Pressure Ves-sels, M. A. Khaleel and F. A. Simonen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p54-57.

Rate-Sensitive Micromechanical Damage Model for Brittle Solid, Dipankar Chandra and Theodor Krauthammer, EM May 96, p412-422.

Reliability of a Cast Duplex Stainless Steel Elbow by Using Probabilistic Fracture Mechanics, P. Hornet and P. Le Delliou, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p756-759.

Size Effects in the Fracture of Fiber Reinforced Materials, Roberta Massabó and Alberto Carpinteri, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p462-473.

Smeared Crack Approaches—Material Modeling, Marco Petrangeli and Joško Ožbolt, EM June 96, p545-554.

Some Phenomenological Aspects of High Performance Concretes, and their Consequences for Numerical Analysis, Ravindra Gettu, Ignacio Carol and Pere C. Prat, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

Statistical Aspects of Toughness in Brittle Fracture, A. Chudnovsky and M. Gorelic, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-

cea D. Grigoriu, ed., 1996), p346-349.

Structural Redundancy and Fracture in Composite Lattice/ Skin Structures, A. K. Maji, E. Fosness and D. Satpathi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p641-644.

A Study on the Link between Damage Mechanics and Fracture Mechanics, Zhen Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p739-742.

Tensile Response of Reinforced High Strength Concrete Members, S. P. Shah and C. Ouyang, (Worldwide Ad-vances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p431-442.

Time-Dependent Fluid Fracture Interaction in Concrete, Volker Slowik and Victor E. Saouma, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p865-868.

Zero-Brittleness Size-Effect Method for One-Size Fracture Test of Concrete, Zdeněk P. Bažant and Zhengzhi Li, EM May 96, p458-468.

Fracture strength

Accurate Asphalt Mixture Tensile Strength, William G. Buttlar, Reynaldo Roque and Namho Kim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p163-

Behavior of Cementitious Composites with Randomly Dis-persed Microfibers, D. A. Lange, C. Ouyang and S. P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p281-287.

Copper Precipitation Hardened, High Strength, Weldable Steel, Semyon Vaynman, Morris E. Fine, Gautam Ghosh and Shrikan P. Bhat, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1551-1560.

A Probabilistic Framework for Brittle Fracture Assessments of Structures —Constraint and Ductile Tearing Effects, Claudio Ruggieri and Robert I. Dodds, Jr. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), earn ede. p878-881.

Reliability of a Cast Duplex Stainless Steel Elbow by Using Probabilistic Fracture Mechanics, P. Hornet and P. Le Delliou, (Probabilistic Mechanics & Structural Reliabiliry, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p756-759.

Volume and Stress Heterogeneity Effects in Fiber-Reinforced Composites, François Hild and Pascal Feil-lard, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1026-1029.

Fractures

Analysis of Masonry Structures with Elastic/Viscoplastic Models, Teymour Manzouri, P. Benson Shing and Benard Amadei, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p61-71.

Capillary Pressure-Saturation Relationships in Fracture, Zitong Ye, Bing Han, Sishen Li and Jiafa Zhang, (North American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996), p3869-3873. Cohesive Crack Model with Rate-Dependence and Visco-elasticity, Zdeněk P. Bažant and Yuan-Neng Li, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

Complex Crack Interaction in Composite Plate, Wieslaw K. Binienda, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p408-411.

Dissipated Energy as a Function of Material Microstructure, Mark J. Meisner and George N. Frantziskonis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996). p1030-1033.

Ductile Steel Beam-to-Column Connections for Seismic Resistance, Sheng-Jin Chen, C. H. Yeh and J. M. Chu, ST Nov. 96, p1292-1299. Editor's Note, David Darwin, ST Nov. 96, p1257.

Effects of Zero Gravity on Bones, Jon Capron, Engineer-ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1262-1264. Equivalent Strength of Porous Fractured Rock, William G.

Pariseau, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p216-219.
Fatigue Failures of Hexa'lliptical Steel Davit Arms Induced by Aeolian Vibrations at Resonant Conditions, Markus Ostendorp, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p874-877.

Finite Element Analysis of Discontinuities in Concrete, Hong D. Kang and Kaspar J. Willam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1054-1057.

Constitutional Simulation, Parameter Development and Property Scaling for GWTT-95, Sean A. McKenna and Susan J. Altman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p181-

Integrating the Refraction Seismic Method into Stream Crossing Characterization for Scour and Excavation Conditions, Michael L. Rucker, (Uncertainty in the Geo-Conditions, sinchael L. Rucker, (Oncertainty in the Geo-logic Environment: From Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1163-1177.

Peak-Load Method for Fracture Parameters of Two-Parameter Fracture Model, Tianxi Tang, Chengsheng Ouyang and Surendra P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p584-587.

Remote Sensing, in Investigation of Engineered Under-

Remote Sensing in Investigation of Engineered Under-ground Structures, William F. Kane, Douglas C. Peters and Robert A. Speirer, GT Aug. 96, p674-681. Steel Moment Frames with Welded Connections, Helmut

Krawinkler, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1115-1122.

A Stochastic Model for Elastic-Plastic Fracture of Cracked Pipes, Sharif Rahman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p764-767.

Fractures, materials

Fractures, materials
Analysis of Branch Crack in Compression, Chiheb Chaker and Michel Barquins, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p366-374.
Analysis of Crack Propagation in Concrete Structures by Markov Chain Model and R-curve Method, Yunping Xi and Zdende P. Bažant, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p38-361.
Analysis of Work-of-Fracture Method for Measuring Fracture Energy of Concrete, Zdenék P. Bažant, EM Feb. 96, p138-144.

p138-144.

Cellulose Fiber Reinforced Concrete, Parviz Soroushian, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p809-818.

Development of a Solidification Method for Pulverized Concrete Waste by Hydrothermal Hot-Pressing and Fiber Reinforcement, Kazuhiko Sato, Toshiyuki Hashida, Hideaki Takahashi and Nakamichi Yamasaki, (Materials for the New Millennium, Ken P. Chong, ed., 1996). n684-693

p684-693. Effect of Copper Slag on the Hydration of Blended Cementitious Mixtures, B. Mobasher, R. Devaguptapu and A. M. Arino, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1677-1686. Finite Element Analysis of Fracture Behavior of ECC Shear Beams, Petr Kabele and Hideyuki Horit, (Materials for the New Millennium, Ken P. Chong, ed., 1996), ed.

p409-418. HMA Overlays to Rehabilitate PCC Pavements, Dale S. Decker and Matthew W. Witczak, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1418-1428. Improving the Ductility of High Performance Concrete Through Mortar-Aggregate Interfaces, Oral Bijvikkörtürk and Brian Hearing, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1337-1346.
Observations of Internal Crack Growth in Mortar Using X-Pav Microstomography Eric N. Landis, Edwin N. Naev.

Ray Microtomography, Eric N. Landis, Edwin N. Nagy, Denis T. Keane and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1330-1336.

A Proposed Poroelastic Model for Hydraulic Fracturing Breakdown Pressure in Porous Rocks, Xiaofeng Huang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p208-211.

Fracturing
Computer Vision and Fracture Process in Cement-Based
Materials, Sokhwan Choi and Surendra P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),
p967-970.

ps967-970.
Effect of Aggregates on Fracture Process Zone of Concrete, Yunping Xi and Felix E. Amparano, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1185-1188.
Effect of Inclusion Strength and Geometry on Mortar Fracture, Mohsen A. Issa, A. B. Shafiq and A. Chudnovsky, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1038-1041.

Processor of the State Bioremediation (Available only in Focus on Geo/Environmental Special Issue), Sankar N. Venkatraman, John R. Schuring, Thomas M. Boland and David S. Kosson, CE Mar. 96, p14A-16A.

Analysis of Free Vibrations of Tall Buildings, Qiusheng Li, Hong Cao and Guiqing Li, EM Sept. 94, p1861-1876. ictions in Use of Collar Beams, Jonathan Ochshorn,

Contradictions in Use of Collar Beams, Jonathan Ochshorn, AE Mar. 96, p20-25.

Dynamics of Highly Deformable Sandwich Frame Structures, H. Deng and L. Vu-Quoc, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1147-1150.

Earthquake Response of Structures by Structural Mixture Theory, Mohammed S. Al-Ansari, O. M. Kirkely and Gregory Gillette, ST Oct. 96, p1198-1207.

Matheet for Structural Reliability Analysis of Marine

Method for Structural Reliability Analysis of Marine Structures Using Combined Plate and Frame Structure Models, Hiroo Okada, Koji Masaoka, Yoshisada Murotsu, Shigeyuki Hibi and Wataru Kiyokawa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol,

Mechanics & Strictural Retiability, Dan M. Frangopot, ed. and Mircea D. Grigoriu, ed., 1996), p150-153.
Negative Shear Lag in Framed-Tube Buildings, Y. Singh and A. K. Nagpal, ST Nov. 94, p3105-3121.
Nonlinear Dynamic Response of Frames Using Lanczos Modal Analysis, Steven M. Vukazich, Kyran D. Mish

and Karl M. Romstad, ST Dec. 96, p1418-1426.

On Buckling Analysis of Beams and Frame Structures by the Differential Quadrature Element Method, Xinwei Wang, Huizhi Gu and Bin Liu, (Engineering Mechanics,

Y. K. Lin and T. C. Su, 1996), p382-385.

Probabilistic Modeling of Roof Sheathing Uplift Capacity,
D. V. Rosowsky and S. D. Schiff, (*Probabilistic Me*chanics & Structural Reliability, Dan M. Frangopol, ed.

and Mircea D. Grigoriu, ed., 1996), p334-337.

Protection of the Building Envelope in Maintaining Structural Integrity, Clifford Oliver, (Natural Disaster Reduction, George W. 1997), p121-122. W. Housner, ed. and Riley M. Chung, ed.,

Quake Proofing a Palace, John Casey, CE Aug. 96, p32-35.

Refined Second-Order Analysis of Frames with Members under Lateral and Axial Loads, Z. H. Zhou and S. L. Chan, ST May 96, p548-554.

Restraint Demand Factors and Effective Lengths of Braced Columns, Jostein Hellesland and Reidar Bjorhovde, ST

Oct. 96, p1216-1224.

Seismic Rehabilitation of a Non-Ductile Concrete Frame Building Using Shearwalls, Paul A. Murray and James H. Parker, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p373-380.

Upgrading of Braced Frames for Potential Local Failures, Hae In Kim and Subhash C. Goel, ST May 96, p470-475.

Buckling Modes at Coincident Singularities of Stiffness Matrix, Igor Raskin and John Roorda, EM Aug. 96,

Doubly Symmetric Tube Structures. I: Static Analysis Hideo Takabatake, Hisao Mukai and Tadato Hirano, ST July 93, p1981-2001.

Doubly Symmetric Tube Structures. II: Dynamic Analysis, Hideo Takabatake, Hisao Mukai and Tadato Hirano, ST July 93, p2002-2016.

Effective Length Factor for Columns in Unbraced Frames, Lian Duan and Wai-Fah Chen, ST Jan. 89, p149-165.

Experimental Evaluation of Masonry-Infilled RC Frames, Armin B. Mehrabi, P. Benson Shing, Michael P. Schuller and James L. Noland, ST Mar. 96, p228-237.

Experiments with Elasto-Plastic Oscillator, S. Randrup-Thomsen and O. Ditlevsen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p518-521.

Hysteretic MDOF Model to Quantify Damage for RC Shear Frames Subject to Earthquakes, H. Ugur Köylüoglu, Søren R. K. Nielsen and Ahmet Ş. Çakmak, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Improved Frame Stability Analysis With Effective Lengths, Jostein Hellesland and Reidar Biorhovde, ST Nov. 96,

Manufacturers Meet the "Tee" Aim, CE Dec. 96, p89.

New Hybrid Seismic System Set for Seattle, CE Oct. 96, p20,22.

Nonlinear Finite Element Analysis of Masonry-Infilled Re-inforced Concrete Frames, Medhat A. Haroun and Essam H. Ghoneam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1022-1025.

Optimal Rehabilitation of Locally Damaged Structures Using the Pseudo Distortion Method, Prafulla V. Makode, Ross B. Corotis and Martin R. Ramirez, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p606-612

Parameter Identification of a Hysteretic Structure, M. Battaini, (Probabilistic Mechanics & Structure, M. Bat-taini, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p430-433.

Softening-Induced Dynamic Localization Instability: Seis-mic Damage in Frames, Zdeněk P. Bažant and Milan Jirásek, EM Dec. 96, p1149-1158.

Three Repair/Retrofit Procedures for Welded Moment Frames, J. C. Anderson, Z. Yin and X. Duan, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p768-771.

Transition from Partial Factors Method to Simulation Based Reliability Assessment in Structural Design, Pavel Marek and Milan Guštar, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p558-561.

Updates on Steel Moment Frames, David Bonowitz, CE Aug. 96, p30.

Weld Performs Under Earthquake Conditions, CE Aug. 96,

Framing

The Design of Building Structures by Wolfgang Schueller, Bijan Mohraz, AE June 96, p82-83.

A Framing System for a Lunar/Martian Inflatable Structure, Jenine E. Abarbanel, Ted A. Bateman, Marvin E. Cris-well and Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1069-1075.

Stress Factors Explained, Robert T. Ratay, CE Dec. 96, p27

France

France
Assessment of Risks of Flooding by Use of a TwoDimensional Model, A. Paquier and P. Farissier, (North
American Water and Environment Congress & Destructive Water, Chenchaya Bathala, ed., 1996), 19915-3916.
Design Tools for Public Cars Transportation Systems,
Chafik Allal, François Dumontet and Michel Parent, (Applications of Advanced Technologies in Transportation
Engineering, Yorgos J. Stephanedes, ed. and Francesco

Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p6-18. Field Trial Results of VMS Travel Time Display on the Corridor Peripherique of Paris, H. Haj Salem, S. Cohen, E. Sididki and M. Papageorgiou, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p368-372.

The French Experience in Bursting Rehabilitation for Pipe-line Crossings, Y. G. Diab and P. Perrotin, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996),

The Gaudi-Marseille Experiment: An Example of a Multiservice Remote Payerineii. An Example of a Muritiservice Remote Payerineii. An Example of a Muritiservice Remote Payerineii. An Example of a Muritiservice Remote Payerineii. An Example of a Muritiserine. An Example

and Francesco Frippi, ed., 1990, p.542-540.
History of Coastal Engineering in France, Luc Hamm, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p.142-168.

Modeling Groundwater Response to a Perimeter Flood, Jeff Leighton and Michel Genoud, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.748-752.
Multicriterion Design of Long-Term Water Supply in Southern France, Oscar Cordeiro Netto, Éric Parent and Lucien Duckstein, WR Nov. Dec. 96, p.033-413.
Structural Aerodynamics (Available only in Focus on Structures Special Edition), Bob Lang and Hugh Muirhead, CE Jan. 96, p.3A-7A.

The Use of Digital Geographic Information in Transportation Engineering, Patrice Boursier, Bernard Allouche, Laurent Coudercy and Yonnel Gardes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p.403-407.

1996), p403-407.
Use of Traffic Information System in Congested Area, A. Pauzié, A. Sarpedon and G. Saulnier, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p305-309.

Vision Technique for Platoon Driving, Michel Parent, Pas-cal Daviet and Sofiane Abdou, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p666-675.

Wavelet Transforms for Incident Detection on Motorways,

Simon Cohen and Bian-shun Jing, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p222-226.

Under Cover Transport and Accumulation of Frazil Granules, Hung Tao Shen and De Sheng Wang, HY Feb. 95, p184-195.

Free surfaces

Application of High-Resolution Schemes to Free Surface Flows in Irregular Channels, Ke-Qiang Zheng and Eddy J. Langendoen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p201-206.

Cu., 1990), p.201-200. Depth-Averaged Equations for Free Surface Flows, Guohong Duan and Guixian Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.213-218.

Flow through Slit in Dam, Yakun Guo, Xianyun Wen and Chigong Wu, HY Nov. 96, p662-669.

Interactive RANS/Laplace Method for Nonlinear Free Sur-face Flows, Hamn-Ching Chen and Sing-Kwan Lee, EM Feb. 96, p153-162.

Modeling 3D Free Surface Flow in Compound Channels: A Validation Case Study, Francisco J. M. Simões and Sam S.-Y. Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2719-2724.

Optimal Well Locations for Groundwater Mound Control, Maili Wang and Kevin Lansey, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p940-945.

Seepage from Surface Canals by Boundary Element Meth-od, Alexander C. Demetracopoulos and Christos Had-jitheodorou, IR Jan./Feb. 96, p40-48.

Simulation of Three-Dimensional, Non-Hydrostatic Free-Surface Flows for Estuaries and Coastal Seas, Vincenzo Casulli and Stelling Guus S., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p1-12.

Southern Boundary Experimental Forecasts with the NOAA East Coast Ocean Model, Richard A. Schmalz, Ir., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p442-453.

Freeze-thaw cycle

Foundations for Permafrost and Other Problem Soils, William J. Vangool, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p303-

Frequency Distributions and Bayesian Techniques for Esti-mating Performance in Composite Materials, John Miller and José Gomez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p492-501.

Material Properties, Specifications and Testing for Pave-ments in Cold Regions, Edwin J. Chamberlain, Vincent C. Janoo and Stephen A. Ketcham, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p289-318.

No-Fines Concrete Pavements, Nader Ghafoori and Shivaji Dutta, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1637-1646.

Permafrost Formation and Aggradation in a 23-m High Ho-mogeneous Dyke: A Case-Study, J.-M. Konrad and R. Ladet, (Cold Regions Engineering: The Cold Regions In-frastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p700-711.

Pore-Water Pressures in Freezing and Thawing Fine-Grained Soils, K. Dieter Eigenbrod, Sven Knutsson and

Daichao Sheng, CR June 96, p77-92.

Predicting the Level of Frost Penetration into Landfill Covconcuring the Level of Frost Penetration into Landfill Covers, Horace K. Moo-Young, Jr., Thomas F. Zimmie and Morris H. Morgan, III, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p745-756.

Stress and Temperature Effects on Silt Frost Heave, Seyed M. Marandi, Douglas I. Stewart and Terrence W. Cousens, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p23-34.

Thermal Impact of a Buried Chilled Gas Pipeline, Lutfi Raad, Xioalin Yuan and Dieter Weichert, (Cold Regions Engineering: The Cold Regions Infrastructureternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p203-214.

Vertical Migration of Diesel into Silty Sand Subject to Cy-clic Freeze-Thaw, K. W. Biggar and J. C. R. Neufeld, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p116-127.

Winter Effects on Hydraulic Conductivity of Compacted Clay, C. H. Benson, T. H. Abichou, M. A. Olson and P. J. Bosscher, GT Jan. 95, p69-79.

Freeze-thaw durability

Comparison of Load Restriction Timings Determined Using FHWA Guidelines and Frost Tubes, Nazli Yesiller, Craig H. Benson and Peter J. Bosscher, CR Mar. 96.

Prezz-Thaw Durability of Concrete Cured Below 0°C
Using Antifreeze Admixtures, Michael R. Mason and
Herbert P. Schroeder, (Cold Regions Engineering: The
Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996),
p185-195.

Freeze-Thaw Durability of Concretes With and Without Class C Fly Ash, C. Ouyang and O. J. Lanc, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Windsor Bridge Pier Repairs, Phillip Pierce and Joseph Mieczkowski, SC May 96, p79-81.

Concrete/Reinforcing Steel Bond Strength of Low-Temperature Concrete, Herbert P. Schroeder and Thomas B. Wood, CR June 96, p93-117

Drying Sludge Saves Costs, CE Oct. 96, pl 1.

Incorporation and Rejection of Alum Sludge Flocs by an Advancing Freezing Front, Philip J. Parker, Anthony G. Collins and John P. Dempsey, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p757-768.

International Space Station Payload Accommodations, Daniel W. Hartman, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

An Open Graded Base to Reduce Thaw Weakening in Flex-ible Pavements, Maureen A. Kestler, (Cold Regions En-gineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p878-889.

Probability Distributions Used in 100-Year Return Period of Air-Freezing Index, Peter M. Steurer, CR Mar. 96,

p25-35.

Spray Freezing to Treat Oil Sands Tailings Pond Water, W. Gao, D. C. Sego and D. W. Smith, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p60-70.

Using Spaceborne Imaging Radar to Identify Lake Water Resources on the Alaskan North Slope, M. O. Jeffries, K. Morris and G. E. Liston, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p855-865.

Freight transportation

Constraint Logic Programming Contribution for Fleet Man-agement System in Freight Transport, Etienne Gaudin and Gérard Scémama, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p470-474.

The Financial-Economic Evaluation of ATT Systems in Road Freight Transport, Ferdinand Ballhaus, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-

pi, ed., 1996), p465-469.

IFMS: Evaluation of Pilot Projects, Marco Monticelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p475-479.

Interport Modelling with State Automata, Maurizio Mazzucchelli, Valerio Recagno and Giuseppe Sciutto, (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p104-108.

Transportation Shortcuts Exist, J. F. Koenen, P.E., CE Oct.

96, p37-38.

Frequency Polarization and Conduction of Clay-Water-Electrolyte Systems, J. Q. Shang, K. Y. Lo and I. I. Inculet, GT Mar. 95, p243-248.

Prestress Force Effect on Vibration Frequency of Concrete Bridges, M. Saiidi, B. Douglas and S. Feng, ST July 94, p2233-2241.

Seismic Hazard Analysis Without the Gutenberg-Richter Relationship, David Speidel, Peter Mattson and Bon Sy, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p129-130.

Use of Radio Frequency Spectrum in Lunar Environment, Shayla E. Davidson and Robert M. Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p847-853.

Frequency analysis

Characterization of Turbulent Scales in Atmospheric Wind by Orthonormal Wavelets, M. R. Hajj, H. W. Tieleman and M. Bikdash, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p971-974.

Empirical Simulation Technique Based Storm Surge Frequency Analyses, Norman W. Scheffner, Leon E. Borgman and David J. Mark, WW Mar./Apr. 96, p93-101.

Evaluation of Sampling Properties of General Extreme Value (GEV) Distribution-L-Moments Vs Conventional Moments, A. Sankarasubramanian and K. Srinivasan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p152-158.

FLODRO 2.0: A User Friendly Personal Computer Package for Flood and Drought Frequency Analyses, Jose A. Raynal-Villasenor, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p304-309.

Interdependence of Beach Fill Volumes and Repetition Intervals, Hans-H. Dette, Alfred Fuehrboeter and Arved J. Raudkivi, WW Nov./Dec. 94, p580-593.

Nonparametric Estimation of Low-Flow Frequencies, Kaz

Adamowski, HY Jan. 96, p46-49. Probability Distribution of Annual Maximum, Mean, and Minimum Streamflows in the United States, Richard M. Vogel and Ian Wilson, HE Apr. 96, p69-76.

Probability-Weighted Moments without Plotting Position Formula, Tefaruk Haktanir, HE Apr. 96, p89-91.

Reliability Analysis in Support of Risk Assessment for Non-Routine Closure/Shutdown of Hydroelectric Generating Stations, T. V. Vo, T. R. Blackburn, L. O. Casazza, P. G. Heasler, N. L. Mara, T. M. Mitts and H. K. Phan, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p326-345.

Response Spectral Densities of Stochastically Excited Nonlinear Systems, G. Q. Cai and Y. K. Lin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p732-735

Selection of Parameter-Estimation Method for LP3 Distribution, Babak Naghavi and Fang Xin Yu, IR Jan./Feb.

96, p24-30.

Storm Surge Frequency Computations for Long Island, NY: A Comparison of Methodologies, Norman W. Scheffner and H. Lee Butler, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p80-

Absorber for Offshore Structures: Frequency-Domain Analysis, Mikhail F. Dimentberg, Shiyu Chen, Zhikun Hou and Mohammad Noori, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p588-591.

Frequency distribution
Evaluation of Sampling Properties of General Extreme
Value (GEV) Distribution-L-Moments Vs Conventional Moments, A. Sankarasubramanian and K. Srinivasan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Frequency Distributions and Bayesian Techniques for Estimating Performance in Composite Materials, John Miller and José Gomez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p492-501.

Dynamic Analysis of Axisymmetric Foundations on Poroe-lastic Media, Gary F. Durgush and Manoj B. Chopra, EM July 96, p623-632.

Full-Scale Resonance Tests of a Railway Bridge, E. Mara-gakis, B. M. Douglas, S. Haque and V. Sharma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996).

Ordinary Operating Conditions of Large Channels of Mos-cow's Sewerage Network, Yuri A. Ermolin, IR May/ June 96, p145-148.

Fresh water

Bird Use of an Evaporation Basin and a Mitigation Wet-land, Andrew G. Gordus, Jeff Seay and Scott B. Terrill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p518-523.

Copper and Copper-Nickel Alloys as Zebra Mussel Anti-foulants, Jane M. Dormon, Catherine M. Cottrell, D. Grant Allen, Joseph D. Ackerman and Jan K. Spelt, EE Apr. 96, p276-283.

Flushing Criteria in Estuarine and Laboratory Experiments, Walter Debler and Jorg Imberger, HY Dec. 96, p728-

The Great Great Lakes, Murray Clamen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2300-2305.

Modeling Changing Freshwater Delivery to Apalachicola Bay, FL, W. K. Jones and Wenrui Huang, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p116-127.

Transient Effect of Battery of Injection Wells on Seawater Intrusion, A. Mahesha, HY May 96, p266-271.

Analysis and Design of Liner System for a Large Ash Re-sidual Landfill, Yun Zhou, Luis E. Vallejo and Daniel C. Hsu, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Valle-jo, ed. and L. N. Reddi, ed., 1996), p114-129.

Analysis of Work-of-Fracture Method for Measuring Fracture Energy of Concrete, Zdeněk P. Bažant, EM Feb. 96,

p138-144

Boundary Layer Theory and Field Bedload, Leszek M. Kaczmarek, Rafalł Ostrowski and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p664-675.

Computation of Shallow Recirculating Flow Dominated by Friction, S. Babarutsi, M. Nassiri and V. H. Chu, HY

July 96, p367-372.

Cone Penetration in Very Weakly Cemented Sand, Anand J. Puppala, Yalcin B. Acar and Mehmet T. Tumay, GT Aug. 95, p589-600.

Constitutive Driver for Cohesive-Frictional Materials, K. Willam and M.-M. Iordache, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p751-760.

Criteria for Initiation of Slide, Rock, and Slide-Rock Rigid-Body Modes, Harry W. Shenton, III, EM July 96, p690-693.

Earth Slide on Geomembrane, A. C. Stamatopoulos and P. C. Kotzias, GT May 96, p408-411.

Friction Characteristics of Cohesionless Soil Penetrated by Polymer and Mineral Slurries, Kamal Tawfiq, P.E. and Hubert Lee Broughton, III, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1170-1178.

Pigging Submarine Outfalls, Jonathan A. French, EE May 95, p396-401.

Seismic Isolation Retrofit of Large Historic Building, Anoop S. Mokha, Navinchandra Amin, Michael C. Constantinou and Victor Zayas, ST Mar. 96, p298-308.

Smooth Modelling of Oblique Contact with Friction of Turbine Blades: Béhaviour Analysis Under Random Excita-tion, Erick Tournu, Sergio Bellizzi and Béatrice Costa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p760-763.

Friction coefficient, hydraulic

Evaluating Hydraulic Roughness in Tunnels, Thomas C. MacDonald and Ken J. Susilo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3645-3650.

Path Integration Applied to Structural Systems with Uncertain Properties, Søren R. K. Nielsen and H. Uğur Köylüoğlu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p6-9.

Friction factor

An Evaluation of Tidal Predictions in the Yellow and East China Seas, Cheryl Ann Blain, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p429-441.

Prediction of Effects of Woody Debris Removal on Flow Resistance, F. Douglas Shields, Jr. and Christopher J. Gippel, HY Apr. 95, p341-354.

Friction resistance

Interaction Between Geomembranes and Granular Materials, Luis E. Vallejo and Yun Zhou, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Mecgoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p82-96.

Fringe benefits

Bonuses Up Sharply, ME Nov./Dec. 96, p12.

Frost heave

Design and Construction for Asphalt Pavements in Permaorgan and Construction for Aspinal Pavements in Perma-frost Areas: Case Study of Qinghai-Tibet Highway, Nin-gyuan Li and Ralph Haas, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p866-877.

Environmental-Induced Longitudinal Cracking in Cold Regions Pavements, Robert L. Scher, (Cold Regions Engineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-

son, ed., 1996), p899-910.

Foundation Design Considerations for Construction on Marshlands, A. Rhett Whitlock and Shahzad S. Moosa, CF Feb. 96, p15-22.

Frost Action, Dennis E. Pufahl, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p57-86.

Full-Scale Test Studies on Prevention of Frost Damage for Retaining Wall Reinforced with Geotextile, Lun Chen, Guangxin Li and Wenfeng Huang, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p724-735.

Iron(II) Amine Complex Soil Stabilization, David A. Hem-street and Ted S. Vinson, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p447-458.

Minimum Thermal Protection for Cold Weather Masonry, C. J. Korhonen, E. R. Cortez and R. D. Thomas, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p128-140.

An Open Graded Base to Reduce Thaw Weakening in Flexible Pavements, Maureen A. Kestler, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p878-889.

Pavement Design Applying Allowable Frost Heave, Seppo Saarelainen, (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p890-898.

Pavement Distress Caused by Deep Heave in Anchorage, Alaska, Rupert G. Tart, Jr., Mark R. Musial and Michael E. Krueger, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p923-934.

Probability Distributions Used in 100-Year Return Period of Air-Freezing Index, Peter M. Steurer, CR Mar. 96,

p25-35.

Research Program for Reducing Frost Heave with Geosynthetic Capillary Barriers, Karen S. Henry and Earl Ellis, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p266-277. Road and Airfield Maintenance, John C. Becker and David C. Esch, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p249-270.

Stress and Temperature Effects on Silt Frost Heave, Seyed M. Marandi, Douglas I. Stewart and Terrence W. Cousens, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p23-34.

Upheaval Buckling of a Pipeline in an Arctic Environment, T. Bartlett Quimby and Michael R. Fitzpatrick, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p215-225.

Frost penetration

Field Observations of Instrumented Highway Sections with Different Frost Protections, J.-M. Konrad, G. Dore and M. Roy, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p652-663.

Frost Action, Dennis E. Pufahl, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p57-86.

Frost Resistance of Roller-Compacted High-Volume Fly Ash Concrete, Michael Pigeon and V. Mohan Malhotra, MT Nov. 95, p208-211.

Predicting the Level of Frost Penetration into Landfill Covers, Horace K. Moo-Young, Jr., Thomas F. Zimmie and Morris H. Morgan, III, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p745-756.

Thermal Impact of a Buried Chilled Gas Pipeline, Lutfi Raad, Xioalin Yuan and Dieter Weichert, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p203-214.

Winter Effects on Hydraulic Conductivity of Compacted Clay, C. H. Benson, T. H. Abichou, M. A. Olson and P. J. Bosscher, GT Jan. 95, p69-79.

Discharge Coefficient of Rectangular Side Weirs, R. Singh, D. Manivannan and T. Satyanarayana, IR July/Aug. 94, p814-819.

Flushing Criteria in Estuarine and Laboratory Experiments, Walter Debler and Jorg Imberger, HY Dec. 96, p728-

Local Scour: By A Deeply Submerged Horizontal Circular Jet, Yee-Meng Chiew and Siow-Yong Lim, HY Sept. 96, p529-532.

An LPI Numerical Implicit Solution for Unsteady Mixed-Flow Simulation, D. L. Fread, Ming Jin and Janice M. Lewis, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3222-327.

Relative Celerities of Mobile Bed Flows with Finite Solids Concentrations, Peter H. Morris and David J. Williams, HY June 96, p311-315.

Selection of Sediment Transport Relations: Part II, Ranges of Dimensionless Numbers, David S. Smith and David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathalia, ed., 1996), p2837-2842.

Study of Hydraulic Jump Lengths on Inclined Channel Beds, Tiao J. Chang. Cheng F. Li and Hong Y. Sun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4064-4071.

Water Surface Profiles in Compound Channel with Multi-ple Critical Depths, Terry W. Sturm and Aftab Sadiq, HY Dec. 96, p703-709.

Behavior of a Sand in Frozen and Unfrozen States, Christochavior of a Sano in Prozen and Unifozen States, Charle-pher W. Swan, (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p483-493. Foundations for Permafrost and Other Problem Soils, William J. Vangool, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p303-314.

Hydraulic Conductivity of Frozen Granular Soils, Orlando B. Andersland, David C. Wiggert and Simon H. Davies, EE Mar. 96, p212-216.

Strengthening Railroad Roadbed Bases Constructed on Icy Permafrost Soils, V. G. Kondratjev, (Cold Regions Engineering: The Cold Regions Infrastructure-An Intern tional Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p688-699.

Fuel consumption

Using Artificial Intelligence to Reduce High Fuel Con-sumption in Congested Cities, Ken Fox, Roy Clarke and Howard Kirby, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p520-524.

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Automobile Emissions Under Arctic Conditions Using Unaudinonia Editionis Under Arctic Condumbs Using Or-leaded and 10 Percent Ethanol Admixed Gasolines, R. J. Andres, J. D. Goldbach and F. L. Williams, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p792-803.

Characterization and Remediation of a Fuel Oil Plume, Do-rinda L. Clause and Stacey R. Leake, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p762-775.

Combustion Processes and Applications in Reduced Gravi-ty, Howard D. Ross, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Containing Spills and Fire, William E. Wiley, CE Mar. 96, p53-55.

A Discussion of Two SVE/Bioventing Pilot Studies, Robin D. Wankum, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p751-761.

Investigation of On-Orbit Servicing Robot, T. Matsue and Y. Wakabayashi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p533-

Mars Sample Return Using In-Situ Propellant Production, David I. Kaplan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p717-

Methodology to Group DOE Fuels for the Purpose of Repository Technical Acceptance, Robert Einziger, Ray Stout, Henry Loo and Scott Gladson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p432-434.

Full-scale tests

Anchorage Behavior of Shaft Anchors in Alluvial Soil, H. J. Liao, C. D. Ou and S. C. Shu, GT July 96, p526-533.

Behavior of Two Long-Span High Strength Concrete Pre-stressed Bridge Girders, Theresa M. Ahlborn, Carol K. Shield and Catherine W. French, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p141-152.

Creep Deformation and Stress Relaxation in Preloaded/ Prestressed Geosynthetic-Reinforced Soil Retaining Walls, Fumio Tatsuoka, Taro Uchimura, Masaru Tateyama and Katsumi Muramoto, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. and Victor N. Kaliakin, ed., 1996), p258-272.

Equivalent Single-Axle Load Factor for Rigid Pavements, Pin-Sien Lin, Yuan-Ting Wu, Tien-Kuen Huang and C. H. Juang, TE Nov. Dec. 96, p462-467.

Forced Vibration of Full-Scale Wall-Backfill System, Ahmed-W. Elgamal, Sreenivas Alampalli and Paul Van Laak, GT Oct. 96, p849-858.

Long-Span Timber Trusses—Evaluating a Repair Method, Thomas E. Forsberg, SC May 96, p89-92.

Measured Seismic Behavior of a Two-Story Masonry Building, Gregory R. Kingsley, Guido Magenes and G, Michele Calvi, (Worldwide Advances in Structural Con-crete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p123-134. Reliability Analysis and Full-Scale Testing of Transmission Tower, M. J. Alam and A. R. Santhakumar, ST Mar. 96, n338, 344.

p338-344.

Functional analysis

Implications of Using Approximate Expressions for Well Function, Rajesh Srivastava, IR Nov./Dec. 95, p459-462.

Funding allocations

Alfalfa Power, CE Nov. 96, p8.

Applications Surge for New Jersey Cleanup Funds, CE Feb. 96, p22.

Are Bridge Conditions Improving Under Bridge Management: A Panel Discussion, Bojidar S. Yanev, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p282-289.
ASCE Planning Group Recommends Funding Shift in FY
97 Budget, NE July 96, p1,6.

ASCE's New Paradigm, Delon Hampton, P.E., CE July 96,

Combined Flood Hazard Mitigation Techniques for Com-prehensive Planning - the Saugus River Coastal Flood Risk Reduction Plan, Barbara D. Hayes, (North Ameri-can Water and Environment Congress & Destructive

Water, Chenchayya Bathala, ed., 1996), p2312-2317. Commercial Mining Activities for the Space Frontier, David M. Neil, Russell J. Miller, David S. McKay and Brad R. Blair, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p800-

205 Earthquake Predictions Shaky, CE Mar. 96, p8.

EPA Proposes Rural Wastewater Grants, CE Dec. 96, p8. FEMA Conference Stresses Preplanning for Natural Disas-

ters, CE Feb. 96, p14,16. Fiscal '97 Budget Likes Infrastructure, Martin Hight. CE

Fiscal 97 Budget Library Nov. 96, p.116.
For Public Works, Metrication is a Luxury, Ronald F. Kilmartin, CE Jan. 96, p.31-32.
Kilki Durgosa/Multi-Objective Game Model Approach to Multi-Purpose/Multi-Objective Game Model Approach to Multi-Purpose/Multi-Objective Water Resources Related Environmental Protection Pro-ject Planning and Management in Developing Nations: A Nigerian Example, Azuka Benjamin Anyika, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1057-1062.
Grants Aid South American Development, CE Dec. 96,

p13.

Grassroots Grants to Aid Sections, Branches Make an Impact at Local Level, NE Nov. 96, p1.

Minority Set-Aside Unconstitutional, CE Oct. 96, p30.

MPO's Conform to ISTEA Requirements, CE Oct. 96, p12,14.

Multijurisdictional Project Evaluation in Chattanoog Urban Area, Catherine L. Ross and W. Jeffrey Davis, UP June 96, p71-81.

New Jersey Fund Offers Help, H. Michael Sklar, CE June 96, p27.

Reader Says Feds Overspend on Highways, Kirk R. Barrett, P.E., CE Oct. 96, p32,37.

Reliability Analysis in the Rehabilitation of Corps Structures with Time-Dependent Needs, Mary Ann Legget (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p134-141.

The Standley Lake Protection Project, Joseph Green-Heffern and David J. Kaunisto, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2820-2825. Taxing Matters for Trust Funds, Casey Dinges, CE July 96,

p100. This Year's Budget, with Only Five Months Left, Is a Done Deal, NE June 96, p2.

Traffic Congestion Leads to Innovative Funding, CE Sept. 96, p14.

Trust Fund Vote in House, Casey Dinges, CE June 96, p100

Turnkey Procurement Speeds Highway Work, ME May/ June 96, p10.

Water Resources Legislation, Martin Hight, CE Sept. 96, p116.

Furrow Irrigation
Modeling in Water Losses Evaluation for Nonhomogeneous Furrow Set, Z. Popova and R. Kuncheva, IR Jan./

ous Furrow Sos, Z. Experiments
Feb. 96, p1-6.

Modeling Seasonal Furrow Irrigation, N. S. Raghuwanshi
and W. W. Wallender, IR July/Aug. 96, p235-242.

Modeling Transport of Bromide in Furrow-Irrigated Field,
Behzad Izadi, Bradley King, Dale Westermann and Ian
McCann, IR Mar/Apr. 96, p90-96.

Sensitivity Analysis of Furrow-Irrigation Performance Parameters, Dawit Zerihun, Jan Feyen and J. Mohan Reddy, IR Jan./Feb. 96, p49-57.

Fuzzy sets

Automated Constructibility Analysis of Work-Zone Traffic-Control Planning, Deborah J. Fisher and Naveen Rajan, CO Mar. 96, p36-43.

Autonomous Intelligent Cruise Control Using the Fuzzy Logic, Kwang Soo Chang and Jae Sung Choi, (Applica-tions of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p644-655.

A Combined Fuzzy and Random-Set Approach to the Multiobjective Optimization of Uncertain Systems, Alberto Bernardini and Fulvio Tonon, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p314-317

Comprehensive Evaluation Method on Earthquake Damage Using Fuzzy Theory, Bo Song, S. Hao, Suminao Murakami and Satoru Sadohara, UP Mar. 96, p1-17.

Determining Relative Density of Sands from CPT Using Fuzzy Sets, C. H. Juang, X. H. Huang, R. D. Holtz and J. W. Chen, GT Jan. 96, p1-6.

Evaluation of Nitrate Treatment Methods Under Uncertainty, Crystal C. Tannehill, M. F. Dahab and W. E. Woldt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1003-1008.

Finite Element Analysis with Fuzzy Variables, Ru-Jen Chao and Bilal M. Ayyub, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p643-650.
Fuzziness of the Modified Mercalli Intensity as a Measure of Damage, Nozar G. Kishi and Timothy H-J. Yao, (Natural Olivers Behavior Coopers, W. Husensed).

ural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p247-248.

Fuzzy Arithmetic for Ecological Risk Management, Jacques Ganoulis, Iraklis Bimbas, Lucien Duckstein and Istvan Bogardi, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p401-415.

Fuzzy Controlled Genetic Algorithm Search for Shape Op-timization, Chee Kiong Soh and Jiaping Yang, CP Apr. 96, p143-150.

Fuzzy Drivers Make Good Models, Monica Maldonado, ET June/July 96, p1,9.

Fuzzy Logic Based Control for Sliding Structures, Andrei M. Reinhorn, Ravi S. Subramaniam and Michael A. Riley, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p298-309.

A Fuzzy Logic Paradigm for Fault Trees and Event Trees in Risk Assessment, Timothy J. Ross and Sunil Donald,

in Russ Assessment, Timothy J. Ross and Sunil Donald, (Computing in Civil Engineering, 10rge Vanegas, ed. and Paul Chinowsky, ed., 1996), p369-375. Fuzzy Logic Process Control of HPO-AS Process, Mark T. Yin and Michael K. Stenstrom, EE June 96, p484-492. Fuzzy Rule-Based Estimation of Flood Probabilities under Climatic Busenstrian.

Climatic Fluctuations, Istvan Bogardi, Roland Reiter and Climatic Fluctuations, Istvan Bogardi, Roland Reiter and Peter Nachtnebel, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p61-79.
Fuzzy Rule-Based Modeling of Reservoir Operation, Bijaya P. Shrestha, Lucien Duckstein and Eugene Z. Stakhiv, WR, Bully/Aug, 96, p262-269.
Hazard Ranking of Landfills Using Fuzzy Composite Programming, Michael E. Hagemeister, David D. Jones and Wayne E. Woldt, EE Apr. 96, p248-258.

Henry's Problem and Its Representation --- Representing an Architect's Reasoning Structure, Quinsan Cao, (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul

Chinowsky, ed., 1996), p1058-1064.

Incorporation of Fuzzy Damage States in Seismic Fragility Analysis, Jun-Rong Huo and Howard H. M. Hwang, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p318-321

p318-321.
Managerial Fuzzy Optimal Planning for Solid-Waste Management Systems, Ni-Bin Chang and S. F. Wang, EE July 96, p649-658.
Managing Multi-Degree-of-Freedom Systems in Structural Fuzzy Control, Fabio Casciati and Lucia Faravelli, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), n306-309. p306-309

p306-309. Modeling Uncertainty in Prediction of Pier Scour, Peggy A. Johnson and Bilal M. Ayyub, HY Feb. 96, p66-72. A Practical Approach to Uncertainty Modeling in Geotechnical Engineering, C. Hsein Juang and David J. Elton, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1269-1283. Prediction of Cavitation Damase for Soillyway. Wenping

son, ed. and Mary J. S. Roth, ed., 1996), p1269-1283. Prediction of Cavitation Damage for Spillways, Wenping Lee and John A. Hoopes, HY Sept. 96, p481-488. Project-Network Analysis Using Fuzzy Sets Theory, Pasit Lorterapong and Osama Moselhi, CO Dec. 96, p308-318. Reservoir Operating Rules with Fuzzy Programming, Samuel O. Russell and Paul F. Campbell, WR May/June

90, pt03-170.

Rule-Based Control Algorithm for Active Tuned Mass Dampers, Masato Abé, EM Aug. 96, p705-713.

Structural Analysis with Fuzzy-Based Load Uncertainty, Robert L. Mullen and Rafi L. Mulanna. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, and M. Fra ed. and Mircea D. Grigoriu, ed., 1996), p310-313

Study on Fuzzy ANN and its Application in Runoff Forecast, Dunchun Wang and Jiqun Zhang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p456.

Uncertainty Measures in Reliability Assessment of Ship Structures, Bilal M. Ayyub and Kwan-Ling Lai, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p621-626.

Uncertainty Modeling for Preliminary Design of Structures, Yung-Ching Shen and Larry J. Feeser, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p565-571.

SSJ, Cu., 1990, p.03-971.
Use of Fuzzy Logic and Similarity Measures in the Risk Management of Hazardous Waste Sites, Sunil Donald and Timothy J. Ross, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p.376-382.

Logic in Aircraft Navigation Systems, A. Lopes Pereira, A. K. Achaibou and F. Mora-Camino, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p99-103.

Gaging stations

Langing Stations. The System for the Hydrological Forecasting in Serbia, Bojan Palmar and Borjanka Palmar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p716-717.

Design of an Advanced Fork System for Assembly Burnup Measurement, Ronald I. Ewing and Kevin D. Seager, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p340-341.

Nopal I Uranium Deposit: A Study of Radionuclide Migration, Virgina Wong, Elizabeth Anthony and Philip Goodell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p43-45.

Carages
Carages
Ferformance of Precast Parking Garages in the Northridge Earthquake: Lessons Learned, Sharon L. Wood, John F. Stanton and Neil M. Hawkins, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1221-1227.

Seismic Behavior of Precast Parking Structure Diaphragms, R. B. Fleischman, R. Sause, A. B. Rhodes and S. Pessiki, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1139-1146.

Gas pipelines

30-Inch Gas Pipeline Crossing of the San Juan River: Open Cut Excavation in Quality Water Area, James D. Evanoff and Neil P. Stockholm, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p186-193.

Aerial Pipeline Crossings - Inspection and Rehabilitation, Thomas Spoth, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p298-305.

Another Person Cures Galloping, Ray G. Barney, CE June 96, p27-28.

Crossing the Cape Cod Canal; A Natural Gas Pipeline Interconnection, Charles A. Pickering, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p48-55.

Design and Construction of Large Diameter High Pressure Gas Transmission River Crossing for San Diego Gas and Electric Using Directional Boring, Jey K. Jeyapalan and Robert Dalby, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p379-386.

Development of Caltrans Guidelines for Natural Gas Pipelines on Highway Bridges, Anthony Gugino, Chih-Hung Lee, Richard Gailing, Philip Constantine and David Reistetter, (*Pipeline Crossings 1996*, Lawrence F. Ca-talano, ed., 1996), p245-253.

Environmental Permitting for the Canal Electric Project, Gene F. Crouch, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p237-244.

Factors Affecting the Selection of a Crossing Method, David E. Hairston, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p214-221.

Telesleeve Crossing, David E. Comfort and Paul F. Lucas, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p139-146.

Tenneco's Risk Management Approach to Pipeline Crossings, J. S. Street and J. C. Bowles, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p14-21.

Thermal Impact of a Buried Chilled Gas Pipeline, Lufi Raad, Xioalin Yuan and Dieter Weichert, (Cold Regions Engineering: The Cold Regions Infrastructure—An In-ternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p203-214.

Transportation of Alaska North Slope Natural Gas to Mar-ket, Donald A. Lannom, David O. Ogbe, Akanni S. Lawal and F. Lawrence Bennett, (Cold Regions Engi-neering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p226-237.

Upheaval Buckling of a Pipeline in an Arctic Environment, T. Bartlett Quimby and Michael R. Fitzpatrick, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p215-225.

Gas production

Bring Attention to Coal-Tar, Allen Hatheway, CE May 96, p30-31.

Casification

Bioenergy in Transition, Ralph P. Overend, Charles M. Ki-noshita and Michael J. Antal, Jr., EY Dec. 96, p78-92.

2-D Experimental Investigation of Surfactant Mobilization of Light Nonaqueous Phase Liquid, Lizette R. Chevalier, Roger B. Wallace, David C. Wiggert and Mohsen D. Shabana, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p357-368.

Analysis of the Gasoline Spill at East Patchogue, New York, James W. Weaver, Joseph E. Haas and John T. Wilson, (Non-Aqueous Phase Liquids (NAPLs) in Sub-surface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p707-718.

Automobile Emissions Under Arctic Conditions Using Unutomorbite Emissions Under Arctic Condutions Using Un-leaded and 10 Percent Ethanol Admixed Gasolines, R. J. Andres, J. D. Goldbach and F. L. Williams, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p792-803.

Hazardous Soil Remediation: A Cooperative Effort Be-tween Industry and Government, Wendy L. Cohen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1203-1208.

Offshore Conclave Is Due This Month in Houston, CE May 96, p71.

 pri.
 Petroleum Hydrocarbon Removal via Volatilization and Bi-odegradation at McGrath, Alaska, Paul C. Ramert and Wayne L. Eberhardt, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Impera-tive for the 21st Century, Robert F. Carlson, ed., 1996),

Risk Assessment of Vapors in Cold Regions, Robert A. Perkins, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p360-371.

Surfactant Enhanced Electrokinetic Remediation of Gasoline Contaminated Soils, Sujan K. Bhattacharya, David III. Contaminated 3018, 3ujan N. Bhattacharya, David H. Foster and J. Mohan Reddy. (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p311-322.

Gates

Bus Gate, Pre-Signal and Queue Relocation: The Park View Road Bus Priority Scheme, Daniel D. G. T. Metz-

view Road Bus Priority Scheme, Daniel D. G. T. Metz-ger, (Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p81-86. Combined Flood Hazard Mitigation Techniques for Com-prehensive Planning - the Saugus River Coastal Flood Risk Reduction Plan, Barbara D. Hayes, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2312-2317. Design Guidelines for Stillway Gates Chandek School

Design Guidelines for Spillway Gates, Chander K. Sehgal, HY Mar. 96, p155-165.

Developing a Rating Table for the Central Diversion Dam Radial Gates, Michael A. Drain, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3598-3603.

Development of a Miter Gate Reliability Model, D. B. Cleary, C. J. Hookham and J. W. Waller, (*Probabilistic* Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p862-865.

Discharge Characteristics of Overshot Gates, Brian Wahlin and John Replogle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3604-3609.

Evaluation of System Downstream Control, Zihui Lin and David H. Manz, (North American Water and Environ-

David H. Manz, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1893-1898.

Hoddel, M. E. Allen, M. P. Cherian and L. J. Weber, (North American Water and Environment Congress & Destructive Water, Chanchayer, Bathala, ed. 1906). Destructive Water, Chenchayya Bathala, ed., 1996), p1111-1116.

Increasing Computational Accuracy of Radial Gate Flows, Brian Henning and Timothy F. Kacerek, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3592-3597.

Optimum Storage Realiocation and Gate Operation in Multipurpose Reservoirs, Abbass Afshar and Hamid Morad-Khani, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1962-1967.

Probabilistic Assessment of Miter Gates, Nathan M. Kathir, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p866-869.

System Downstream Control for On-Demand Irrigation Ca-nals, Zihui Lin and David H. Manz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p824-829.

Gaussian distribution

Application of Chaotic Dynamics to Stochastic Resonance, Marek Franaszek and Emil Simiu, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p86-89.

Field Estimation of Standard Deviations for 3D Gaussian Model, An Jin and Shoou-Yuh Chang, EE July 96,

p660-662

Gaussian process

An Approximation Method for Estimating Extremes of Narrow-Band Non-Gaussian Random Vibration, Arvid Naess and Tor Espen Hagen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p90-93.

Calibration and Simulation of Non-Gaussian Translation Processes, M. Grigoriu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p804-807.

Comparison of Some Simulation Algorithms on Basis of Distribution, Marc P. Mignolet and Maruvada V. Harish, EM Feb. 96, p172-176.

Crossing Rate Analysis of NonGaussian Response of Linear Systems, M. D. Pandey and S. T. Ariaratnam, EM June 96, p507-511.

Estimation of Frequency-Dependent Reflection Coefficients Using Current and Elevation Sensors, David A. Huntley, David J. Simmonds and Mark A. Davidson, (Coastal Dy-namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p57-68.

Experiments with Elasto-Plastic Oscillator, S. Randrup-Thomsen and O. Ditlevsen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p518-521.

Fatigue Reliability Analysis Based on Time Dependent First Passage, C.-J. Kuo and P. H. Wirsching, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p466-469.

Minimum Weight of Control Devices with Bounded LQG Control, Alexander A. Bolonkin, Duane E. Veley and Narendra S. Khot, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1230-1236.

Random Response to Periodic Excitation with Correlated Disturbances, Zhikun Hou, Yunshen Zhou, Mikhail F. Dimentberg and Mohammad Noori, EM Nov. 96, Dimentberg p1101-1108.

Random Vibration of a Hysteretic Oscillator, Arvid Naess and Vibeke Moe, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p514-517.

Time-Delay Linear Systems with Gaussian White Noise Input, M. Grigoriu, T. T. Soong and A. Reinhorn, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p422-425.

Geocentric datum

GPS High Accuracy Geodetic Networks in Mexico, Tomás Soler, Gabriel Álvarez-García, Antonio Hernández-Navarro and Richard H. Foote, SU May 96, p80-94.

Geodesy

GPS High Accuracy Geodetic Networks in Mexico, Tomás Soler, Gabriel Álvarez-García, Antonio Hernández-Navarro and Richard H. Foote, SU May 96, p80-94.

GPS High Accuracy Geodetic Networks in Mexico, Tomás Soler, Gabriel Álvarez-García, Antonio Hernández-Navarro and Richard H. Foote, SU May 96, p80-94.

Leveling by GPS Relative Positioning with Carrier Phases, Joz Wu and Shiou-Gwo Lin, SU Nov. 96, p145-157.

Geographic information systems

Accessible Information, William J. Douglas and Izak Maitin, CE June 96, p59-61.

Application of GIS in Site Selection for Nuclear Waste Dis-posal Facility, Grant Sheng, Isaac N. Luginaah and John Sorrell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p95-97.

Application of GIS Technology to Floodplain & Habitat Analyses, Scott E. Stonestreet, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1393-1398.

ArcSite: Enhanced GIS for Construction Site Layout, M. Y. Cheng and J. T. O'Connor, CO Dec. 96, p329-336.

Assessing Opal's Impact, David J. Greenwood and Darryl J. Hatheway, CE Jan. 96, p40-43.

J. Frauneway, C.E. Jan. 90, pd0-43.
BASINS—a GIS-linked Watershed Analysis and Modeling Tool, Gerald D. LaVeck, Marjoric C. Coombs and Marilyn Fonseca, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3629-3632.

Consensus Building Model to Select CASIS in Small Communities, Steven W. McCrary, Colin O. Benjamin and Vijay E. Ambavanekar, UP June 96, p46-70.

County-Wide Drainage Study Using GIS, J. J. DeVries and T. V. Hromadka, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3623-3628.

Developing Parameters for a Quasi-Distributed Runoff Model Using GIS, Thomas A. Evans and John C. Peters, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Earthquake Hazard Assessment Through Geographic Infor-mation Systems, Stephanie A. King, Anne S. Kirem-idjian and Kincho H. Law, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p123-124.

Earthquake-Induced Landsliding Analyzed and Predicted With a Geographic Information System, James McCalpin, (Natural Disaster Reduction, George Housner, ed. and Riley M. Chung, ed., 1997), p3-4.

The Effects of Natural Hazards on Pipeline Safety, Betty Bonn, Myles Powers, Andy Chernoff, Alan Gregory, Dan Phillips and Donna Roy, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p68-69.

Estimation of Flash Flood Potential for Large Areas, K. P. Georgakakos, A. K. Guetter and J. A. Sperfslage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl 147.

Every Road That Rises Must Converge on GIS, Eric Rasmussen, ET Oct./Nov. 96, p8.

Extracting Watershed Characteristics from Spatial Digital Data Using GIS, A Case Study of the Great Miami River Basin, Maged Hussein and Franklin W. Schwartz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p515-521.

Flood Damage Estimates Using GIS Spatial Analysis, Craig R. Wilkening, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3405-3410.

Geographic Data Exchange Format in Taiwan, Wei-hsin Ho and Ge-wen Lee, SU Aug. 96, p114-131.

Geographic Database for Traffic Operations Data, Cesar A. Quiroga and Darcy Bullock, TE May/June 96, p226-234. Geographic Information Systems for Emergency Response Management of Transportation Systems, Anne Kirem-idjian, Nesrin Basoz, Kincho Law and Stephanie King, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p355-356.

Getting to Know ArcView by Environmental Systems Research Institute, Wayne Sarasua, TE Sept./Oct. 96, p409.

GIS and CAD-based Design Software in CE Education, Randy Dymond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p501-507.

GIS Application for Miami Transportation System Hurri-cane Emergency Preparedness, Kangming Xu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p107-108.

GIS Applications in Modern Stormwater Management, Charles G. Boehm, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3633-3638.

GIS Gains Ground as Disaster Mitigation Tool, CE Sept. 96, p19-20.

A GIS Sewer Database for a University Campus, D. J. Schuller, D. I. Pusey and A. R. Rao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.1765-1770.

Chenchayya Bathala, ed., 1990), p.170-1770.

GIS-T Design for its Applications, Edmond Chin-Ping Chang, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p.174-178.

Historical Perspective of Spatial Flow Data Visualization Techniques in GIS, Young-Kyun Lee and Sang-Ki Hong,

Techniques in Glis, Young-Kyun Lee and Sang-Ki Hong, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p167-173. Integrated GlS Based Watershed Management Modeling System, L. E. Gomez, C. L. Chen and J. Herr, (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p508-514.

Landfill Sitting Using Geographic Information Systems: A Demonstration, Muhammad Z. Siddiqui, Jess W. Everett and Baxter E. Vieux, EE June 96, p515-523. Mapping History, Rebecca Balcom, CE Oct. 96, p54-56.

pping the Future, CE July 96, p18-19.

Mapping the Folding and Location Analysis for Free-way Emergency Needs, Kevin P. Hwang, (Applications of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p281-285.

Multifactor Spatial Analysis for Landfill Siting, Jehng-Jung Kao and Hung-Yue Lin, EE Oct. 96, p902-908. Multigrid Methods in GIS Grid-Cell-Based Modeling En-

vironment, Daene C. McKinney and Han-Lin Tsai, CP

vironment, Daene C. McKinney and Han-Lan Isai, C. Jan. 96, p25-30.

Network Expert Geographic Information System for Landfill Siting, Jehng-Jung Kao, Wei-Yea Chen, Hung-Yue Lin and Show-Jyi Guo, CP Oct. 96, p307-317.

On the Web, CE Nov. 96, p8.

Optimal Design of Water-Distribution Networks with GIS,

Saud A. Taher and John W. Labadie, WR July/Aug. 96, p301-311.

Package System for Supporting Decisions in a County Area, Quinto Riccardo Bertini and Pietro Antonio Cappa,

Area, Quinto Riccardo Bertini and Pietro Antonio Cappa, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p408-412. lanning and Analysis of Airport Access Using GIS: SLCIA Example, John Bergener, Massoud Javid and Pri-anka Seneviratne, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), 590.05 p89-95.

Real-Time Construction Staking, Don K. Nasland and David Paul Johnson, CE June 96, p46-49.

Reducing Uncertainty in Environmental Site Characteriza-tion, Yi-Chang Tsai and J. David Frost, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and

Mary J. S. Roth, ed., 1996), p1019-1033.
Results of a GIS/HEC-1 Interface Module, Paul A. DeBarry, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996).

p3194-3199.

Route Assessment Using Comparative Risk Factors Inte-grated through a GIS, Douglas M. Toth and William J. O'Connell, (High Level Radioactive Waste Management,

Technical Program Committee, 1996), p363-365.
Shake, Rattle and Map, Stephanie A. King and Anne S. Kiremidjian, CE June 96, p50-52.

Kiremidjian, CE June 96, p50-52.
Simplified Transformation between NAD27 and NAD83 in Southeastern Wisconsin, Kurt W. Bauer and Earl F. Burkholder, SU Feb. 96, p26-39.
Spatial Statistics for Rainfall Forecasts Assessment, Lynn E. Johnson and Billy Olson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2897-2902.
Status Report - Task Committee on GIS Models and Dissense Technology.

Status Report - Task Committee on GIS Models and Dis-tributed Models of the Watershed, Rafael G. Quimpo, Paul A. DeBarry and E. James Nelson, (North American

Paul A. Debarty and E. James Netson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2915-2920.

Storm Drainage GIS, Modeling, and Master Planning for the City of Berkeley, H. Yee, J. Egeberg and D. Akagi, (North American Water and Environment Congress & Worth American Water and Environment Congress & Month and Conference of the City o Destructive Water, Chenchayya Bathala, ed., 1996), p4239-4244.

Storm-Water Management Implementation through Modeling and GIS, Uzair M. Shamsi, WR Mar./Apr. 96, p114-127.

A Strategy for Solving Static Multiple-Optimal-Path Transit Network Problems, Nicholas Koncz, Joshua Green-feld and Kyriacos Mouskos, TE May/June 96, p218-225. Systems Engineering Firms Merge, CE Dec. 96, p22.

Use of a National Loss Estimation Methodology for Risk Management, Thalia Anagnos, Scott Lawson, Jawhar Bouabid and Mourad Bouhafs, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p.249-250.

The Use of Digital Geographic Information in Transportation Engineering, Patrice Boursier, Bernard Allouche, Laurent Coudercy and Yonnel Gardes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p403-407.

Use of Geographic Information Systems in Ground-Water Flow Modeling, D. W. Watkins, D. C. McKinney, D. R. Maidment and Min-Der Lin, WR Mar./Apr. 96, p88-96.

Use of GIS Mapping to Illustrate the Sensitivity of Wind Hazard Insurance Loss Estimation to Modeling Parameters, Andrew Steckley, Lawrence A. Twisdale and Peter J. Vickery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p201-202.

Water Based Land Use Regulations Using GIS Water Budgeting Model, H. William Sellers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3962-3968.

WQMAP in a Windows Environment, Daniel Mendelsohn, Eoin Howlett and J. Craig Swanson, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p555-569.

Geography

Rainfall Depth—Duration Relationship for South Italy, Vito Ferro and Vincenzo Bagarello, HE Oct. 96, p178-180

Leveling by GPS Relative Positioning with Carrier Phases, Joz Wu and Shiou-Gwo Lin, SU Nov. 96, p145-157.

Remote Sensing in Investigation of Engineered Under-ground Structures, William F. Kane, Douglas C. Peters and Robert A. Speirer, GT Aug. 96, p674-681.

Scoping Analysis of In Situ Thermal-Hydrological Testing at Yucca Mountain, Thomas A. Buscheck and John J. Nitao, (High Level Radioactive Waste Management, Technical Program Committee, 1996), pl 30-132.

Magnetic Investigation of a Simulated Hazardous Waste Site, Susan E. Burns and Kenneth E. Lemons, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p813-825.

The 1994 California State University, Northridge Earth-quake Experience - A Case Study, Gerry Simila, (Nani-ral Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p45.

Addressing Uncertainty in Rock Properties through Geo-statistical Simulation, Sean A. McKenna, Marc V. Cro-mer, Christopher A. Rautman and William P. Zelinski, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p297-311.

son, ed. and Mary J. S. Roth, ed., 1996), p297-311.

Analysis of Branch Crack in Compression, Chiheb Chaker and Michel Barquins, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p366-374.

A Comparison of Seismic Design Using ASD and LRFD, Jeffrey R. Soulages, Jon A. Heintz and James O. Malley, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p542-549.

Crossipe Fault Lines with Lenge Designer.

Crossing Fault Lines with Large Diameter Water Pipelines in the Houston Area, John M. Olden, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p155-162.

Defining the Potential Repository Siting Block Yucca Mountain, Nevada, Robert W. Elayer and Richard M. Nolting, III, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p157-159.

Development of the Deterministic Caltrans Seismic Hazard Map of California, Lalliana Mualchin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p297-298.

Earthquake Fault Rupture Propagation Through Soil, Jonathan D. Bray, Raymond B. Seed, Lloyd S. Cluff and H. Bolton Seed, GT Mar. 94, p543-561.

Evaluation and Upgrade of Major Transmission Lines Crossing Active Faults, Robert W. Lau, David D. Lee, David L. Pratt and Marilyn L. Miller, (*Pipeline Cross*ings 1996, Lawrence F. Catalano, ed., 1996), p418-425.

Nine-Component Vertical Seismic Profiling at Yucca Mountain, Nevada, A. H. Balch, Cemal Erdemir, R. W. Spengler and W. Clay Hunter, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p155-156.

Numerical Modeling of Deep Well Injection Near a Fault, Peikang Jin and Michael E. Barber, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J.

S. Roth, ed., 1996), p912-926.

S. Roun, ed., 1996, pp.12-920.

Results of Multiple High-Resolution Geophysical Surveys at Yucca Mountain, E. Majer, M. Feighner, L. Johnson, K. Lee, T. Daley, E. Karageorgi, P. Parker, T. Smith, Williams, A. Romero, T. McEvilly, D. Ponce and V. Langenheim, (High Level Radioactive Waste Management). ment, Technical Program Committee, 1996), p151-154.

Risk Assessment of Nambe Falls Dam, J. Lawrence Von Thun, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p604-

Screening Hospitals and Fire Stations for Seismic Poten-tials in City of Tehran, F. Nateghi-A, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p349-350.

Seismic Design Issues of Water Pipelines at the Hayward Fault Crossing, Luke Cheng and Lota D. Nuguid, (Pipe-line Crossings 1996, Lawrence F. Catalano, ed., 1996),

Seismic Microzonation and Development of an Earthquake Damage Scenario for Istanbul, Turkey, Mustafa Erdik and Jennifer N. Swift-Avci, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p341-342.

Seismic Reflection Evidence Against a Shallow Detachment Beneath Yucca Mountain, Nevada, Thomas M. Brocher and W. Clay Hunter, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p148-150.

Seismotectonic and Seismic Hazard in Southern Bulgaria, Tosho Stoyanov, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p175-176

Geological surveys

Deep Geological Disposal Programs in Preparation and Under Development, D. P. Khrushchov, (High Level Ra-dioactive Waste Management, Technical Program Committee, 1996), p19-21.

Evaluation of Geological Formations of West Ukraine from the Standpoint of Raw Disposal, Olga V. Shestopalova, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p79-80.

Geoenvironmental Evaluation of Geological Formations of Lithuania for Radioactive Waste Disposal, Valentinas Kadūnas and Jurgis Valūnas, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p83-85.

(1990), pos-os.
Geological and Geophysical Studies of Sites in the Ukrainian Shield Rock Series Suitable for Construction of Underground Laboratories, L. S. Galetsky, D. P. Khrushchov and A. P. Volik, (High Level Radioactive Waste Management, Technical Program Committee, 1996), pp. 1967. p81-82

New USGS Seismic Hazard Maps for the United States, A. Frankel, C. Mueller, D. Perkins, T. Barnhard, E. Leyen-decker, E. Safak, S. Hanson, N. Dickman and M. Hop-per, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p173-174.

The Research of the Relationship Between Earthquakes and the 30 Years of Intensive Geological Surveys in Xin tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p388.

1997), D300.
Results of Multiple High-Resolution Geophysical Surveys at Yucca Mountain, E. Majer, M. Feighner, L. Johnson, K. Lee, T. Daley, E. Karageorgi, P. Parker, T. Smith, K. Williams, A. Romero, T. McEvilly, D. Ponce and V. Langenheim, (High Level Radioactive Waste Management). ment, Technical Program Committee, 1996), p151-154.

Seismic Reflection Evidence Against a Shallow Detach ment Beneath Yucca Mountain, Nevada, Thomas M. Brocher and W. Clay Hunter, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p148-150.

Ukrainian Program of Radioactive Waste Disposal in Geo-logical Formations, Dmitri P. Khrushchov, Michail A. Pavlovsky and Valeri M. Starodoumov, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p25-26.

Achieving a Reasonable Level of Accuracy in Site Charac-terization in the Presence of Geologic Uncertainty, Lynn Yuhr, Richard C. Benson and Devraj Sharma, (Uncer-tainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p195-209.

Son, ed. and Mary J. S. Noth, ed., 1950, p. 1950.

Appalachian Piedmont Regolith: Relations of Saprolite and Residual Soils to Rock-Type, Milan J. Pavich, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p1-11.

Assessing the Local Geologic Component of the Earth-quake Hazard in the Portland Metropolitan Area, Mat-thew A. Mabey and Ian P. Madin, (Natural Disaster Re-duction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p177-178.

Combining Geophysical and Well Data for Identifying Best Well Locations, Geza Pesti, William E. Kelly, Istvan Bo gardi and Robert J. Kalinski, WR Mar./Apr. 96, p97-104.

Development of a Multivariate Vulnerability Indicator, Wilbert O. Thomas, Jr., Betty Bonn and Albert V. Romano, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p303-304.

Earthquake Hazard Assessment of Iran, Behrooz Tavakoli and Mohsen Ghafory Ashtiany, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p301-302.

Embankment Dams in the Piedmont/Blue Ridge Province, Chuck Wilson and Ray Martin, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p27-36.

Geologic Uncertainties in Tunneling, Herbert H. Einstein, Vijaya B. Halabe, Jean-Paul Dudt and François Descoeudres, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p239-253

Geostatistical Assessment of Spatial Variability in Piezocone Tests, Yasser A. Hegazy, Mayne Paul W. and Shahrokh Rouhani, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth,

ed., 1996), p254-268.

Incorporating Uncertainty, Objective, and Subjective Data in Geologic Site Characterization, Patrick G. Kinnicutt and Herbert H. Einstein, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p104-118.

Integrated Planning Decision Support System (IPDS), Mario Mejia-Navarro and Luis A. García, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), pl 89-190.

Integrated Planning Decision Support System (IPDS) Application: Glenwood Springs, Colorado, Mario Mejfa-Navarro and Luis A. García, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p386-387.

1996 ANNUAL INDEX

Operational Satellite Remote Sensing for Mineral Exploration, Charles Sabine, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Overcoming Soil Uncertainty in Prediction of Construction and Industrial Vibrations, Mark R. Svinkin, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1178-1194.

Performance Assessment Modeling of the Proposed Gent-ing Island Repository Facility, Yudi U. Imardjoko, Dan-iel B. Bullen and Sofyan Yatim, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p172-175.

Probabilistic Simulation of Geologic Waste Disposal Faciliobadinistic Simulation of Georgia: waste Disposal Facilities Using the Repository Integration Program (RIP), Ian Miller and Rick Kossik, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p944-964.

Problem and Technical Solutions: The Seven Oaks Dam, Physical Elements of the Seven Oaks Dam Feature, Robert E. Koplin, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2177-2184.

Significance of Geologic Features on the Contaminant Mi-gration from Landfill Sites, Rao Nivargikar and Thomas Voss, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p988-993.

Uncertainty in the Geologic Environment: from Theory to Practice, 2 vols., Geotechnical Special Publication No. 58, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996, 0-7844-0188-8, 1460pp.

and Mary J. S. Kottl, ed., 1996, 0-7844-0188-8, 1400pp. Uncertainty in the Geologic Setting and Its Impact on Site Characterization, Richard C. Benson, Lynn Yuhr and Devraj Sharma, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p91-103.

Use of a Technical Clearinghouse during Emergencies, Carl E. Mortensen, Richard K. Eisner, James F. Davis and Michael S. Reichle, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p309-310.

The Use of Direct Push Technologies in Expedited Site Characterization, Greg A. Stenback, Bruce H. Kjartanson, Al Bevolo and David Wonder, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p180-194.

Use of Geologic Information in Site Characterization, Tien H. Wu, Mohamed A. Abdel-Latif, Michael A. Nuhfer and B. Brandon Curry, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth,

ed., 1996), p76-90.

Whither Nuclear Waste Disposal—A 50th Anniversary View, William W.-L. Lee, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1592-1596.

Geometric nonlinearity

Buckling Analysis of Elastic Space Rods under Torsional Moment, Yoshiaki Goto, Xiao-Song Li and Toshihiro Kasugai, EM Sept. 96, p826-833.

Large Deformation Analysis of Inelastic Space Truss Struc-tures, George E. Blandford, ST Apr. 96, p407-415. Stability Analysis of Axisymmetric Thin Shells, Ashutosh Bagchi and V. Paramasivam, EM Mar. 96, p278-281.

Alluvial Channel Geometry: Theory and Applications, Pierre Y. Julien and Jayarnumi Wargadalam, HY Apr. 95, p312-325.

- Evaluating the Variability of Engineering Properties of Soil Deposits Using Fractals, Luis E. Vallejo, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p353-367.
- Many J. S. Rom, ed. P. P. Finite Actuator VGT Manipulator Shape Control Paradigm, William C. Farrow, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p86-92.
- Geometric Calibration of CCD Camera Using Planar Object, Mohammed Taleb Obaidat and Kam W. Wong, SU Aug. 96, p97-113.
- Geometric Design of Compound Horizontal Curves, B. K. Roy, TE July/Aug. 94, p674-683.
- Geometry of Sand Ripples due to Combined Wave-Current Flows, Hitoshi Tanaka and Van To Dang, WW Nov./Dec. 96, p298-300.
- Impact of Freeway Geometric and Incident Characteristics on Incident Detection, H. M. Al-Deek, S. S. Ishak and A. A. Khan, TE Nov/Dec. 96, p440-446.
- Membrane Analogy for Saint-Venant Torsion: New Results, S. M. Heinrich, EM Nov. 96, p1110-1112.
- Negative Binomial Analysis of Intersection-Accident Frequencies, Mark Poch and Fred Mannering, TE Mar./Apr. 96, p105-113.
- On Concept of Lateral Change of Acceleration, Orhan Baykal, SU Aug. 96, p132-141.
- Optimal Geometric Shape of a Surface Aeration Tank, Achanta Ramakrishna Rao and U.S Laxmi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p800-805.
- Simple Formula for Eccentric Bolted Connection Design, Thomas W. Hartmann and Janelle K. Rohrbaugh, SC Feb. 96, p40-46.
- Sprinkler Performance as Function of Nozzle Geometrical Parameters, Jiusheng Li, IR July/Aug. 96, p244-247.
- Stochastic Modelling of River Geometry, J. Dalsgaard Sørensen and K. Schaarup-Jensen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p898-901.
- Strongly Nonlinear Stochastic Response of a System with Random Initial Imperfections, Jiff Náprstek, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p740-743.
- Surface Profiling System for Measurement of Engineering Structures, Xiaoli Ding, Richard Coleman and J. Michael Rotter, SU Feb. 96, p3-13.

Geomorphology

- Some Thoughts on Thermoporoelastic Coupling, M. Bai, Y. Abousleiman and J.-C. Roegiers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p48-51.
- Use of Geomorphic Data for Assessing Stream Stability at Bridge Structures, Jonathan Fuller and Steven R. Walker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3294-3299.
- Utilizing Geomorphic Analogs for Design of Natural Stream Channels, Scott Gillilan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2799-2804.

Geophysical surveys

- The Application of Time Domain Electromagnetics to a Regional Groundwater Investigation in Western Washington, Rory Retzlaff and Robert H. Anderson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed. 11996), p.27-41.
- Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Geotechnical Special Publication No. 62, Paul Michaels, ed. and Richard Woods, ed., 1996, 0-7844-0208-6, 128pp.
- Delineating Subsurface Contamination Using Geostatistical and Non-Intrusive Geophysical Methodologies, Sandra Bowling, Wayne Woldt and Dennis Schulte, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2230-2235.

- Geological and Geophysical Studies of Sites in the Ukrainian Shield Rock Series Suitable for Construction of Underground Laboratories, L. S. Galetsky, D. P. Khrushchov and A. P. Volik, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p81-82.
- Geophysical Characterization of Florida Limestone—An Investigative Case History, D. S. Saxena, R. M. Dickinson and A. Saxena, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p73-85.
- Geophysical Investigation of Karst Collapse Features for a Proposed Waste Rock Stockpile Irian Jaya, Indonesia, Philip H. Duoos and Rowland B. Cromwell, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p86-100.
- Ground and Airborne Magnetic and Electromagnetic Surveys at a Hazardous Waste Site, Jonathan E. Nyquist, Les P. Beard and Don Johnson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), pi-13
- Inference of Dynamic Shear Modulus from Lotung Downhole Data, C.-Y. Chang, Chin Man Mok and H.-T. Tang, GT Aug. 96, p657-665.
- Location of a Lunar Base: A Site Selection Strategy, Lawrence A. Taylor and Dong-Hwa S. Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p741-755.
- Magnetic Investigation of a Simulated Hazardous Waste Site, Susan E. Burns and Kenneth E. Lemons, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p813-825.
- Son, ed. and wary J. S. Koth, ed., 1990), p813-823.
 A Marine Geophysical Investigation to Determine the Cause for Failure of the Yaquina Bay Jetty, Newport, Oregon, Richard E. Sylwester, Jon L. Dasler and Terry C. Sullivan, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p42-55.
- Optimum Smoothing Filter for Geophysical Tomography by the Extended Bayesian Method, Yusuke Honjo, Toshiaki Yamaue and Nobuaki Kudo, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p942-945.
- and Mircea D. Origona, ed., 1990, p. 22-22.

 Results of Multiple High-Resolution Geophysical Surveys at Yucca Mountain, E. Majer, M. Feighner, L. Johnson, K. Lee, T. Daley, E. Karageorgi, P. Parker, T. Smith, K. Williams, A. Romero, T. McEvilly, D. Ponce and V. Langenheim, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p151-154.
- Use of Geophysics to Aid in Mapping Basalts Relevant to Ground Water Flow and a Landslide Hazard at Hagerman Fossil Beds National Monument, P. Michaels, L. Growney and P. Donaldson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p14-26.

Georgia

- Anatomy of a Wetland, Jim Renner, CE Jan. 96, p58-60.
- Flooding in Southeastern United States From Tropical Storm Alberto, July 1994, T. C. Stamey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p245-246.
- Resolution of the ACT-ACF Water dispute with a Federal-State Partnership, N. D. McClure, IV, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3417-3422.
- Treatment of Wet Weather Discharges in Columbus, Georgia, Stephen P. Hides, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p582-587.

Geosynthetics

Analysis and Design of Liner System for a Large Ash Residual Landfill, Yun Zhou, Luis E. Vallejo and Daniel C. Hsu, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p114-129.

Bearing Capacity of Hydrated Geosynthetic Clay Liners, Robert M. Koerner and Dhani Narejo, GT Jan. 95, p82-

Collapse of Geogrid-Reinforced Retaining Structure, Ger-ald A. Leonards, J. David Frost and Jonathan D. Bray, CF Nov. 94, p274-292.

Creep Deformation and Stress Relaxation in Preloaded/ Prestressed Geosynthetic-Reinforced Soil Retaining Walls, Fumio Tatsuoka, Taro Uchimura, Masaru Tateyama and Katsumi Muramoto, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p258-272.

Detecting Leaks Electronically (Available only in Geo/ Environmental Engineering Special Issue), Rita Robison,

CE Nov. 96, p16A.

CE Nov. 96, p16A. Field Evaluation of GEOSYNTHETICALLY STABI-Field Evaluation of GEOSYNTHETICALLY STABI-LIZED PAVEMENTS, Imad L. Al-Qadi, Thomas L. Brandon and Salman A. Bhutta, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p328-337. Geosynthetic Tubes for Confining Pressurized Slurry: Some Design Aspects, Dov Lestschinisky, Ora Leshchinisky, Hoe I. Ling and Paul A. Gilbert, GT Aug. 96, p682-

690

Geotextile-Reinforced Surface for Rapid Construction of Low-Volume Pavements, Reed B. Freeman and Randy C. Ahlrich, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p298-307.

Hydraulic Conductivity of Desiccated Geosynthetic Clay Liners, B. Tom Boardman and David E. Daniel, GT Mar.

96, p204-208.

New on the Web, CE June 96, p8.

Ohio Transportation Goes to the Mat to Protect a Creek, CE Mar. 96, p82.

Practical Methods for Managing Uncertainties for Geosynthetic Clay Liners, David E. Daniel and Robert B. Gilthetic Clay Effects, David E. Daniel and Robert B. Oll-bert, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1331-1346.

Protecting Dredged Material Containment Levees Along the Houston Ship Channel, Deron N. Austin and Marc S. Theisen, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3121-3128.

1990, p3121-3120.
Research Program for Reducing Frost Heave with Geosynthetic Capillary Barriers, Karen S. Henry and Earl Ellis, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p266-277.

http://kobert.F. Carison, etc., 1996), p.266-277.
Shear Strength of Reinforced Geosynthetic Clay Liner, Robert B. Gilbert, Federico Fernandez and David W. Horsfield, GT Apr. 96, p.259-266.
Use of Geosynthetics in Road and Airfield Construction in Cold Regions, Thomas C. Kinney, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, etc. of Millson H. Hess. ed. 1000-277-288. ed. and Wilbur H. Haas, ed., 1996), p271-288.

Geotechnical engineering

Achieving a Reasonable Level of Accuracy in Site Charac-terization in the Presence of Geologic Uncertainty, Lynn Yuhr, Richard C. Benson and Devraj Sharma, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p195-209.

Addressing Uncertainty in Rock Properties through Geo-statistical Simulation, Sean A. McKenna, Marc V. Cromer, Christopher A. Rautman and William P. Zelinski. (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p297-311.

Analyzing Spatial Variability of In Situ Soil Properties, Don J. DeGroot, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p210-238.

Application of Numerical Limit Analyses for Shallow Foundations on Clay, Andrew J. Whittle and Boonchai Ukritchon, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p132-135.

ASCE Geo-Institute Starts to Take Shape, NE Feb. 96, p2.

ASCE's Board Gives Green Light on Institutes, Virginia Fairweather, NE June 96, p1,3. ASCE's Strategic Plan: Almost Everything You Need to

Know about ASCE's Proposed 'Institutes' and 'Academ-

ies', NE Mar. 96, p3-4. ASCE's Two New Institutes Are Open for Business, NE

Nov. 96, p1,4. ASFE Publishes Financial Performance Survey, ME July/

Aug. 96, p6.

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Biopolymers for Geotechnical Applications, Teh Fu Yen, Iris C. Y. Yang, Shiva Karimi and Geoffrey R. Mattin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1602-1607.

p1002-1007.

Building a Landfill on Mud(Available only in Geo/
Environmental Special Issue), Michael J. Byle and Anne
M. Germain, CE July 96, p12A-16A.

Dealing with Uncertain and Highly Variable Geotechnical
Conditions Beneath the Inco Smelter in Copper Cliff, Cultinuous Belauli the like Silheli in Copple Chin, Karlis J. Jansons, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1383-1401.

Dempster-Shafer Approach to Soil Properties, David Rees Gillette, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1254-

Deterministic and Probabilistic Analyses of Preload Design at a Hydraulic Fill Site, S. Thevanayagam, E. Kavazan-jian, Jr., A. Jacob and S. Nesarajah, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1417-1431.

S. Koth, ed., 1990, p1417-1431.
Engineering Judgment in the Evolution from Deterministic to Reliability-Based Foundation Design, Fred H. Kulhawy and Kok Kwang Phoon, (Uncertainty in Medical Central Photosophy in Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J.

S. Roth, ed., 1996), p29-48.

Evaluating the Variability of Engineering Properties of Soil
Deposits Using Fractals, Luis E. Vallejo, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p353-367. Firm Serves As a Model for its Piers, CE Oct. 96, p97.

FRP Applications in Geotechnical Engineering, J. A. R. Ortigao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p535-544.

Further Application of Dynamic Poroelasticity to Geotechnical Engineering Via BEM, Jianming Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p479-482.
Gene McMaster, Seattle Consultant, Was ASCE National

Officer, NE Apr. 96, p7.
Geostatistical Assessment of Spatial Variability in Piezocone Tests, Yasser A. Hegazy, Mayne Paul W. and
Shahrokh Rouhani, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth,

ed., 1996), p254-268.

A Geostatistically-Based Method to Assess Potential Haz-ardous Waste Sites Using Hard and Soft Data, Morris M. Dirnberger and Richard W. Stephenson, (Uncertainty in on the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p826-847.
Geotechnical Instrumentation for Boston's Central Artery/

Tunnel Project: An Overview, John Dunnicliff, Charles Daugherty and Thom Neff, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p727-733.

Geotextiles Cut Costs for Temporary Retaining Wall, CE

Incorporating Uncertainty, Objective, and Subjective Data in Geologic Site Characterization, Patrick G. Kinnicutt and Herbert H. Einstein, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p104-118.

John Scoville, Killed in Croatia Plane Crash, Headed Harza

Engineering in Chicago, NE May 96, p15.

- Just One More Boring, and We'll Know for Sure! Sam S. C. Liao, David L. Druss, Thom L. Neff and Brian R. Brenner, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996),
- Minimizing Uncertainties in Geotechnical Investigations, Yakov M. Reznik, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p149-166.
- Monte Carlo Simulation to Evaluate Slope Stability, Doug-las Scott Chandler, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p474-493.
- New Version of Manual 45 Ready, CE Dec. 96, p70.
- On Quantifying Inherent Soil Variability, Kok Kwang Phoon and Fred H. Kulhawy, (Uncertainty in the Geo-logic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p326-340.
- Organizing and Evaluating Uncertainty in Geotechnical En-gineering, Robert V. Whitman, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1-28.
- A Practical Approach to Uncertainty Modeling in Geotechnical Engineering, C. Hsein Juang and David J. Elton, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1269-1283.
- Practical Geoenvironmental Visualization, G. B. Baecher, J. A. Zarge and J. Shapiro, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p56-62
- Practical Probabilistic Approach Using Spreadsheet, B. K. Low, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1284-
- Probabilistic Slope Stability in Theory and Practice, Thomas F. Wolff, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996),
- Probabilistic Solutions to Geotechnical Problems, Nagaratnam Sivakugan and Ali Al-Harthy, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p938-941.
- The Reliability of Soil Classification Derived from Cone Penetration Test, Zhongjie Zhang and Mehmet T. Tumay, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p383-
- Reliability-Based Exit Gradient Design of Water Retain Structures, D. V. Griffiths, Gordon A. Fenton and G. M. Paice, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p518-
- Risk in Geotechnical Engineering for Embankment Dams, Gil M. Lawton and Michael P. Forrest, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p550-562.
- Seismic Response of a Block on an Inclined Plane to Verti-cal and Horizontal Excitation Acting Simultaneously, Liping Yan, Neven Matasovic and Edward Kavazanjian, Jr., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1110-1113.
- Seven Guidelines for Managing Uncertainty in Geoenviron-mental Design, Robert B. Gilbert and Travis C. McGrath, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p774-796.

- Stochastic Finite Element Method in Geomechanics, Gabriel Auvinet, Amine Bouayed, Sandra Orlandi and Arturo López, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1239-
- Surface Cleanliness Effects on Lunar Regolith Shear Strength, Howard A. Perko, John D. Nelson and Willy Z.
- Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p689-698. Uncertainties in Characterising Soil Properties, Suzanne Lacasse and Farrokh Nadim, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.
- Roth, ed., 1996), p49-75.
 Uncertainty in the Geologic Environment: from Theory to Practice, 2 vols., Geotechnical Special Publication No. 58, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996, 0-7844-0188-8, 1460pp.
- and mary J. S. Noth, ed., 1990, 0-7844-018-8, 1460pp.
 Uncertainty in the Geologic Setting and Its Impact on Site
 Characterization, Richard C. Benson, Lynn Yuhr and
 Devraj Sharma, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p91-103.
- Upheavals in Soil Firms, CE Sept. 96, p11. Use of Geologic Information in Site Characterization, Tien H. Wu, Mohamed A. Abdel-Latif, Michael A. Nuhfer and B. Brandon Curry, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth,
- ed., 1996), p76-90.
 "Acts of God": The Symbolic and Technical Significance of Foundation Failures, Jane Morley, CF Feb. 96, p23-
- Geotechnical investigations
- Flexible Boundary for Discrete Element Simulation of Granular Assemblies, Runing Zhang and Stein Sture, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p723-726.
- Micromechanical Simulation of Geotechnical Problems using Massively Parallel Supercomputers, David W. Washington and Jay N. Meegoda, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p717-721.
- Geotechnical models
- Geotechnical models

 Approach, Methods and Results of an Individual Elicitation for the Volcanism Expert Judgment Panel, Bruce M. Crowe, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p56-58. Modeling the Behavior of LNAPLs Under Hydraulic Flushing, S. Ratnam, P. J. Culligan-Hensley and J. T. Germaine, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Favironment: Assessment and Remediation, Lakshing
- face Environment: Assessment and Remediation, Laksh-mi N. Reddi, ed., 1996), p595-606. Modelling of a Heater Experiment in a Saturated Granite with Thermoporoelastic Source Singularities, Emmanuel
- with Intermoporoelastic Source Singularities, Emmanuel Detournay and Ilya Berchenko, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p44-47.

 Modelling of Thermal-Hydrological-Mechanical Processes in a Discrete Joint, T. S. Nguyen, A. P. S. Selvadurai and P. Flavelle, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p60-63.
- Geotextiles
- Arching in Piled Embankments, B. K. Low, S. K. Tang and V. Choa, GT Nov. 94, p1917-1938.
- v. Choa, GT Nov. 94, p1917-1938.

 Bearing Capacity of Rectangular Footings on Geogrid-Reinforced Sand, Temel Yetimoglu, Jonathan T. H. Wu and Ahmet Saglamer, GT Dec. 94, p2083-2099.

 Centrifuge Modeling of Geotextile-Reinforced Cohesive Soil Retaining Walls, A. Porbaha and D. J. Goodings, GT Oct. 96, p840-848.
- GT Oct. 96, p840-848.
 Earth Side on Geomembrane, A. C. Stamatopoulos and P.
 C. Kotzias, GT May 96, p408-411.
 Engineered Contaminated Soils and Interaction of Soil
 Geomembranes, Geotechnical Special Publication No.
 59, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N.
 Reddi, ed., 1996, 0-7844-0213-2, 144pp.
 Field Observations on Stabilization of Unpaved Roads with
 Geosynthetics, R. J. Fannin and O. Sieurdsson, GT July
- Geosynthetics, R. J. Fannin and O. Sigurdsson, GT July 96, p544-553.

Full-Scale Test Studies on Prevention of Frost Damage for Retaining Wall Reinforced with Geotextile, Lun Chen, Guangxin Li and Wenfeng Huang. (Cold Regions Engi-neering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p724-735.

Son, Ca., 1990, p. 1249.3.
Geotexule-Reinforced Surface for Rapid Construction of Low-Volume Pavements, Reed B. Freeman and Randy C. Ahlrich, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p.298-307.

Geotextiles Cut Costs for Temporary Retaining Wall, CE July 96, p84. HDPE Geomembrane/Geotextile Interface Shear Strength,

Timothy D. Stark, Thomas A. Williamson and Hisham T. Eid, GT Mar. 96, p197-203.

Interaction Between Geomembranes and Granular Materials, Luis E. Valleio and Yun Zhou, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi,

ed., 1996), p82-96.

ed., 1990), p82-90.

Research Program for Reducing Frost Heave with Geosynthetic Capillary Barriers, Karen S. Henry and Earl Ellis, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p266-277.

Sealing Leaks in Geomembrane Liners Using Electrophore-sis, Glenn T. Darilek, M. Yavuz Corapcioglu and Albert

T. Yeung, EE June 96, p540-544.

Slope Stabilization Using Old Rubber Tires and Geotex-tiles, Paul S. H. Poh and Bengt B. Broms, CF Feb. 95, p76-79

Transport of Aqueous Organic Compounds in Thermoplas-tic Geomembranes. II: Mass Flux Estimates and Practi-cal Implications, Jae K. Park, Joni P. Sakti and John A. Hoopes, EE Sept. 96, p807-813.

Transport of Organic Compounds in Thermoplastic Geomembranes. I: Mathematical Model, Jae K. Park, Joni P. Sakti and John A. Hoopes, EE Sept. 96, p800-806

Geothermal energy Geotherman energy
Preliminary Studies of a Karst Warm Spring in Mt.
Kräuterin, Austria, Dachang Zhang, Rudolf Pavuza,
Hans Fischer and Karl Mais, (North American Water and
Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1279-1284.

Germany ASCE Group Is Off to Berlin This Month, CE June 96, p72-73.

History and Heritage of German Coastal Engineering, Hanz D. Niemeyer, Hartmut Eiben and Hans Rohde, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p169-213.

ed., 1990), p109-213.
The Last Two Extreme Floods in Germany - Analyses and
Consequences, K. Wilke, (North American Water and
Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1716.
The Rhine Flood Events in December 1993/January 1994

and in January 1995, H. Engel, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p243-244.

Numerical Morphodynamic Modelling of Keta Lagoon, Tim J. Chesher, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p927-938.

Giardiasis

Electrophoretic Mobility of Cryptosporidium Oocysts and Giardia Cysts, Jerry E. Ongerth and Julie Proctor Pecoraro, EE Mar. 96, p228-231.

Behavior of RC Bridge Decks with Flexible Girders, L. Cao, J. H. Allen, P. B. Shing and D. Woodham, ST Jan. 96, p11-19.

Connection of a Steel Cap Girder to a Concrete Pier, Joseph M. Ales, Jr. and Joseph A. Yura, (Building an International Community of Structural Engineers, S. K. Ghos ed. and Jamshid Mohammadi, ed., 1996), p475-482.

Cross-Frame Spacing and Parametric Effects in Horizontally Curved I-Girder Bridges, James S. Davidson, Mark A. Keller and Chai H. Yoo, ST Sept. 96, p1089-1096.

Design Considerations for Post-Tensioned Integral Pier Caps, Sami W. Tabsh. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p444-451.

Detecting Damage in Highway Bridges from Vehicle Induced Girder Strains, Leon L-Y Lai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1122-1125.

Dynamic Characteristics of Post-Tensioned Girders with Web Openings, Nabil F. Grace and Brian Ross, ST June 96, p643-650.

Economic Preliminary Design of Bridges with Prestressed I-Girders, Sami M. Fereig, BE Feb. 96, p18-25. Editor's Note, David Darwin, ST June 96, p579-580.

Editor's Note, David Darwin, ST Aug. 96, p843-844.
Fabrication and Testing of High Performance Steel I-Girders Research in Progress, William Wright, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1571-1578

Failure of a Stiffened Seat Bracket Connection, David L. Weaver, Jason S. Yates and Randall W. Poston, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p468-474.

314

Laying Sequence Planning for Continuous Girder Reinforced Concrete Floor System by Genetic Algorithms, Y. Natsuaki, S. Mukandai, K. Yasuda and H. Furuta, (Analsis and Computation, Franklin Y. Cheng, ed., 1996),

p79-90.
Local Buckling of Curved I-Girder Flanges, James S. Davidson and Chai H. Yoo, ST Aug. 96, p936-947.
Rehabilitation of Steel Beams Using Composite Materials, William Edberg, Dennis Mertz and John Gillespie, Jr., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p502-508.
Revised Rule for Concept of Strong-Column Weak-Girder Design, Han-Seon Lee, ST Apr. 96, p359-364.
Roosevelb Bridge Spans Florida River, CE Jan. 96, p10.
Stress Limits in Prestressed Concrete Bridge Girders, Hassen H. El-Hor and Andrezie S. Nowak, (Building an In-

san H., El-Hor and Andrzej S. Nowak, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p460-

Web Buckle at I-40 Bridge Test, John Minor and Clinton

Woodward, BE Feb. 96, p34-36. Yield-Interaction Relationships for Curved I-Girders, Charles G. Schilling, BE Feb. 96, p26-33.

Draining Himalayan Glacial Lakes Before They Burst, Richard Kattelmann and Teiji Watanabe, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1978.

Water, Chemensya Banana, ed., 1920, 1978.
Glacier-Generated Floods and Debris Flows, Andrew G. Fountain and Joseph S. Walder, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2449.

Reducing Glacial-Lake Outburst Hazards in the Khumbu Himal, Richard Kattelmann and Teiji Watanabe, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p258-259.

Glacial till

Constructional and Environmental Aspects of Structural Materials at Antarctica and Indian Himalayas, R. C.

Materials at Antarctica and Indian Himalayas, R. C. Pathak, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p968-977.
Evaluation of Long-Term Time-Rate Parameters of Subglacial Till, C. L. Ho, J. C. Vela, P. U. Clark and J. W. Jenson, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, dec. 1006-1120-122. ed., 1996), p122-136.

Roth, ed., 1996), p104-118.

Alkali-Silica Reaction in Concrete with Waste Glass as Aggregate, Christian Meyer, Stephen Baxter and Weihua Jin, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1388-1397. Flash-Setting Lightweight Material—A First Step to Float-ing Island Construction, Sumio Horiuchi, Noburu Uchiyama, Takuro Odawara and Kazuya Yasuhara, MT Aug. 96, p138-146.

Jobert Disposing of Non-Recyclable Glass, Venkata S. Panchakarla and Millard W. Hall, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p509-518.
 Making Windows Safer, CE Dec. 96, p8.
 Performance of Laminated Glass Units under Simulated

Performance of Laminated Glass Units under Simulated Windborne Debris Impacts, Richard A. Behr and Paul A. Kremer, AE Sept. 96, p95-99.

Progress of the ASTM Standard on Fenestration Relative to Windstorms and its Relationship to Building Codes, David B. Hattis, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p119-120. Richard Elstner, 72, Was Failures Expert, CE Nov. 96,

p75-76.

Seismic Performance of Architectural Glazing Systems, Richard A. Behr, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p115-

116.

Surface Reactivity of High Level Waste Matrices Charac-terized by Radiometric Emanation Method, Vladimír Balek, Zdeněk Málek and A. Clearfield, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p474-476.

Volcanic Class — Oxygen Ore on the Moon, Carlton C. Allen, John M. Woodell and David S. McKay, (Engi-neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p756-761.

Behavior of Fiber Reinforced Polymer Concrete, C. Vipu-lanandan and S. K. Mantrala, (Materials for the New Mil-

Isanandan and S. K. Mantraia, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p. 1160-1169.
A Computer Controlled Filament Winding Technique for Manufacturing Cement Based Cross-Ply Laminates, Mobasher and A. Pivacek, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p. 1347-1356.

Concrete and Sand Confined with Composite Tubes, Srinivasa L. lyer, A. Kortikere and A. Khubchnadani, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1308-1319.

Design Recommendations for Bond of GFRP Rebars to Concrete, M. R. Ehsani, H. Saadatmanesh and S. Tao, ST Mar. 96, p247-254.

Development of Tension Grips for GFRP Rebars, Hota V. S. GangaRao and Derek Altizer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p394-399.

Evaluation of Bond Characteristics of Steel and Glass-Fiber Reinforcing Bars, James R. Lundy and Damian I. Ka-chlakev, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p638-647. Potential of Waste Glass for Concrete Masonry Blocks,

Christian Meyer, Stephen Baxter and Weihua Jin, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p666-673

Sensitivity Studies of the Interfacial Shear Strength in Composite Materials Using the Microbond Test, W. M. Cross, L. Kjerengtroen, R. M. Winter, W. Jiang, W. Fan

Cross, L. Kjerengtroen, R. M. Winter, W. Jiang, W. Fan and J. J. Kellar, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p356-365.
Stress-Laminated Timber Decks Using Glass FRP Tendons, H. J. Dagher, B. Abdel-Magid, S. Iyer and W. Lu, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1458-1468.
A Unified Limit State Approach Using Deformability Factors in Concrete Beams Reinforced with GFRP Bars, P. V. Vijay and H. V. S. GangaRao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p657-665.

Glass reinforced plastics
Design Recommendations for Bond of GFRP Rebars to
Concrete, M. R. Ehsani, H. Saadatmanesh and S. Tao,

ST Mar. 96, p247-254.

Hydrothermal Effects on the Bearing Strength of GFRP Composite Joint, Stephanie Hurd and Robert Yuan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p243-250.

Global positioning

Accelerating Innovation: New Style of Leadership Needed, Les McCraw, ME Sept./Oct. 96, p3-5.

Applications of Space Technology to Aid in Identification of Seismic Hazards, Ronald Blom, Robert Crippen, Andrea Donnellan, Gilles Peltzer and Paul Rosen, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p305-306.

Gator Communicator Design of a Hand Held Digital Data Mapper, John F. Alexander, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1052-1057.

GPS High Accuracy Geodetic Networks in Mexico, Tomás Soler, Gabriel Álvarez-García, Antonio Hernández-Navarro and Richard H. Foote, SU May 96, p80-94.

Karst Water Inventories Using Thermography, C. Warre Campbell, Joseph W. Foster and Mohamed Abd El Latif, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3910-3914.

p.3910-3914. Leveling by GPS Relative Positioning with Carrier Phases, Joz Wu and Shiou-Gwo Lin, SU Nov. 96, p145-157. Satellite Setup Links Russian, U.S. GPS, CE July 96, p8.

Simplified Transformation between NAD27 and NAD83 in Southeastern Wisconsin, Kurt W. Bauer and Earl F. Burkholder, SU Feb. 96, p26-39.

Global warming
Adapting Water Resources of the Canadian Prairies under the impact of Climatic Warming, Thian Yew Gan, (North American Water and Environment Congress & Destruc tive Water, Chenchayya Bathala, ed., 1996), p2163-2168. Climate Change: What the North American Water Engineer

limate Change: What the North American Water Engineer Should Know, Maurice Roos, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1471-1476. evelopment of a Regional Atmospheric-Hydrologic Model for the Study of Climate Change in California, ZhiQiang Chen, M. Levent Kavvas, Liqin Tan and Surai State of Congress & Destructive Water, Chenchayya Bathala, ed. 1996, p1003-1098. Development of ed., 1996), p1093-1098. The Effect of Climatic Change on Hydrologic Variables,

Jason R. Westmacott and Donald H. Burn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1465-1470. Verification of the Bruun Rule for the Estimation of Shore-

line Retreat Caused by Sea-Level Rise, Nobuo Mimura and Hisamichi Nobuoka, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p607-616.

Glues

Dynamic Behavior of Glued Laminated Timber Girder Bridges, Terry J. Wipf, Michael A. Ritter and Douglas L. Wood, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p260-267. Reinforced Glued Laminated Timber, Bruce D. Pooley,

P.E., CE Sept. 96, p50-53.

Learning on the Jagged Edge, Bill Hayden, Jr., ME Jan/ Feb. 96, p23-25. Risk Variability Due to Uniform Soil Remediation Goals, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE July 96, p612-621. Substitute Goals, James C. Porter, ME Jan./Feb. 96, p8-9.

Top 10 Reasons to Love Your Mission Statement, ME Nov./Dec. 96, p11.

Goldberg, John E. (Honorary Member, ASCE) Prominent Educator Goldberg of Purdue Dies at 85, NE Feb. 96, p14.

Golden Gate Bridge Golden Gate Bridge Gets Its Color Back, CE Sept. 96, p12.

Goldsmith, Myron Myron Goldsmith, Structural Engineer, Architect, Dies at 77, CE Oct. 96, p78.

1996 Elections: Get Involved, Casey Dinges, CE Apr. 96, p116. ASCE Joins Ranks of Congressional Fellows, Martin

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A Concept in Networking, Kevin A. Taylor, ME Nov./Dec. 96, p9-10.

Ed Groff: A "Muddy Boots" President, Virginia Fairweather, CE Dec. 96, p66-68.

The Importance of Civil Engineering Leadership in the Government Sector, Marvin H. Hilton, El Apr. 96, p53. Privatization: A Cure for Our Ailing Infrastructure? Charles

R. Rendall, CE Dec. 96, p6. Slim Environmental Outlook, Casey Dinges, CE Aug. 96,

Subcontractor's Pass-Through Claim Forfeited Due to Fraudulent Conduct of Prime Contractor, Michael C. Loulakis and William L. Cregger, CE Nov. 96, p29.

A Surveying Trip Report from George Washington's Diary, Michael P. Johnson and William P. Johnson, Jr., (Civil Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p1-12.

Government agencies

Constructability in Public Sector, G. E. Gibson, Jr., C. I. McGinnis, W. S. Flanigan and J. E. Wood, CO Sept. 96,

Evaluating Efficiency of Rock Blasting Using Data-Envelopment Analysis, James Odeck, TE Jan./Feb. 96, p41-49

Product Champions in Government Agencies, Steve G. Winistorfer, ME Nov./Dec. 96, p54-58.

USAID Efforts in Mitigating Natural Disasters, Tej Mathur and Nathalie Valette-Silver, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p82-83.

Government employees

Eight Government Engineers Honored by ASCE Division. CE Mar. 96, p70-72.

Product Champions in Government Agencies, Steve G. Winistorfer, ME Nov/Dec. 96, p54-58.

Government policies
Application of BOT System for Infrastructure Projects in
China, Liyin Shen, Rowson K. H. Lee and Zhihui Zhang,
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Commentary on MBE and FBE Participation in the Con-struction Industry, Amir Tavakoli, ME July/Aug. 96, p6-

Editorial, Patrick K. Takahashi, EY Dec. 96, p75-77. Further Future Thinking, Dan H. Pletta, P.E., CE Aug. 96,

Human Space Exploration: Justifications and U.S. Space Policy, Arthur M. Hingerty, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p126-132.

Infrastructure Planning and Sustainable Development, David W. Wright, UP Dec. 96, p111-117.

Restaurants and Roadways: Food for Thought, John E.

Abraham, CE Apr. 96, p6. US Space Policy and the Use of Excess US Ballistic Mis-sile Assets, Mike Trial, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p206-213.

Government role

Evaluating Sustainability of Water & Sanitation Projects: Case Studies in Developing Countries, Philip Roark, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3253-3258.

Further Future Thinking, Dan H. Pletta, P.E., CE Aug. 96. p29-30.

Government Actions to Enable Space Business Parks, Brent Sherwood, Charles J. Lauer and Joseph P. Hopkins, Jr., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p186-193.

History of Coastal Engineering in Canada, J. William Kamphuis, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p89-102. Section Lauds Utah Governor, CE Oct. 96, p74,76. Suit Filed Over Alleged ADA Violations, CE Apr. 96, p8.

A System to Improve Water-Related Sustainability Characteristics of International Development Programs/Projects, Larry Quinn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3259-3264. Who Springs for Water? Eric Rasmussen, CE Sept. 96, p65-67.

Grade control structures

Effect of Grade Control Structures on DEC Streams, R. L. Bingner, E. J. Langendoon, L. Li and C. V. Alonso, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p280-285

Features of a Chevron Weir Rock Ramp, R. J. Wittler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Grade Control Structures for Pipeline Crossings in the Arid Southwest, Martin J. Teal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p830-835.

Grade-Control Structures for Salt River Channelization, Dennis L. Richards and Tim Morrison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p606-611.

Quasi Two-Dimensional Hydraulic Analysis of Drop Struc-tures, William C. Taggart, Katherine J. Chase and Peter L. Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p600-605.

Reduction of Sediment Loads in DEC Streams, Chester C. Watson, Tom Pokrefke and Daniel Gessler, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2885-2890.

Rock Riprap for Grade Control, Charles E. Rice, Kerry M. Robinson and Kem C. Kadavy, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p588-593.

Siting Low Profile Grade Control Structures for the Muddy Creek Demonstration Stream Restoration Research Project, R. J. Wittler, D. R. Eby, S. D. Keeney, C. C. Watson and S. R. Abt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p105-110.

Siting of Grade Control Structures, Chester C. Watson, John Smith and David S. Biedenharn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p286-291.

Successful Implementation of Grouted Boulder Grade Control Structures on Drainageways in the Denver Metropol-itan Area, John M. Pflaum, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p836-841.

Gradient

Experimental Measurement of Strain Gradient Effects in Granular Materials, Matthew R. Kuhn, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p881-885.

Gradient Damage and Size Effects, Jan Carmeliet, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p1175-1178.

Reliability-Based Exit Gradient Design of Water Retaining Structures, D. V. Griffiths, Gordon A. Fenton and G. M. Paice, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p518-534

Graduate students

The Elements of Academic Research, Richard H. McCuen, ed., 1996, 0-7844-0171-3, 290pp.

Graduate study

Architectural Engineering Program at University of Miami, David A. Chin and Michael K. Phang, AE June 96, p78-

Business Degrees Three Times That of Engineering Degrees, ME July/Aug. 96, p5.

Certificate Program in Construction Engineering and Management, Amarjit Singh and Harold S. Hamada, El July 96, p114-122.

Dan Pletta, Prominent Engineering Educator, Dies at 92, NE Oct. 96, p6. Engineering Education: Paragon or Paradox? Robert D. Kersten, El Oct. 96, p147-150.

Environmental Hydraulics: New Research Directions for the 21st Century, ASCE Task Committee on Hydraulic Engineering Research Advocacy, HY Apr. 96, p180-183. Ethics in Graduate Education, Gregory D. Reed, El Apr.

96, p53.

International Postgraduate Program of Water Resources Engineering in Asia, Thian Yew Gan, El Jan. 96, p6-11. National Reserach Council Symposium on Major Issues in Engineering Education, Peter G. Hoadley, El Apr. 96,

Part-Time Graduate Education: Obstacles, Conflicts, and Suggestions, Allen P. Davis and Richard H. McCuen, El Apr. 95, p108-113.

Grain size

Changes of Sand Grain Distribution in the Surf Zone, Kazumasa Katoh and Shin-ichi Yanagishima, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p639-650.

Zeidler, ed., 1990), po.59-050.

Channel Restoration of Incising, Mixed Grain Size Streams: Lessons Learned, F. D. Shields, Jr., M. W. Doyle, S. S. Knight and C. M. Cooper, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3363-3368.

Grain-Size Distribution for Smallest Possible Void Ratio, B. Aberg, GT Jan. 96, p74-77.

Posttesting Correction Procedure for Membrane Compli-ance Effects on Pore Pressure, Atilla M. Ansal and Ayfer Erken, GT Jan. 96, p27-38.

Sediment Erosion Rate in the Baltimore Harbor, Jerome P.-Y. Maa, Larry Sanford and Jeffrey P. Halka, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4383-4388. Selection of Sediment Transport Relations: Part II, Ranges

of Dimensionless Numbers, David S. Smith and David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2837-2842.

Void Sizes in Granular Soils, B. Aberg, GT Mar. 96, p236-

Grain size analysis

Acoustic Sediment Flux Measurements from DUCK '94, Karen M. Kohanowich, Timothy P. Stanton and Edward B. Thornton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p739-748.

Grains

Cement Among Grains, Jack Dvorkin, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p869-872.

Irrigation of Grain Sorghum on the Delmarva Peninsula, W. F. Ritter and R. W. Scarborough, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3904-3909.

Analysis and Design of Liner System for a Large Ash Re-sidual Landfill, Yun Zhou, Luis E. Vallejo and Daniel C. Hsu, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Valle-jo, ed. and L. N. Reddi, ed., 1996), p114-129.

Characterization of Granular Material by Low Strain Dy-namic Excitation and ANN, Salome Romero and Sibel Pamukcu, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996).

Computer Modelling for a Discrete Particle System, Kofi B. Acheampong, (Engineering Mechanics, Y. K. Lin and

T. C. Su, 1996), p731-734.

Deformation Patterns in Biaxial Shear of Particulates, Anil Misra and Hongjun Jiang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p568-571.

N. Lill and T. C. 3tt, 1990, page 2017.

Dynamic Optimal Groundwater Remediation by Granular Activated Carbon, Teresa B. Culver and Gary W. Shenk, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p123-128.

Effect of Internal Length on the Vibration of Granular Solids, Ching S. Chang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p873-876.

Experimental and Numerical Studies of Shear Layers in Granular Shear Cell, Jan-Olov Aidanpää, Hayley H. Shen and Ram B. Gupta, EM Mar. 96, p187-196.

Experimental Measurement of Strain Gradient Effects in Granular Materials, Matthew R. Kuhn, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p881-885.

Failure of Fiber-Reinforced Granular Soils, Radoslaw L. Michalowski and Aigen Zhao, GT Mar. 96, p226-234.

Failure of Unidirectionally Reinforced Composites with Frictional Matrix, Radoslaw L. Michalowski and Aigen Zhao, EM Nov. 96, p1086-1092.

Flexible Boundary for Discrete Element Simulation of Granular Assemblies, Runing Zhang and Stein Sture, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Grain-Size Distribution for Smallest Possible Void Ratio, B. Aberg, GT Jan. 96, p74-77.

Granular Flow Based on Non-Newtonian Fluid Mechanics, Sergio A. Elaskar, Luis A. Godoy and Alejandro T. Brewer, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p394-397.

Interaction Between Geomembranes and Granular Materials, Luis E. Vallejo and Yun Zhou, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p82-96.

Issues on Geomechanics, Nicholas C. Costes and Stein Sture, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p516-520.

Jamming of the Flow of Granular Materials, Yi Sun and Oleg Vinogradov, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p265-268.

Micromechanical Modelling for Granular Materials, Ching S. Chang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p551-554.

MRI Studies of Direct Shear Tests on Round Particles, Tang-Tat Ng, Marlene Kelley and James Sampson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p572-575.

One-Dimensional Compression of Sands at High Pressures, Jerry A. Yamamuro, Paul A. Bopp and Poul V. Lade, GT Feb. 96, p147-154.

Refined Finite Element Analysis of Geomaterials, Boris Jeremić and Stein Sture, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p555-558.

Edit anu 1. C. Su, 1990), p329-3-58.

Segregation in Hopper Flows, Masami Nakagawa, Xiaoshan Lin and G. G. W. Mustoe, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p386-389.

Significance of Particle Crushing in Granular Materials, Poul V. Lade, Jerry A. Yamamuro and Paul A. Bopp, GT Apr. 96, p309-316.

Uniformity Evaluation of Cohesionless Specimens Using Digital Image Analysis, Chun-Yi Kuo and J. David Frost, GT May 96, p390-396. Void Sizes in Granular Soils, B. Aberg, GT Mar. 96, p236-

239

Granular media

Asymptotic Analysis of Intraparticle Diffusion in GAC

Asymptotic Analysis of Intraparticle Diffusion in GAC Batch Reactors, D. A. Lyn, EE Nov. 96, p1013-1022.
Cement Among Grains, Jack Dvorkin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p869-872.
Centrifugal, Gravity and Side-wall Effects in Annular Shear Cells, Cliff K. K. Lun, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p104-107.
Constitutive Behavior of Granular Media Using a Lattice Type Model, S. Ramakrishnan, Muniram Budhu and George Frantziskonis, (Envineering Mechanics, Y. K. George Frantziskonis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p713-716. Editor's Note, Thomas L. Theis, EE June 96, p452.

Effects of Media Characteristics on Performance of Upflow Anaerobic Packed-Bed Reactors, Joo-Hwa Tay, Kuan-Yeow Show and S. Jeyaseelan, EE June 96, p469-476. Elastic Properties of Soils, Pierre-Yves Hicher, GT Aug.

96, p641-648.

Granular-Flow Rheology: Role of Shear-Rate Number in Transition Regime, Cheng-lung Chen and Chi-Hai Ling, EM May 96, p469-480. Ground-Water Remediation with Granular Collection Sys-

tem, Richard W. Frieseke and Erik R. Christensen, EE June 96, p546-549.

In Situ Groundwater Treatment by Granular Zero-Valent Iron Design, Construction and Operation of an In Situ Treatment Wall, Frank S. Szerdy, John D. Gallinatti, Scott D. Warner, Carol L. Yamane, Deborah A. Hankins and John L. Vogan, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p245-256.

Issues of Uncertainty Regarding Localized Strains in Gran-ular Soils, M. A. Mooney, R. J. Finno, G. Viggiani and W. W. Harris, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p312-325.

On Efficiency and Accuracy in Simulations of Granular-type Systems, Yi Sun and Oleg Vinogradov, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p96-99.

ing Mechanics, Y. K. Lin and T. C. Su, 1996), p96-99. Scaling-Up of Small-Scale Granular Sediment Transport Laws, J. Raghuraman and P. K. Haff, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p262-264. Shock Compression in Granular Media Using DFEM, Ab-dolreza Joghataie and Jamshid Ghaboussi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p246-429. Small-Strain Response of Random Arrays of Spheres Using Discrete Element Method, Tang-Tat Ng and Emmanuel Petrakis, EM Mar. 96, p239-244.

Petraxis, EM Mar. 90, p239-244.
Studying Mixed Granular Flows by Image Analysis, Lennart Gustafsson and Peter Gustafsson. (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p100-103.
Theory and Simulations of Relaxation and Cyclic Granular Flows, Marijan Babic and William J. Bocchieri, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p100-132. p108-111.

Graphic methods

Finite-Element Graphic Objects in C++, Jianing Ju and M. U. Hosain, CP July 96, p258-260.

Graphic techniques

Inappropriate Parameterization in Biofilm-Process Design Curves, C. S. P. Ojha and Rajnish Shrivastava, EE Jan. 96, p67-70.

On-Line Motion Planning for the Three-Link Revolute Arm in an Unknown Three-Dimensional Environment, Sanjay Tiwari and Brandon Kroupa, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), pl-7.

Simple Irrigation Scheduling Calendars, Robert W. Hill and Richard G. Allen, IR Mar/Apr. 96, p107-111.

Graphical analysis Graphical Methods for Assessing Changes in Water Quali-ty, Karen Cozzetto and P. M. Berthouex, EE July 96, p667-668.

pool-7008. Optimization of Graphical Models, Jeanine Graf, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p97-103.
Web Buckling in Thin Webbed Castellated Beams, Walid Zaarour and Richard Redwood, ST Aug. 96, p860-866.

Graphite fibers

Inelastic Thermal Response of Gr/Cu with Nonuniform Fiber Distribution, Brett A. Bednarcyk and Marek-Jerzy Pindera, AS Oct. 96, p93-105.

Structures in the Real World: Guidelines for Drop Structures in Grass Lined and Wetlands Channels, Wil-liam C. Taggart, William G. DeGroot, Katherine J. Chase and Peter L. Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p594-599.

Non-Growing Season Water Budgets for a Shortgrass Steppe, Shusen Wang, William J. Parton and Gigi A. Richard, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p237-242.

Rehabilitating Arctic Tundra in Alaska, Jay D. McKendrick, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p764-769.

An Update on Surface Renewal Estimation of Evapotranspiration, R. L. Snyder, D. Spano, P. Duce and K. T. Paw U., (North American Water) . (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p430-435.

Gravel

318

Advective-Diffusive Contaminant Migration in Unsaturated Sand and Gravel, R. Kerry Rowe and K. Badv, GT Dec. 96, p965-975.

Effect of Gravel on Pumping Behavior of Compacted Soil, Robert W. Day, GT Oct. 96, p863-866. Liquefaction Behavior of Sand-Gravel Composites, Mark D. Evans and Shengping Zhou, GT Mar. 95, p287-298. Modeling Sediment in Gravel-Bedded Streams Using HEC-6, Robert N. Havis, Carlos V. Alonso and John G.

King, HY Oct. 96, p559-564.

King, H1 Oct., 36, p.339-308.
Performance of a Passively Refrigerated Gravel Pad Foundation in Fairbanks, Stephen Adamczak, Jr., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p13-22.

Prediction of Bed-Load Transport by Desert Flash Floods, Ian Reid, D. Mark Powell and Jonathan B. Laronne, HY

Mar. 96, p170-173.

Gravity

Artificial Gravity, Zachary Zutavern, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1315-1318.

Behavior of Fresh Mortar in a Vacuum and Microstructure of Mortar Hardened in a Vacuum, L. J. Powers-Couche and T. D. Lin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p608-

613 Combustion Processes and Applications in Reduced Gravi-ty, Howard D. Ross, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Control Systems Governing Gravity-Dependent Plant Growth, C. Duran, D. Flores, J. D. Smith and G. W. Morgenthaler, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1095-1101

Crystal Growth in Microgravity, Grant Meyer, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1295-1297.

Design and Construction Balances for Bascule Bridges, Andrew W. Herrmann and Nicholas J. Altebrando, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p9-15.

Design and Construction of Zero-Gravity Gymnasium, Patrick Collins, Sunao Kuwahara, Tsuyoshi Nishimura and Takashi Fukuoka, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p200-

205

Digital Image Analysis of Two-Dimensional Fluidized Beds at Lunar Gravity, D. J. Brueneman, L. L. Sorge, M. A. Gibson, C. W. Knudsen and H. Kanamori, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p769-775.

The Distinction between an Interplanetary Vehicle and a Mars Surface Habitat, Marc M. Cohen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), 9984-996.

Effects of Zero Gravity on Bones, Jon Capron, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1262-1264.

Flow Induced Charging of Liquids in Reduced Gravity, Donald Pettit, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p545-

Flow through Slit in Dam, Yakun Guo, Xianyun Wen and Chigong Wu, HY Nov. 96, p662-669.
Fluid Management in Space-Based Systems, Jack A. Salzman, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p521-526.

Gravity Current of Fluid Mud on Sloping Bed, Thijs van Kessel and C. Kranenburg, HY Dec. 96, p710-717.

High Frequency Access to Low Gravity Experimentation in Organic Crystal Growth from Solutions, Michael G. Sportiello, Paul Todd, Ching-Yuan Lee, Craig E. Kun-drot, Steve C. Schultz, Louis S. Stodieck and John M. Cassanto, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p378-384. Investigation of On-Orbit Servicing Robot, T. Matsue and Y. Wakabayashi, (Engineering, Construction, and Oper-ations in Space, Stewart W. Johnson, ed., 1996), p533-

Issues on Geomechanics, Nicholas C. Costes and Stein Sture, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p516-520.

Lunar Excavating Research, Walter W. Boles and John F. Connolly, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p699-705.

Microgravity's Effects on the Muscular System of the Human Body, Susie Newton, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1298-1302.

Process Research in Support of the Human Exploration and Development of Space: Issues in Program Development, Bradley M. Carpenter, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p509-515.

Space Sickness, Thienga Nguyen, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1303-1306.

Standpipe Solids Transfer Behavior in a Lunar Gravity Flu-idized Bed, Les L. Sorge, David J. Brueneman, J. Dale Ortego, Jr., Michael A. Gibson, Christian W. Knudsen, Ortego, Jr., Michael A. Cibson, Christian W. Knudsen, Hiroshi Kanamori and B. Kent Joosten, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p776-782.
Surfactant Enhanced Gravity Drainage (SEGD) of Dense Nonaqueous Phase Liquids: A New Concept in the Insitu DNAPL Remediation, Milind D. Deo and Ju-Woung

Yoon, (Non-Aqueous Phase Liquids (NAPLs) in Subsur face Environment: Assessment and Remediation, Laksh-

mi N. Reddi, ed., 1996), p393-404.

Vibration Isolation for Space Station Micro-Gravity Using High Temperature Superconductors, W. K. Chu, K. Ma, H. Xia and T. L. Wilson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p540-544.

Gravity loads

High Over Shanghai, Stan Korista, P.E., Mark Sarkisian, P.E. and Ahmad Abdelrazaq, CE Dec. 96, p58-61.

Medium Span Gravity Sewer Aerial Crossings, Curtis W. Swanson and Glenn E. Hermanson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p457-468. No-Dig Gains Ground, Luis Aguiar, Thomas G. Scheller,

James T. Cowgill, P.E. and Iqbal Noor, CE Aug. 96, p54-57.

PVC Lined Steel Pipe Bridges for Gravity Sewers, Andrew E. Romer, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p441-448.

Earthquake Destructiveness Potential Factor and Permanent Displacements of Gravity Retaining Walls, Teresa Crespellani, Claudia Madiai and Giovanni Vannucchi, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p124-133.

Reliability Assessment Methodology for Sliding Stability of Gravity Structures, Bilal M. Ayyub and Ru-Jen Chao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996).

p858-861.

poso-ooi. Rotation of Large Gravity Walls on Rigid Foundations under Seismic Loading, R. S. Steedman and X. Zeng. (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p38-56.

Gravity waves

Application of the Q-3D SHORECIRC Model to Surfbeat, A. R. Van Dongeren, I. A. Svendsen and F. E. Sancho, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p233-244.

Astrophysical Cosmology Using a Lunar Ligo, Thomas L. Wilson, Hans-Joachim Blome and Norman LaFave, (Engineering, Construction, and Operations in Space, Stew-art W. Johnson, ed., 1996), p861-863.

Finite Amplitude Shear Wave Instabilities, H. Tuba Özkan and James T. Kirby, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p465-476.

Influence of Short and Long Waves Coupling on Sand Suspending, Sergey Yu. Kuznetsov and Nikolay V. Pykhov, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p720-727.

Modeling Time- and Depth-Varying Currents at Supertank, Jane McKee Smith and Ib A. Svendsen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p245-256.

Observational Cosmology from the Moon, Thomas L. Wilson and Hans-Joachim Blome, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p864-870.

On the Origin of Infragravity Waves in the Surf Zone of a Dissipative Multiple Bar System, B. G. Ruessink, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p93-104.

Surf-Zone Modeling, Ib A. Svendsen and Uday Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed., 1996), p13-32.

Grense

Low Temperature Performance Rating Criteria for Lubrication Greases, Ian Lundberg and Terry McFadden, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p153-172.

History of Coastal Engineering in Great Britain, Rendel Palmer, ed. and Tritton Limited Development and Engineering Consultants, ed., (History and Heritage of Coast-al Engineering, Nicholas C. Kraus, ed., 1996), p214-274.

Coastal Evolution Downdrift of St. Joseph Harbor on Lake Michigan, R. B. Nairn and L. E. Parson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p903-914.

The Great Great Lakes, Murray Clamen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2300-2305.

The Great Lakes Storm Damage Reporting System, David Wallin and P. S. Chawla, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p183-184.

1997), p163-164.
High-Resolution, Short-Term Lake Forecasts for Lake Erie, John G. W. Kelley, David J. S. Welsh, Keith W. Bedford, David J. Schwab, Jay S. Hobgood and Brendon Hoch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p367-378.
Managing Great Lakes Water Levels: An International Partnership, Anthony J. Eberhardt, (North American Water and Environment Congress & Destructive Water, Chenchova, Bathala, ed. 1996), p137-1327.

Chenchayya Bathala, ed., 1996), p1317-1322.

Nearshore Hydrodynamic and Water Quality Modeling for Water Intake Evaluation and Design, Kwang K. Lee, Bing Shen and Chung Shyan Wu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2456-2461.

Consumary a Damana, etc., 1990), p2430-2461.

Numerical Simulation of Internal Kelvin Waves with Z-level and Sigma Level Models, David J. Schwab, Dmitry Beletsky, William P. O'Connor and David E. Dietrich, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p298-312.

Prediction of Storm Induced Flows in Great Lakes Estuarine Inlets, James H. Riley and William L. Wood, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p583-595.

Sediment and Contaminant Transport in Green Bay, Zeni-the Chroneer Mary Cardenas, James Lick and Wilbert tha Chroneer, Mary Cardenas, James Lick and Lick, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p313-324.

Wortley's Winter Wanderings: A Narrative, C. Allen Wortley, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p837-854.

Great Salt Lake

Atmospheric Flow Indices and Interannual Great Salt Lake Variability, Young-Il Moon and Upmanu Lall, HE Apr. 96, p55-62.

Greens function

3-D Elastodynamic Green's Functions of Laminated Plates, J. Zhu and A. H. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1159-1162.

Grid systems

Bearing Capacity of Rectangular Footings on Geogrid-Reinforced Sand, Temel Yetimoglu, Jonathan T. H. Wu and Ahmet Saglamer, GT Dec. 94, p2083-2099.

and Annet sagamer, (1) Dec. 94, p.2083-2099.

Double-Layer Grids: Review of Dynamic Analysis Methods and Special Topics, Ramesh B. Malla and Reynaud L. Serrette, ST Aug. 96, p882-892.

Double-Layer Grids: Review of Static and Thermal Analysis

sis Methods, Ramesh B. Malla and Reynaud L. Serrette, ST Aug. 96, p873-881.

Flect of Geogrid Reinforcement in Model Track Tests on Pavements, Fereidoon Moghaddas-Nejad and John C. Small, TE Nov /Dec. 96, 9468-474. A Hydrodynamic FVM Algorithm on Arbitrary Grids, Jinglian J. Liu, Billy H. Johnson, Bharat K. Soni and Victor L. Zitta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3668-3673.

Multigrid Methods in GIS Grid-Cell-Based Modeling Environment, Dane C. McKinney and Han-Lin Tsai, CP

Jan. 96, p25-30.

Neural Net for Determining DEM-Based Model Drainage Pattern, Jehng-Jung Kao, IR Mar/Apr. 96, p112-121. Weighted Factors in Computer-Aided Land Leveling, Thomas S. Zissis, Aristotelis H. Papadopoulos and Ilias S. Teloglou, IR Nov./Dec. 96, p336-338.

Groins, structures

Permeable Pile Groins, Arved J. Raudkivi, WW Nov./Dec.

96, p267-272.

Physical and Numerical Study of Wave Induced Currents in Wave Basins of Various Sizes, Peyman Badiei and J. William Kamphuis, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p377-388.

Ground motion

ccelerations and Time Histories for Earthquakes Affecting Kentucky's Bridges, I. E. Harik, R. Street, Z. Wang and D. L. Allen, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p46-471. Accelerations

Achieving Reliable Designs for Pipelines Traversing Unstable Slopes, Dimitri A. Grivas, Chakravarthy Bhagvati, B. Cameron Schultz, Verne C. McGuffey, Gregg O Neil and Gordon Simmonds, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p426-433.

Assessing the Local Geologic Component of the Earth-quake Hazard in the Portland Metropolitan Area, Mat-thew A. Mabey and Ian P. Madin, (Natural Disaster Re-duction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p177-178.

Assessments of Lateral and Torsional Structural Responses Induced by Incoherent Ground Motions, G. D. Hahn and X. Liu, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p188-191.

Common and Variable Characteristics in Spatially Recorded Seismic Ground Motions, Ouqi Zhang and Aspasia Zerva, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p628-631.

1990, po2e-031.
Considering Uncertainty in Earthquake Response Spectra, Sara Wadia-Fascetti and Burcu Vuran Gunes, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p211-212.
Design of Energy Dissipation Devices Based on Concept of Damage Control, K. L. Shen and T. T. Soong, ST Jan.

96, p76-82.

Development of the Deterministic Caltrans Seismic Hazard Map of California, Lalliana Mualchin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p297-298.

DSHA Versus PSHA for Critical Structures, Ellis L. Krinitzsky, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p241-242.

Dynamic Response of Cantilever Retaining Walls, A. S. Veletsos and A. H. Younan, (Analysis and Design of Retaining Structures Against Earthquakes, Prakash, ed., 1996), p19-20.

Dynamic Response of Rectangular Flexible Fluid Containers, Jac Kwan Kim, Hyun Moo Koh and Im Jong Kwahk, EM Sept. 96, p807-817.
Earthquake Response of Structures by Structural Mixture Theory, Mohammed S. Al-Ansari, O. M. Kirkely and Gregory Gillette, ST Oct. 96, p1198-1207.
Earthquake-Induced Ground Settlements of Bridge Abutment Fills, Raj V. Siddharthan and Mahmoud El-Gamal, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p100-123.
Effect of Ground Condition on Earthquake Danase. Mako-

Effect of Ground Condition on Earthquake Damage, Mako-to Nasu. (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p233-234.

Effects of Ground Subsidence on a House, R. M. Bennett, E. C. Drumm, G. Lin, T. Triplett and L. Powell, CF Nov. 96, p152-158.

320

Examples of Structural Identification from Measured Earth-quake Response: Buildings, Bridges, and Dams, G. L. Fenves, E. Safak and M. Raghavendrachar, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p659-666

Experimental Investigation of Tuned Liquid Dampers, Dorothy A. Reed, Harry Yeh, Jinkyu Yu and Sigurdar Gar-darsson, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p215-216. Generation of Ground Motion Time Histories as Non-

Generation of Ground Motion Time Histories as Non-Stationary Vector Processes: Response Spectrum Com-patible Seismograms, George Deodatis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p616-619.
Ground Motion Estimation and Nonlinear Seismic Analy-sis, David B McCallen and Lawrence J. Hutchings, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p616-6472.

1996), p416-427.

Ground Movement Prediction for Deep Excavations in Soft Clay, Youssef M. A. Hashash and Andrew J. Whittle, GT June 96, p474-486.

Ground-Movement-Related Building Damage, Storer J. Boone, GT Nov. 96, p886-896.

Implications of Measured Near-Field Ground Motion on Structural Response, Wilfred D. Iwan, (Building an International Community of Structural Engineers, S. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1213-1220.

Incorporation of Fuzzy Damage States in Seismic Fragility Analysis, Jun-Rong Huo and Howard H. M. Hwai (Probabilistic Mechanics & Structural Reliability, D. M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p318-321.

p318-321. Inference of Dynamic Shear Modulus from Lotung Downhole Data, C.-Y. Chang, Chin Man Mok and H.-T. Tang, GT Aug. 96, p657-665. Insight into the Inelastic Response to a Fully Nonstationary Earthquake Ground Motion Model, Bor-Feng Peng and Joel P. Conte, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p269-272. The Kohe Farthquake: Ground Shaking, Damage and Loss.

The Kobe Earthquake: Ground Shaking, Damage and Loss, Charles A. Kircher, (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and

nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p908-916.

Magnitude-Distance Contours for Probabilistic Seismic Hazard Analysis, P. Bazzurro, S. R. Winterstein, T. C. Ude and C. A. Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p202-205.

Method for Probabilistic Evaluation of Seismic Structural Domaes. Aim Simbal and Anne S. Kirmsteilian, ST.

Method for Probabilistic Evaluation of Seismic Structural Damage, Ajay Singhal and Anne S. Kiremidjian, ST Dec. 96, p1459-1467. Nonlinear Soil Response—1994 Northridge, California, Earthquake, M. D. Trifunac and M. I. Todorovska, GT Sept. 96, p725-735. On Reliability Assessment of Infrastructure Systems under

Strong Earthquake, Hitoshi Furuta and Naruhito Shiraishi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p632-635.

Passive Control Systems for Mitigation of Near-Field Earthquake Ground Motions, Peter W. Clark and James M. Kelly, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p217-218.

Performance of Two Reservoirs during 1994 Northridge Earthquake, C. A. Davis and J. P. Bardet, GT Aug. 96, p613-622.

Probabilistic Seismic Hazard and Sensitivity Analysis: A Case Study from Southern California, Mehrdad Mahdyiar, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p299-300.

Recent Developments in Stochastic Mechanics Relevant to Earthquake Engineering, M. Shinozuka, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p1-1.

Reduced-Order Sand Model for Ground Response Analysis, X. S. Li, EM Sept. 96, p872-881.

Response of Long-Span Bridges to Spatially Varying Ground Motion, Ronald S. Harichandran, Ahmad Hawwari and Basheer N. Sweidan, ST May 96, p476-

Response of Pile Embedded in Stochastic Ground Media, Makoto Suzuki and Tsuyoshi Takada, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p612-615.

Seismic Hazard Assessment in Southeastern U.S. Paul C. Rizzo and Vaidya E. Bazan, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p127-128.

Seismic Hazard Assessment of the NPPS in the CR, Dana Procházková, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p179-180.

Seismic Isolation of Bridges Using Sliding Isolation Sys-tems, Paul F. Bradford and Ronald J. Watson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p41-47

Seismic Motion Incoherency Effects on Dynamic Response, Dan M. Ghiocel, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p624-627.

Seismic Pressures Against Rigid Walls, Guoxi Wu and W. D. Liam Finn, (Analysis and Design of Retaining Struc-tures Against Earthquakes, Shamsher Prakash, ed., 1996), pl-18.

Statistical Aspects of Damages Due to the Great Hanshin Earthquake, Hitoshi Seya and Michio Sugimoto, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p186-189.

Strong Ground Motion Characteristics and Damage Distribution of Housings by an Epicentral Region Earthquake of Mag.7.2 in KOBE, Japan of 1995, Yoshinori Iwasaki, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p147-148.

Torsion in Symmetric Structures due to Ground-Motion Spatial Variation, Ernesto Heredia-Zavoni and Federico

Barranco, EM Sept. 96, p834-843.

Variability in Site-Specific Seismic Ground-Motion Design Predictions, C. J. Roblee, W. J. Silva, G. R. Toro and N. Abrahamson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1113-1133.

Vertical Seismic Forces on Elevated Concrete Slabs, M. N. Palaskas, Limin He and Michael Chegini, SC Aug. 96,

Ground support equipment

Dynamic Effects from the Space Shuttle Liftoff, Fady F. Barsoum and William F. Carroll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1190-1196.

Ground water

The Application of Time Domain Electromagnetics to a Regional Groundwater Investigation in Western Washington, Rory Retzlaff and Robert H. Anderson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p27-41.

Bugs Clean Tunnels, CE Aug. 96, p22.

Characteristics in Evaluating Stream Functions in Ground-Water Flow, G. B. Matanga, HE Jan. 96, p49-53.

Combining Geophysical and Well Data for Identifying Best Well Locations, Geza Pesti, William E. Kelly, Istvan Bo-gardi and Robert J. Kalinski, WR Mar/Apr. 96, p97-104.

Control of Seawater Intrusion through Injection-Extraction Well System, A. Mahesha, IR Sept./Oct. 96, p314-317.

Coupled and Uncoupled Poroelastic Solutions to Land Subsidence due to Groundwater Withdrawal, Giuseppe Gambolati, Mario Putti and Pietro Teatini, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p483-486.

Developing Comprehensive State Ground-Water-Protection

Developing Comprenensive State Ground-water-Protection Programs, R. Gregory Bourne, Sonja Massey, Elizabeth Rolle and Bruce Meighen, WR July/Aug, 95, p294-301. Development of an Expert System for Daily Drought Monitoring, T. J. Chang, H. Zheng, X. A. Kleopa and C. B. Teoh, CP Jan. 96, p20-24.

Dimensional Analysis of Colloid-Facilitated Ground-Water Conteminant Transport, M. Yavuz Corapcioglu and Shi-yan Jiang, HE Oct. 96, p139-143. Editor's Note, Thomas L. Theis, EE Aug. 96, p675.

Environmental Engineers Take Aim at Firing Range, CE

Aug. 96, p18.

Ground-Water Remediation with Granular Collection System, Richard W. Frieseke and Erik R. Christensen, EE June 96, p546-549.

Ground-Water Treatments Gain Ground, Rafat A. Abbasi,

Ground-Water Treatments Gain Ground, Ratat A. Adoass, CE Feb. 96, p53-55.
Groundwater Monitoring System Design Using a Probabilistic Observation Method for Site Characterization, Mauricio Angulo and Wilson H. Tang, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p797-812.
Interseasonal Irrigation System Planning for Waterlogged Sodic Soils, S. N. Panda, S. D. Khepar and M. P. Kaushal, IR May/June 96, p135-144.

Isotopic Systematics of Saline Waters at Aspö and Laxe-mar, Sweden, Bill Wallin and Zell Peterman, (High Level Radioactive Waste Management, Technical Program

Committee, 1996), p41-42.

Modeling Pumping of Saline Water from Two-Layer Aquifer, Andrzej Sawicki, HY June 96, p341-347.

Nonsteady-State Drawdowns in Two Coupled Aquifers, Louis H. Motz, IR Jan./Feb. 96, p19-23.

Numerical Modeling of Biologically Reactive Transport Near Nutrient Injection Well, T. Prabhakar Clement, Bri-an S. Hooker and Rodney S. Skeen, EE Sept. 96, p833-

Object-Oriented Pumping-Test Expert System, Driss Oua-zar, Alexander H-D. Cheng and Abdu Diore Kizamou,

CP Jan. 96, p4-9.

Operation and Maintenance of Ground Water Facilities (M&R No. 86), Committee on Ground Water of the Irribation of Children gation and Drainage Division, American Society of Civil Engineers, (Lloyd C. Fowler, chmn.), 1996, Engineers, (Lloyd 0-7844-0139-X, 180pp.

Waters: Application of Trace Metals in Natural Waters: Application of Co-Precipitation and Co-Dissolution Models, Jordi Bruno and Lara Duro, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p64-66.
Pump-and-Treat Ground-Water Remediation System Optimization, Daene C. McKinney and Min-Der Lin, WR Mar/Apr. 96, p128-136.
Removal of Appenies C. McKinney and Min-Der Lin, WR Mar/Apr. 96, p

Removal of Arsenic from Ground Water by Iron Oxide-Coated Sand, Arun Joshi and Malay Chaudhuri, EE Aug.

96, p769-771 Simulation of Bioventing for Soil and Ground-Water Re-mediation, Paul D. McClure and Brent E. Sleep, EE Nov. 96, p1003-1012.

Simulation of Interaction between Canal Regulation and Groundwater, Hsin-Chi J. Lin and Hwai-Ping Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1587-1591

Slope Instability from Ground-Water Seepage, Muniram Budhu and Roger Gobin, HY July 96, p415-417. Stream-Aquifer Interaction Model with Diffusive Wave

Routing, Samuel P. Perkins and Antonis D. Koussis, HY Apr. 96, p210-218.

Students Aid Bolivian Village, CE Sept. 96, p14,19.

Two-Dimensional Hydraulics of Recirculating Ground-Water Remediation Wells in Unconfined Aquifers, W. M. Stallard, K. C. Wu, N. Shi and M. Yavuz Corapcioglu, EE Aug. 96, p692-699.

Use of Geographic Information Systems in Ground-Water Flow Modeling, D. W. Watkins, D. C. McKinney, D. R. Maidment and Min-Der Lin, WR Mar/Apr. 96, p88-96.

The Use of Hydrologic Budget Techniques in Assessing Site Suitability for Wetland Creation, William R. Arcieri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3956-3961.

Volumetric Leaky-Aquifer Theory and Type Straight Lines, Zekai Şen, HY May 96, p272-280.

Ground-water depletion

Changes in Ground Water-Surface Water Interaction in the Santa Ana River Caused by Independent Water Resources Management Activities, Mark J. Wildermuth, Timothy F. Moore and Traci Stewart, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3300-3313.

Development of Islandwide Groundwater Pollution Potential for Taiwan, Wen-Sen Chu, Chin-Hwa Chiang, Mei-Hui Chang and Cheh-Ming Lee, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3164-3169.

Effects of Ignoring Well Losses on the Specific Capacity Function, Otto J. Helweg and Timothy Mays, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2224-2229.

Ground-water flow

Achieving a Reasonable Level of Accuracy in Site Charac-terization in the Presence of Geologic Uncertainty, Lynn Yuhr, Richard C. Benson and Devraj Sharma, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p195-209.

An Adaptive Finite Element Model for Saturated and Unsaturated Porous Media, D. W. Pepper, M. L. Lytle and D. B. Carrington, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p105-

Characteristics in Evaluating Stream Functions in Ground-Water Flow, G. B. Matanga, HE Jan. 96, p49-53.

Characterization and Remediation of a Fuel Oil Plume, Dorinda L. Clause and Stacey R. Leake, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: As-sessment and Remediation, Lakshmi N. Reddi, ed., 1996), p762-775.

A Comparison of Geological and Stochastic Approaches to Characterization of Heterogeneity and their Effects on Simulations of Pump-and-Treat Systems, Peter E. Riemersma, Jean M. Bahr and Mary P. Anderson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1003-1018.

Compass: A Source Term Code for Investigating Capillary Barrier Performance, Wei Zhou and M. J. Apted, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p276-278.

Computational Tools for Subsurface Conceptualization, Earl V. Edris and Eileen Poeter, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2577-2582.

Coupled Modelling of Groundwater Flow and Hydrochemistry in the Sellafield Area, A. K. Littleboy, R. Metcalfe and D. J. Noy, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p135-140.

Discussions of a 3D Numerical Simulation of Transient Regional Groundwater Flow and Transport, Bernard B. Hsieh, Mansour Zakikhani and William D. Martin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2218-2223.

Dose Rates from Repository Performance Assessment, Robin K. McGuire and John A. Vlasity, (High Level Ra-dioactive Waste Management, Technical Program Committee, 1996), p325-326.

Ensuring Consistency of Groundwater Modeling Results with Indirect Evidence, S. Vomvoris, A. Scholtis and P. Vinard, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p133-134.

Evaluating Strategies to Manage Seawater Intrusion, Tracy Nishikawa and Eric G. Reichard, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4323-4328.

Chayya Bannaia, ed., 1970), pp.323-3326.
Evaluation of Groundwater Travel-Time Calculations for Yucca Mountain, R. W. Barnard, S. J. Altman, B. W. Arnold, C. K. Ho and S. A. McKenna, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p193-195.

Geostatistical Simulation, Parameter Development and Property Scaling for GWTT-95, Sean A. McKenna and Susan J. Altman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p181-

322

Groundwater Dynamics in Beaches and Coastal Barriers, Peter Nielsen and Hong-Yoon Kang, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p521-532.

Groundwater Flow Component of a Wetland-Dynamics Model, Hector R. Bravo and Gregory H. Brown, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2793-2798.

Groundwater Flow Modelling at the Okliutoo Site, Fin-land, Jari Löfman, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), p141-144.

Hydraulic Analysis of Linear Dewatering Systems, Jerzy M. Sawicki, IR Nov. Dec. 96, p348-353.

The Impact of Numerical Precision on Optimal Ground-water Hydraulic Control, David P. Ahlfeld and R. Guy Rieflet, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p618-621.

Indirect Evidences for Quantification of Groundwater Flow Assessment of the Consistency of Geohydrological Groundwater Flow Models and Hydrochemical Mixing/ Reaction Models of the Aspö Hard Rock Laboratory, Peter Wikberg and Ingvar Rhen, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p145-147.

Modeling and Debugging Engineering Decision Procedures with Machine Learning, Yoram Reich, Miguel Medina, Tung-Ying Shieh and Timothy Jacobs, CP Apr. 96,

p157-166.

Modeling Coastal Ground-Water Response to Beach Dewa-tering, L. Li, D. A. Barry and C. B. Pattiaratchi, WW Nov./Dec. 96, p273-280.

Modeling of Possible Outflow of Radionuclides from Deep Burials into Biosphere, V. M. Shestopalov, B. D. Stet-senko and A. S. Boguslawski, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p176-177.

Multigrid Methods in GIS Grid-Cell-Based Modeling Environment, Daene C. McKinney and Han-Lin Tsai, CP

Jan. 96, p25-30.

Numerical Modeling for Saturated-Zone Groundwater Travel Time Analysis at Yucca Mountain, Bill W. Arnold and George E. Barr, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

One-Dimensional Finite-Element Model for High Flow Velocities in Porous Media, Blair T. Greenly and Douglas M. Joy, GT Oct. 96, p789-796.

Optimal Well Locations for Groundwater Mound Control, Maili Wang and Kevin Lansey, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p340-345.

Radionuclide Release for Unsaturated Spent Fuel Tests-First 1.6 Years, P. A. Finn, S. F. Wolf and J. K. Bates (High Level Radioactive Waste Management, Technical Program Committee, 1996), p390-392.

Radwaste Disposal in Clay—E. C. Everest Project, IPSN Contribution, Catherine Certes, Patrick Goblet and André Levassor, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p170-171. Radwaste Disposal in Granite-E.C. Everest Project, IPSN Contribution, P. Baudoin and C. Serres, (High Level Ra-dioactive Waste Management, Technical Program Committee, 1996), p168-169.

323

Regression and Inverse Analyses in Regional Ground-Water Modeling, Andrew R. Piggott, A. Ghosh Bobba and Kent S. Novakowski, WR Jan./Feb. 96, p1-10.

Sensitivity Studies of Unsaturated Groundwater Flow Modeling for Groundwater Travel Time Calculations at Yucca Mountain, Nevada, Susan J. Altman, Clifford K. Ho, Bill W. Arnold and Sean A. McKenna, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p190-192.

Simulation of Regional Ground-Water Flow on a Transboundary Flowline; Trans-Pecos, Texas and Chihuahua, Mexico, Barry J. Hibbs, Bruce K. Darling, John M. Sharp, Jr. and John B. Ashworth, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1323-1330.

Site Characterisation of a Complex DNAPL Site—An Australian Experience, J. M. Duran and J. A. Grounds, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p800-811.

Tide-Induced Ground-Water Flow in Deep Confined Aqui-

fer, Ko-Fei Liu, HY Feb. 96, p104-110.

Uncertainty in the Geologic Setting and Its Impact on Site Characterization, Richard C. Benson, Lynn Yuhr and Devraj Sharma, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p91-103.

Unsaturated Zone Flow Modeling for GWTT-95, Clifford K. Ho, Susan J. Altman, Sean A. McKenna and Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p184-186.

Unsteady Finite-Analytic Method for Solute Transport in Ground-Water Flow, Whey-Fone Tsai and Ching-Jen Chen, EM Feb. 95, p230-243.

Uranium Dioxide Dissolution under Acidic Aqueous Conditions, S. A. Steward and E. T. Mones, (High Level Ra-dioactive Waste Management, Technical Program Committee, 1996), p388-389

Use of Geographic Information Systems in Ground-Water Flow Modeling, D. W. Watkins, D. C. McKinney, D. R. Maidment and Min-Der Lin, WR Mar/Apr. 96, p88-96.

Use of Geophysics to Aid in Mapping Basalts Relevant to Ground Water Flow and a Landslide Hazard at Hager-man Fossil Beds National Monument, P. Michaels, L. Growney and P. Donaldson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p14-26.

Ground-water management

Alternatives for Managing Shallow Ground Water in Arid Irrigated Areas, James E. Ayars, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p183-188.

Analytical Model for Heterogeneous Reactions in Mixed Porous Media, K. Hatfield, D. R. Burris and N. L. Wolfe,

EE Aug. 96, p676-684.

California's Visions of Groundwater: a Water Source and a Salt Sink, J. D. Oster, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1936-1941.

Development of an Interactive Multimedia and Database Model, Michael H. Woo, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p767-773.

Dynamic Optimal Groundwater Remediation by Granular Activated Carbon, Teresa B. Culver and Gary W. Shenk, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p123-128.

Eastern San Joaquin County Groundwater Management, Monique B. Magolske and Miguel A. Marino, (North American Water and Environment Congress & Destruc tive Water, Chenchayya Bathala, ed., 1996), p2781-2786.

Eastern San Joaquin County Groundwater Resource Planning Model Development and Calibration, Najmus Sa-quib, Young Yoon and Mike Cornelius, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3509-3514.

Eastern San Joaquin County Groundwater Resource Planning Alternative Analysis, Najmus Saquib, Alex Chen, Umesh Lalwani, Mike Cornelius, Jeff Kishel, Gary Nuss and Mark Williamson, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3515-3520.

Economic Impact of Managing Sea Water Intrusion, Doug-las D. Parker and Tracy Hart, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4317-4322.

Hollyhills Drain Relief for 1920's Drainage System, T. Scott Schales and Glen Drogin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4251-4256.

Implementing a Successful Conjunctive Use Program, William R. Mills, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3074-3078.

Laboratory Experiments with Heterogeneous Reactions in Mixed Porous Media, David R. Burris, Kirk Hatfield and

N. L. Wolfe, EE Aug. 96, p685-691. Management of Stream-Aquifer Systems in the 21st Century, Babs Makinde-Odusola, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2787-2792. Mechanical Properties of Vitrified Soils, Christopher Y. Tuan and William C. Dass, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p731-740.

Mexican Border Ground Water Agreement, Conrad G. Keyes, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2330-2334.

Modeling Groundwater Response to a Perimeter Flood, Jeff Leighton and Michel Genoud, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p748-752.

A Multiperiod Approach for the Solution of Groundwater Management Problems using the Outer Approximation Method, George P. Karatzas, Alexander A. Spiliotopoulos and George F. Pinder, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p129-134.

Optimal Dispersed Ground-Water Contaminant Management: MODCON Method, R. C. Peralta, J. Solaimaniar and G. R. Musharrafieh, WR Nov./Dec. 95, p490-498.

Optimal Management of a Coastal Aquifer in Southern Tur-key, Khosrow Hallaji and Hasan Yazicigil, WR July/ Aug. 96, p233-244.

Pump-and-Treat Ground-Water Remediation System Opti-mization, Daene C. McKinney and Min-Der Lin, WR Mar./Apr. 96, p128-136.

Regional Groundwater Management with Health Risk As-sessment, Susan D. Pelmulder and Yung-Hsin Sun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Reliability of Remediation Designs in Presence of Modeling Error, Changqing Zhen and James G. Uber, WR July/Aug. 96, p253-261.

Shallow Ground Water Management with a Modified Subsurface Drainage System, J. E. Ayars, R. A. Schoneman, F. Dale and P. Shouse, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2130-2135.

Use of SALQR Optimization in Large Aquifer Cleanup, Christopher M. Mansfield and Christine A. Shoemaker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p135-139.

Ground-water pollution

Ground-water potution
Addressing Non-Aqueous Phase Liquids and Dissolved
Plumes at Two Adjacent Superfund Sites with Commingled Groundwater Contamination, Jeffrey A. Dhont and
Udai P. Singh, (Non-Aqueous Phase Liquids (NAPLs) in
Subsurface Environment: Assessment and Remediation,
Lakshmi N. Reddi, ed., 1996), p812-823.

Lakshmi N. Reddi, ed., 1990), pol2-eds.
Analysis of the Gasoline Spill at East Patchogue, New York, James W. Weaver, Joseph E. Haas and John T. Wilson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p707-718.

Analytical Model for Heterogeneous Reactions in Mixed Porous Media, K. Hatfield, D. R. Burris and N. L. Wolfe,

EE Aug. 96, p676-684.

Application of the Hydrocarbon Spill Screening Model to Field Sites, James W. Weaver, (Non-Aqueous Phase Liq-uids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p788-

Aquifer Transmissivity Computations Based on Data from Pump-and-Treat Facilities, Walter Z. Tang, Dean F. Ra-deloff and Vassilios A. Tsihrintzis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1273-1278.

Bayesian Decision Analysis for Contaminant Travel Time, Marian W. Kemblowski and Hewa A. Wijedasa, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Sta-

khiv, ed., 1996), p207-218.

Behavior of DNAPLs in Fractured Bedrock, David Foster, Salvatore Priore and Kevin Brewer, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), pS83-594.

Biodegradation Modeling of a Closed Landfill Site, Sai K. R. Edavally, Lawrence H. Woodbury and G. Padmanabhan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2510-2515.

Biological Clogging and Rehabilitation of Drains and Well Systems and the Implications on Groundwater Quality, George Alford and D. Roy Cullimore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p34-39.

Chance-Constrained Optimal Monitoring Network Design for Pollutants in Ground Water, Bithin Datta and Sanjay

D. Dhiman, WR May/June 96, p180-188.

CHEMFLO Modeling of Aquifer Bioremediation in Va-dose Zone, Avdhesh K. Tyagi, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2516-2521.

A Comparison of Geological and Stochastic Approaches to Characterization of Heterogeneity and their Effects on Simulations of Pump-and-Treat Systems, Peter E. Rie-mersma, Jean M. Bahr and Mary P. Anderson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p1003-1018.

Comparison of Stochastic Programming and Robust Opti-mization Models for Groundwater Plume Containment, David W. Watkins, Jr. and Daene C. McKinney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p612-617.

A Cost-Effective approach to In Situ Remediation of Soil and Groundwater at a Diesel Fuel Spill Site, David A. Nickerson and James N. Baker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1379-1386.

Cropping Systems on the Delmarva Peninsula to Reduce Ground Water Contamination, W. F. Ritter and R. W. Scarborough, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2341-2346.

Delineating Subsurface Contamination Using Geostatistical and Non-Intrusive Geophysical Methodologies, Sandra Bowling, Wayne Woldt and Dennis Schulte, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2230-2235.

Delineation of a Dielectric Fluid LNAPL Using Discrete Sampling Methods, Michael J. Pierdinock, Spence S. Smith, Christopher L. Kingma and John Seferiadis, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N.

1996 ANNUAL INDEX

vironment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p139-150.
Denitrification of Ground Water/Waste Water using the Aquacel System, Peter Hall and Jerry Shapiro, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p577-581.
Development of Islandwide Groundwater Pollution Potential for Taiwan, Wen-Sen Chu, Chin-Hwa Chiang, Mei-Hui Chang and Cheb, Mine Lee, (Morth American Waters)

Hui Chang and Cheh-Ming Lee, (North American Water Hui Chang and Cheh-Ming Lee, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3164-3169.

Development of Remediation Technologies Simulators, Mark S. Dortch and Christian J. McGrath, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2583-2588.
Do-Nothing Cleanups, Randall T. Hicks and Rais Rizvi, CE

Sept. 96, p54-57.

The DOD Groundwater Modeling System: A Conceptual Model Approach, David R. Richards and Norman L. Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2589-2594.

Enhancement of In Situ Zero-Valent Metal Treatment of Contaminated Groundwater, D. R. Reinhart, C. Clausen, C. Geiger, N. Ruiz and G. Afiourny, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Asand Remediation, Lakshmi N. Reddi, ed., 1996), p323-332.

Evaluation of a Bedrock DNAPL Pool Site, Daekyoo Hwang, Christopher Reitman and William Richardson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p731-742.

Field-Scale Application of In-Situ Cosolvent Flushing: Evaluation Approach, M. D. Annable, P. S. C. Rao, R. K. Sillan, K. Hatfield, W. D. Graham, A. L. Wood and C. G. Enfield, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p212-220.

Framework for a Screening Model for DNAPL Contamina-tion of Porous Media, Clinton S. Willson, James W. Weaver, Tissa Illangasekare and Randall J. Charbeneau, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N.

Reddi, ed., 1996), p407-418.

Genetic Algorithms for the Design of Groundwater Remediation Systems, Daene C. McKinney and Min-Der Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p842-847.

Geochemical Modeling of Lead in Vadose Zone, K. V. Nedunuri, R. S. Govindaraju, A. P. Schwab and L. E. Erickson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1221-1226.
Ground-Water Treatments Gain Ground, Rafat A. Abbasi,

CE Feb. 96, p53-55. Groundwater Remediation Design When Pretty Good is Good Enough, J. Wayland Eheart, (North American Water and Environment Congress & Destructive Water,

Chenchayya Bathala, ed., 1996), p848-853. Health Risk Sensitivity to Variable and Uncertain Parameters, Reed M. Maxwell and Susan D. Pelmulder, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1285-1290. Hydrologic Theory of Dispersion in Heterogeneous Aqui-fers, Sergio E. Serrano, HE Oct. 96, p144-151.

Impact of Agricultural Water Conservation on Water Quality in Arid Irrigated Areas, James E. Ayars, Kenneth K. Tanji and Thomas J. Trout, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p305-910.

In Situ Plume Interception and Treatment Technologies: An Overview, George P. Korfiatis and Alexandros Makarigakis, (Non-Aqueous Phase Liquids (NAPLs) in Subsur-face Environment: Assessment and Remediation, Laksh-mi N. Reddi, ed., 1996), p66-88. Individual Biotransformation Rates in Chlorinated Aliphatic Mixtures, J. B. Hughes and G. F. Parkin, EE Feb. 96, p99-106.

Interference by Natural Organics in Diesel Analyses, Paul Dworian, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p71-81.

Investigating the Non-Convexity of the Groundwater Quali-ty Management Response Function, David P. Ahlfeld and Mary Palumbo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p854-856.

Laboratory Experiments with Heterogeneous Reactions in Mixed Porous Media, David R. Burris, Kirk Hatfield and N. L. Wolfe, EE Aug. 96, p685-691.

Management of Contaminated Groundwater Using Natural Attenuation, David F. Laney, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2011-2020.

Mapping Groundwater Vulnerability to Nitrate and Pesticide Contamination in the Salinas Valley, Monterey County, California, Weibo Yuan, Joe LeClaire, Ali Diba, Michael Inada and Matt Zidar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1099-1104.

Modeling Ground-Water Remediation at an Oil Refinery, Ko-Hui Liu and Greg McNulty, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p824-

Modeling Groundwater Contaminant by Unstructured FVM, Jinglian J. Liu, Bharat K. Soni and Victor L. Zitta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2212-2217.

Modeling of Contaminant Transport in Groundwater in Areas of Discontinuous Permafrost, Ron Johnson, Doug Kane, Larry Hinzman, Greg Light and Ann Farris, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Pages 16 (2014) 1005 (2014) 1005 (2014) Robert F. Carlson, ed., 1996), p82-93

Modeling of NOM-Facilitated PAH Transport Through Low-foc Sediment, William P. Johnson, Gary L. Amy and

Steven C. Chapra, EE June 95, p438-446.

Modified Jar Test Studies for Removal of Disinfection By-Products (DBPs) and Color Compounds from Ground-water, Mark Williams, Badri Badriyha, Shih-Chieh Tu, Jamal Awad and Massoud Pirbazari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1009-1014.

A New Direction in Remediation, Paul P. Parmentier and Ronald M. Klemovich, CE Apr. 96, p55-57.

Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996, 0-7844-0203-5, 864pp.

An Observational Approach to Removing LNAPL, Richard Haimann, Kathleen Schoen, Hooshang Nezafati and Jim Hartley, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p719-730.

Optimization of a Ground-Water Injection/Extraction System, Anand Prakash, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1167-1172.

Optimization of Groundwater Remediation with DES, Jae-Heung Yoon and Christine A. Shoemaker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p622-627.

Overview of DoD Research in Groundwater Modeling, J. P. Holland, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2565-2570.

PCE in Dewatering Flows - A Case Study Risk-Based Clean-Up Action Levels, Shala L. Craig and Sri Krish-namachari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2242-2247.

Performance Evaluation of the Aeration Curtain at Hill Air Force Base, Utah, Paul R. Bitter and David A. Hoffman, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p776-787.

Permeable Barriers to Remove Benzene: Candidate Media Evaluation, J. Rael, S. Shelton and R. Dayaye, EE May

95, p411-415.

A Pilot-Scale Study of In Situ Hydrocarbon Remediation of Contamination in Soil and Groundwater at Fort Wain-wright, Alaska, Timothy F. Gould and Mark Wallace, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p106-115.

Predicting Transport of Organics through Soil Columns using Distributed Mass-Transfer Rates, Teresa B. Culver and Stephen P. Hallisey, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p2005-2010.

Probabilistic Approach for Cancer Risk Assessment, Paul S. Watkins, Timothy L. Jacobs, Rory B. Conolly and Warren T. Piver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2366-2371.

Pump and Treat and Wait (Available only in the Geo/ Environmental Special Issue), Richard A. Sullivan, P.E.,

CE Nov. 96, p8A-12A.

Quality of Ground Water (M&R No. 85), Committee on Ground Water Quality of the Environmental Engineering Division of the American Society of Civil Engineers, (Sayed M. Sayed, chmn.), 1996, 0-7844-0137-3, 200pp.

Removal of Arsenic from Ground Water by Iron Oxide-Coated Sand, Arun Joshi and Malay Chaudhuri, EE Aug.

96, p769-771.

Removal of Arsenic From Ground Water Using Granular Activated Carbon, Brock D. Buche and Lawrence P. Owens, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1173-1177.

Removal of DNAPL Pools Using Upward Gradient Ethanol Floods, Stuart Lunn and Bernard Kueper, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: As-sessment and Remediation, Lakshmi N. Reddi, ed., 1996), p345-356.

Research to Application: Network Models to Simulate Flow and Transport in Heterogeneous Media, John F. Peters and Stacy E. Howington, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2571-2576.

Risk-Cost Decision Framework for Aquifer Remediation Design, Bruce R. James, Jin-Ping Gwo and Laura Toran,

WR Nov./Dec. 96, p414-420.

Simulation of Unsaturated Zone Virus Transport Adjacent to Municipal Wells, D. D. Adelman and M. A. Tabidian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Small Inocula Can Effect In Situ Biodegradation, Rolf U. Halden and Daryl F. Dwyer, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2402.

Source Characterization at Contaminated Sites, Sudhakar R. Kondisetty, Priyantha W. Jayawickrama and Kenneth A. Rainwater, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, , Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p927-943.

Successful Free Product Removal of NAPLs, Daniel S. Sauvé and Jeffrey L. Pintenich. (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p233-244.

Surfactant Enhanced Electrokinetic Remediation of Gasoline Contaminated Soils, Sujan K. Bhattacharya, David H. Foster and J. Mohan Reddy, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p311-

326

A Technique for the Direct Measurement of the Aerated Zone Resulting from Field Air Sparging Operations, Lee D. Morton, Ron W. Falta, David S. Henderson and Chris A. Kern, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p127-138.

Treatability of s-Triazine Herbicide Metabolites Using Powdered Activated Carbon, Craig D. Adams and Tam-

my L. Watson, EE Apr. 96, p327-330.

Use of Artificial Neural Networks for Agricultural Chemical Assessment of Rural Private Wells, Chittaranjan Ray and Kristopher K. Klindworth, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1687-1692.

Use of SID Method for Site Characterization, P. W. Jayawickrama, K. G. K. Jayakody and K. A. Rainwater, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p897-911.

The Use of Surfactants to Remediate NAPL-Contaminated Aquifers, Kurt D. Pennell, Linda M. Abriola and Laura E. Loverde, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p221-232.

Value and Reliability of DNAPL-Source Location Programs: A Preliminary Framework, Travis C. McGrath, Robert B. Gilbert and Daene C. McKinney, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p187-198.

Wellhead Protection Area Predictions and Implications for the Biscayne Aquifer in Miami, Florida, Hector R. Fuentes, Vassilios A. Tsihrintzis and Jose H. Olivo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Wellhead Protection: Local and Community Efforts, Sharon Lien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p966-969.

Ground-water quality

ASR Case Study - City of Salem, Oregon, Joe Glicker and Paul Eckley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2679-2684.

Biosphere FEP List Development Specific to Yucca Moun-tain, Graham M. Smith, Barbara M. Watkins and Richard Little, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p244-246.

California's Visions of Groundwater: a Water Source and a Salt Sink, J. D. Oster, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1936-1941.

Chance-Constrained Optimal Monitoring Network Design for Pollutants in Ground Water, Bithin Datta and Sanjay D. Dhiman, WR May/June 96, p180-188.

Computer Optimization of a Groundwater Treatment Facility, Denis M. O'Carroll and Thomas L. Theis, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2492-2497.

Denitrification Incorporating Microporous Membranes, A R. Reising and E. D. Schroeder, EE July 96, p599-604.

Desorption of Soil Contaminants Due to Rainwater Infiltration, Anand Prakash, HY Sept. 96, p523-525.

Developing Comprehensive State Ground-Water-Protection Programs, R. Gregory Bourne, Sonja Massey, Elizabeth Rolle and Bruce Meighen, WR July/Aug. 95, p294-301.

Dynamic Optimal Groundwater Remediation by Granular Activated Carbon, Teresa B. Culver and Gary W. Shenk, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p123-128.

Evaluation of Select Trade-Offs between Ground-Water Remediation and Waste Minimization for Petroleum Refining Industry, Craig D. Andrews, William F. McTer-nan and Keith D. Willett, EY Aug. 96, p41-60. Genetic Algorithms for the Design of Groundwater Remediation Systems, Daene C. McKinney and Min-Der Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Ground Water Variability at Sanitary Landfills—Causes and Solutions, John Oneacre and Debbie Figueras, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p965-987.

Ground-Water Treatments Gain Ground, Rafat A. Abbasi, CE Feb. 96, p53-55.

Groundwater Monitoring For a Tunneling Project, James C. Burton and John e. Shamma, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p691-696.

Investigating the Non-Convexity of the Groundwater Quali-ty Management Response Function, David P. Ahlfeld and Mary Palumbo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p854-856.

Modeling Impact of Small Kansas Landfills on Underlying Aquifers, Marios Sophocleous, Nicholas G. Stadnyk and Miles Stotts, EE Dec. 96, p1067-1077.

Norti. American Water and Environment Congress & Destructive Water, CD-ROM (Windows version only), Chenchayya Bathala, ed., 1996, 0-7844-0166-7, 1340pp.

Optimal Dispersed Ground-Water Contaminant Manage-ment: MODCON Method, R. C. Peralta, J. Solaimanian and G. R. Musharrafieh, WR Nov./Dec. 95, p490-498.

Potential Microbial Impacts on Groundwater Quality, D. Roy Cullimore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p40-45.

Seawater Intrusion Solutions for the Salinas Valley, Howard Lauran L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4312-4316.

Site Vulnerability Assessment for Wellhead Protection Planning, Wade E. Hathhorn and Tyler Wubbena, HE Oct. 96, p152-160.

Use of δ¹⁸O and δD to Define Seawater Intrusion, John A. Izbicki, (North American Water and Environment Conress & Destructive Water, Chenchayya Bathala, ed., 1996), p4306-4311.

Wellhead Protection Area Predictions and Implications for the Biscayne Aquifer in Miami, Florida, Hector R. Fuentes, Vassilios A. Tsintntzis and Jose H. Oliver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Ground-water recharge

Artificial Recharge in the Oakes Test Area, Arden W. Freitag and Dale R. Esser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2335-2340.

Artificial Recharge of a Buried Glacial Aquifer in South Dakota, Vernon R. Schaefer and Delvin E. DeBoer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Artificial Recharge Using Inflatable Rubber Dams, Michael R. Markus, Curtis A. Thompson and Matt Ulukaya. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996).

Changes in Ground Water-Surface Water Interaction in the Santa Ana River Caused by Independent Water Resources Management Activities, Mark J. Wildermuth, Timothy F. Moore and Traci Stewart, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3300-3313.

Development of Islandwide Groundwater Pollution Potential for Taiwan, Wen-Sen Chu, Chin-Hwa Chiang, Mei-Hui Chang and Cheh-Ming Lee, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3164-3169.

Economic Impact of Managing Sea Water Intrusion, Doug-las D. Parker and Tracy Hart, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4317-4322.

Effect of Recharge Duration on Water-Table Response, Subramania I. Sritharan and Henry R. Gee, IR July/Aug.

96, p228-234.

Groundwater Recharge with Reclaimed Water Another Step Closer to Potable Reuse, William R. Mills, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3898-3903.

p3898-3903.

Hydrologic Impact of Great Flood of 1993 in South-Central Kansas, Marios Sophocleous, A. J. Stern and S. P. Perkins, IR July/Aug. 96, p203-210.

Management of Stream-Aquifer Systems in the 21st Century, Babs Makinde-Odusola, (North American Water and Environment Congress & Destructive Water, Chenthere Babels, et al. (2006), e3287-2729.

chayya Bathala, ed., 1996), p2787-2792.

Operation and Maintenance of Ground Water Facilities (M&R No. 86), Committee on Ground Water of the Irrigation and Drainage Division, American Society of Civil Engineers, (Lloyd 0-7844-0139-X, 180pp. Fowler, chmn.), C.

Optimal Well Locations for Groundwater Mound Control. Maili Wang and Kevin Lansey, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p940-945.
Optimization of a Ground-Water Injection/Extraction System, Anand Prakash, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1167-1172.

Picacho Reservoir Enhancement Study for Water Recharge, Reparian Enhancement, and Water-Based Recreation Purposes, Ira Mark Artz. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1413-1418. Shallow and Surfacing Ground Water in an Arid Urban En-

vironment, D. L. Smith and J. C. Guitjens, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1495-1500.

Strategies for Operation of Orange County Water District Talbert Seawater Intrusion Barrier, California, Kevin McGillicuddy and Timothy Sovich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4078-4083. Threshold Precipitation Events and Potential Ground-Water

Recharge, Richard H. French, Roger L. Jacobson and Brad F. Lyles, HY Oct. 96, p573-578.

Ground-water supply
Adaptive Search Optimization in Reducing Pump Operating Costs, S. Pezeshk and O. J. Helweg, WR Jan/Feb. 96, p57-63.

96, p57-63.

96, p57-63.

B. Auchard, C. Edwards, M. Morris, J. R. Phillips, L. A. Soo and Sun Liang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4004-4009.

Implementing a Successful Conjunctive Use Program, William R. Mills, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3074-3078.

A New Model of California's SWP/CVP Systems, Tariq N. Kadir and Mieuel A. Marino. (North American Water

Kadir and Miguel A. Marino, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3068-3073.

Group communication

ules of Thumb, Nancy Gibson and John Whittaker, ME Nov/Dec. 96, p34-39.

Coring Technique Reinforces Historic Masonry, CE May

Development and Characterization of Cellular Grouts for Sliplining, C. Vipulanandan and V. Jasti, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p829-839.

Evaluation of Grout Materials for Anchor Embedments in Hardened Concrete, Willie E. McDonald, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p958-

Grouted Anchors for Carbon FRP Tendon, Antonio Nanni and Jay Thomas, (Materials for the New Millennia Ken P. Chong, ed., 1996), p527-534.

Mixer Viscometer Characterization of AFBC Ash Grout, Donald D. Gray and Scott J. Putnam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p816-819.

Seepage Stoppers, V. J. Hebert, P.E., Juan Lelito, P.E. and A. Naudts, CE Oct. 96, p68-70.

Shrinkage Control in Acrylamide Grouts and Grouted Sands, V. Jasti, C. Vipulanandan, David Magill and Don Mack, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p840-850.

Successful Implementation of Grouted Boulder Grade Control Structures on Drainageways in the Denver Metropolitan Area, John M. Pflaum, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p836-841.

Grout curtains

Nation's Largest Grouting Contract Under Way, CE Aug. 96, p22.

Grouting

327

Case of Residential Foundation Failure and Preservation by Grouting, A. Khalilian and F. Amini, CF Nov. 96, p159-

Grout Repair of Dent-Damaged Steel Marine Tubulars, James Ricles and Troy Gillum, WW May/June 96, p110-117.

Nation's Largest Grouting Contract Under Way, CE Aug. 96, p22.

Practical Guide to Grouting of Underground Structures, Co-published in the UK by Thomas Telford Publications, Raymond W. Henn, 1996, 0-7844-0140-3, 198pp.

Seismic Resistance of Partially-Grouted Masonry Shear Walls, Arturo E. Schultz, (Worldwide Advances in Struc-tural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p211-222.

Growth projections

Advice to Environmental Execs: Get Tougher, CE Dec. 96, p14.

Analytic Approach Helps Firm Expand Business, CE Dec. 96, p22.

Design-Build Continues to Grow in U.S., CE Dec. 96, p18-19

Parsons Brinckerhoff Set to Double in Size, CE Nov. 96, p27.

Guardrails

Design and Analysis of Approach Terminal Sections Using Simulation, John D. Reid, Dean L. Sicking and Gene W. Paulsen, TE Sept./Oct. 96, p399-405.

Guardrail End-Types, Vehicle Weights, and Accident Severities, J. L. Gattis, M. S. Alguire and S. R. K. Narla, TE May/June 96, p210-214.

Classification Methodology for Coupled Shear Walls, O. Chaallal, D. Gauthier and P. Malenfant, ST Dec. 96, p1453-1458.

Consulting Engineering: A Guide for the Engagement of Engineering Services, rev. ed. (M&R No. 45), Task Committee on Revision of Manual No. 45 of the Committee on Standards of Practice of the American Society of Civil Engineers, (David F. Garber, chmn.), 1996, 0-7844-0152-7, 50pp.

Contradictions in Use of Collar Beams, Jonathan Ochshorn, AE Mar. 96, p20-25

Design Guidelines for Spillway Gates, Chander K. Sehgal, HY Mar. 96, p155-165.

Design of Sheet Pile Walls, U.S. Army Corps of Engineers, 1996, 0-7844-0135-7, 75pp.

Detection of Outliers in Pearson Type III Data, Colleen S. Spencer and Richard H. McCuen, HE Jan. 96, p2-10.

Development of Caltrans Guidelines for Natural Gas Pipe lines on Highway Bridges, Anthony Gugino, Chih-Hung Lee, Richard Gailing, Philip Constantine and David Reistetter, (*Pipeline Crossings 1996*, Lawrence F. Ca-talano, ed., 1996), p245-253. Development of the San Joaquin County Hydrology Manu-al, T. V. Hromadka, J. J. DeVries, M. Callahan and J. Pulver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2078-2083.

1996), p2078-2083.

Drop Structures in the Real World: Guidelines for Drop Structures in Grass Lined and Wetlands Channels, William C. Taggart, William G. DeGroot, Katherine J. Chase and Peter L. Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p594-599.

EPA Proposes Rural Wastewater Grants, CE Dec. 96, p8.

The FEMA Program of Seismic Safety of Buildings, Ugo Morelli, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p159-160.

Genetic Algorithms for the Design of Groundwater Remediation Systems, Daene C. McKinney and Min-Der Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p842-847.

Guideline for Automatic Docking in Space, Samuel E. Moskowitz, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p164-170.

Guidelines and Commentary for the Seismic Rehabilitation of Buildings (ATC - 33), L. D. Reaveley, D. Shapiro, J. Moehle, T. Atkinson, C. Rojahn and W. Holmes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1123-1130.

ntifying OSHA Paragraphs of Particular Interest, Jimmie

Identifying OSHA Paragraphs of Particular Interest, Jimmie Hinze and Katherine Bren, CO Mar. 96, p98-100.
Nationally Applicable Guidelines for the Seismic Rehabilitation of Existing Buildings, Christopher Rojahn, Daniel Shapiro, Lawrence D. Reaveley, William T. Holmes, Jack P. Mochle, James R. Smith and Ugo Morelli, (Natural Dissater Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p276-277.
New Guidelines for Fatigue Design of HSS Connections, A. M. van Wingerde, J. A. Packer and J. Wardenier, ST Feb. 96, p125-132.
New Metric Guide Stresses "Preferred Numbers" to Aid in

New Metric Guide Stresses "Preferred Numbers" to Aid in

Building Construction, NE June 96, p10.

Overview of the US Army Corps of Engineers Flood Control Channels Research Program, Ronald R. Copeland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Quality of Ground Water (M&R No. 85), Committee on Ground Water Quality of the Environmental Engineering Division of the American Society of Civil Engineers, (Sayed M. Sayed, chmn.), 1996, 0-7844-0137-3, 200pp.

The Reclamation Drought Index: Guidelines and Practical Applications, Karen Weghorst, (North American Water and Environment Congress & Destructive Water, Chen-

chaya Bathala, ed., 1996), p637-642.

isk Communication: Guidelines and Commentary, Clifford S. Russell and Duane D. Baumann, Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p396-400.

Seismic Isolation of Bridges in the Midwest, Mark R. Capron, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-

madi ed., 1996), p48-55.

Selecting Design Conditions a Part of a Watershed Approach to Water Quality Control, David W. Dilks and Kathryn A. Sweet, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1543-1548.

Seven Guidelines for Managing Uncertainty in Geoenviron-mental Design, Robert B. Gilbert and Travis C. McGrath, (Uncertainty in the Geologic Environment: from Theory to Practice. Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p774-796.
Structural Serviceability Review and Standard Implementa-

tion, Bruce Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p436-443.

Student Guide for Space Conference Research Papers, Malva A. Knoll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1319-1326.

Successful Implementation of Grouted Boulder Grade Control Structures on Drainageways in the Denver Metropol-itan Area, John M. Pflaum, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p836-841. Underground Contracts for the 21st Century, Robert A. Pond, CE Dec. 96, p34-57.

Uniform Criteria for Level-of-Service Analysis of Free-ways, Feng-Bor Lin, Chang-Wei Su and Hsin-Hsiun Huang, TE Mar/Apr. 96, p123-130. Urban Water Conservation Efforts of the Irrigation Associ-

ation, Tim Wilson, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p911-916.

ia, ed., 1996), p911-916. Utilizing Geomorphic Analogs for Design of Natural Stream Channels, Scott Gillilan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2799-2804. Writing Persuasive Proposals, James E. Vincler and Nancy Horlick Vincler, ME Sept/Oct. 96, p20-24.

Guideway system

Application of Artificial Neural Network to Guideway Demand Modeling, Young-Kyun Lee and Federico Frigerio, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p214-219.

Galleways
A Concept of Driving on Orbital Station, M. Malenkov, V. Gorbunov, S. Vladykin, V. Zhivoglotov, R. Beglov and V. Syromyatnikov, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996). p559-565.

Gulf of Mexico

Mobile Bay Scour Analysis for Mobile and Baldwin Coun-ties, Alabama, Bryan Hancock, Charles D. Powell and Conor Shea, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p719-728.

On the Response of Transmission Structures to High Winds, Acir Mércio Loredo-Souza and Alan Garnett Davenport, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p272-273.

Forensic Evaluation of Guyed Tower Collapses, David F. Mazurek and Jonathan C. Russell, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p510-517.

Gypsum

Microstructural and Phase Characteristics of Phosphogypsum-Cement Mixtures, Arnitava Roy, Ramesh Kalvakaalva and Roger K. Seals, MT Feb. 96, p11-18.

New Applications for Gypsum Products, Semyon Shimanovich and Christian Meyer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1687-1693.

Pyramid Power, Vladimir Novokshchenov, CE Nov. 96, 50.53.

Shear Resistance of Gypsum-Sheathed Light-Gauge Steel Stud Walls, Reynaud Serrette and Kehinde Ogunfunmi, ST Apr. 96, p383-389.

Tunnel Tops Record Field of 22 to Claim This Year's Outstanding Civil Engineering Achievement Award, NE May 96, p16.

Seepage Assessments and Control Associated with Florida's Phosphate Industry", Wayne A. Ericson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p866-880.

Blind Bolts Seek Spotlight, ET Apr/May 96, p8-9.
Reliability Analysis of Beam with Initial Deflection by Entropy Model, Yoshiro Kohama, Toyofumi Takada and Atsunori Miyamura, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p652-655.

Eigenproperties of Massive Rigid Body on Elastic Half-Space, Z. Sienkiewicz, GT June 96, p488-491.

Surface Response of a Cracked Layered Half-space Sub-jected to an Antiplane Impact, S. W. Liu, J. C. Sung and M. S. Lin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p616-619.

Halides

Fate of Organics during Column Studies of Soil Aquifer Treatment, David M. Quanrud, Robert G. Arnold, L. G. Wilson, Howard J. Gordon, David W. Graham and Gary L. Amy, EE Apr. 96, p314-321.

Halogen organic compounds Biodegradation of Dichloromethane in Leachate, R. Kerry Rowe, Leila Hrapovic, Naim Kosaric and D. Roy Cullimore, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2021-2026.

PCE in Dewatering Flows - A Case Study Risk-Based Clean-Up Action Levels, Shala L. Craig and Sri Krish-namachari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2242-2247.

Probabilistic Approach for Cancer Risk Assessment, Paul S. Watkins, Timothy L. Jacobs, Rory B. Conolly and Warren T. Piver, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2366-2371.

Reductive Pyrolysis for the Destruction of Chloromethane: A Reaction Pathway Model Based on Thermodynamic and Thermokinetic Considerations, Varadarajan Ravin-dran, Massoud Pirbazari, Badri N. Badriyha and Sidney W. Benson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1367-1372.

Hammond, David J., Shah, Surendrah, Houghton, David L., Tadros, Gamil, Braniff, Boyd ASCE Members Figure Prominently in ENR's List of 1995

Achievers, NE Apr. 96, p10.

Handicapped persons A New Kind of Rubber Drive, CE Nov. 96, p94-95. Suit Filed Over Alleged ADA Violations, CE Apr. 96, p8.

Harbor engineering

D. Niemeyer, Hartmut Eiben and Hans Rohde, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p169-213.

History of Coastal Engineering in Italy, Leopoldo Franco, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p275-335.

Harbor structures

Boston's Home Run, Rita Robison, CE July 96, p36-39.

Coastal Evolution Downdrift of St. Joseph Harbor on Lake Michigan, R. B. Nairn and L. E. Parson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

namics 95, winnam R. Dany, ed. and Ryszard B. Zeidler, ed., 1996), p903-914.

Combined Structural and Non-Structural Flood Hazard Mitigation, Barbara D. Hayes, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p25-26.

Design of a 610-mm Water Pipeline Across Providence Harbor, David E. Hairston, Pasquale DeLise and William Skerpan, Jr., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p387-394.

talano, ed., 1996), p387-394.
Exterior Reflections in Elliptic Harbor Wave Models, Bingyi Xu, Vijay Panchang and Zeki Demirbilek, WW May/June 96, p118-126.
Modeling Outfall Plume Behavior Using Far Field Circulation Model, Alan F. Blumberg, Zhen-Gang Ji and C. Kirk Ziegler, HY Nov. 96, p610-616.
Observations of Seiche Forcing and Amplification in Three Small Harbors, Michele Okihiro and R. T. Guza, WW Sept 16-98-032-32-38.

Sept./Oct. 96, p232-238.

Sediment Erosion Rate in the Baltimore Harbor, Jerome P.-Y. Maa, Larry Sanford and Jeffrey P. Halka, (North

P.-Y. Maa, Larry Sanford and Jeffrey P. Halka, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4383-4388.
Validation of Numerical Model for Wind Waves and Swell in Harbors, Edward F. Thompson, H. S. Chen and Lori L. Hadley, WW Sept./Oct. 96, p245-257.

Water Quality Impacts of Dredging and Disposal Opera-tions in Boston Harbor, J. Craig Swanson and Daniel Mendelsohn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2642-2647.

Wortley's Winter Wanderings: A Narrative, C. Allen Wortley's Winter Wanderings: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p837-854.

Strength Growth as Chemo-Plastic Hardening in Early Age Concrete, Franz-Josef Ulm and Olivier Coussy, EM Dec. 96, p1123-1132.

Use of Fibers to Improve Cracking Characteristics of Concrete, P. Balaguru, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p183-192.

Application of the Model SPECIES to Kaneohe Bay, Oahu, Hawaii, Clifford J. Hearn, (Estuarine and Coastal Mod-eling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p355-366.

Central Pacific Hurricanes-What Do We Know? Thomas A. Schroeder, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p291-292.

Comparison of Near-Field Dilutions Derived from In Situ Measurements and Simulated Dilutions at the Sand Island Sewage Outfall Plume, HI, A. A. Petrenko, B. H. Jones, T. D. Dickey and P. J. W. Roberts, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3886-3891.

water, Unenchayya Bathala, ed., 1990), p.886-3891.
The Fate of Pathogenic Organisms in Mamala Bay, John P. Connolly and Alan F. Blumberg, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4090-4095.
Honolulu's Street Relief, Gregory L. Raines, P.E. and James K. Honke, P.E., CE Sept. 96, p70-72.
An Integrated Coastal Management Plan for Mamala Bay, Donald R. F. Harleman and Susan F. Murcott. (North

Donald R. F. Harleman and Susan E. Murcott, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4096-4100.

The Mamala Bay Study, Oahu, Hawaii: Introduction, Ger-ald T. Orlob, Camilla M. Saviz, Jerry R. Schubel and Rita R. Colwell, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p4101-4106.

Near Field Modeling, Philip J. W. Roberts, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3892-3897.

Observations of Tidal Circulation in Mamala Bay, Hawaii, Peter Hamilton, (North American Water and Environment Congress & Destructive Water Chenchay Buth.

ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3880-3885.

Transport Modeling of the Coastal Waters of Oahu, Hawaii, Alan F. Blumberg and John P. Connolly, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4084-4089.

Haynes, John J., Simpson, Willard E., Jr. ASCE's Texas Section Loses Two of Its Past Presidents, CE July 96, p72.

Hazardous materials

Construction Through Crude Oil, Kyle R. Ott, Richard J. Switalski and Dale J. Sadowski, CE Feb. 96, p56-59.

Switatski and Daie J. Sadowski, C.E. Feb. 96, p36-59. Earthquake-Initiated Hazmat Releases: An Assessment, Michael K. Lindell and Ronald W. Perry, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p237-238.

Environmental Site Investigation Guidance Manual (M&R No. 83), Task Committee on Hazardous Waste Site As-sessment Manual of the Environmental Engineering Division of the American Society of Civil Engineers, (Yee K. Cho, chmn.), 1996, 0-7844-0096-2, 141pp.

Evaluating the Potential of ATT Technologies in Hazardous Evaluating the Potential of ATT Technologies in Hazardous Materials Transportation Risk Management, Konstan-tinos G. Zografos and George M. Vasilakis, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi. ed., 1996), p480-484. Minimum Risk Route Model for Hazardous Materials, B. Ashtakala and Lucy A. Eno, TE Sept /Oct. 96, p350-357.

Secondary Containment Design Practices, Charles R. Tay-lor, Jr., (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p547-552

System Design for Safe Robotic Handling of Nuclear Materials, William Drotning, Walter Wapman, Jill Fahrenholtz, Howard Kimberly and Joel Kuhlmann, (Ro-

botics for Challenging Environments, Laura A. Demsetz, ed., 1996), p241-247. Training of Highway Maintenance Personnel for Hazmat Incident Response, Eugene R. Russell, Sr., El Apr. 96,

Turbulent Transport Effect on Hydrocyclone Performance, Michio Nonaka and Hisami Tashiro, EE Apr. 96, p306-

Hazardous waste

Hazardous waste Coping with EPA's Storm Water Permit for Hazardous Waste Facilities, Industrial Landfills, Wastewater Treat-ment Plants, and Recyclers, James P. Amick, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2631-2635. Energy from Paper Sludge: Criteria and Hazardous Air Pol-lutants, Amy K. Zander, Thomas L. Theis and Michael Brennan, EE Aug. 96, p758-760.
Modeling Kinetics of Illuminated and Dark Advanced Oxi-

Modeling Kinetics of Illuminated and Dark Advanced Oxi-dation Processes, Andrew Hong, Mark E. Zappi, Chiang Hai Kuo and Donald Hill, EE Jan. 96, p58-62. New Jersey Fund Offers Help, H. Michael Sklar, CE June

96, p27.

Paradox at the rocky Mountai Arsenal, Colorado: Benefits of Applied Research, Robert D. Jarrett, Joseph P. Capesius and Mark A. Gonzalez, (North American

P. Capesius and Mark A. Gonzalez, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1553-1554.
Reductive Pyrolysis for the Destruction of Chloromethane:
A Reaction Pathway Model Based on Thermodynamic and Thermokinetic Considerations, Varadarajan Ravindran, Massoud Pirbazari, Badri N. Badriyha and Sidney W. Benson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1367-1372.

Solid Waste and Materials Systems Alternatives Study Summary, John R. Kasper and Stephen T. Smith, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p374-378.

Stabilization/Solidification of Hazardous Wastes Using Fly Ash, Jafar Parsa, Stuart H. Munson-McGee and Robert

Steiner, EE Oct. 96, p935-940.

Understanding How to Maintain Compliance in the Current Regulatory Climate, Dale T. Bignell, Jeffry L. Newman and Ronald D. Burns, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Understanding Why Stakeholders Matter, Richard C. Eschenbach and Ted G. Eschenbach, ME Nov/Dec. 96, p59-64.

Hazardous waste sites Brownfields Boom, Monica Maldonado, CE May 96, p36-

A Geostatistically-Based Method to Assess Potential Haz ardous Waste Sites Using Hard and Soft Data, Morris M. Dirnberger and Richard W. Stephenson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p826-847.

Ground and Airborne Magnetic and Electromagnetic Surveys at a Hazardous Waste Site, Jonathan E. Nyquist, Les P. Beard and Don Johnson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p1-

13.

Magnetic Investigation of a Simulated Hazardous Waste Site, Susan E. Burns and Kenneth E. Lemons, (Uncer-

Site, Susan E. Burns and Kenneth E. Lemons, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p813-825.

Mixing Influences on Cement-Based Waste Forms, James B. Stong, James R. Weber and Kevin J. Hull, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1597-1601.

Modeling the Behavior of LNAPLs Under Hydraulic Flushing, S. Ratnam, P. J. Culligan-Hensley and J. T. Germaine, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p595-606.

Monitor Well Design, Installation, and Documentation at Hazardous and/or Toxic Waste Sites, U.S. Army Corps

of Engineers, 1996, 0-7844-0150-0, 51pp.

Significance of Geologic Features on the Contaminant Mi-gration from Landfill Sites, Rao Nivargikar and Thomas Voss, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p988-993.

Site Characterization Process Saves Time and Money, ET

Mar./Apr. 96, p1,4.

CHILL, 20, PL/S.
Use of Fuzzy Logic and Similarity Measures in the Risk Management of Hazardous Waste Sites, Sunil Donald and Timothy J. Ross, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p376-382.

Use of SID Method for Site Characterization, P. W. Jayawickrama, K. G. K. Jayakody and K. A. Rainwater, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p897-911.

330

Building Collapse Rescue Engineering, Sólveig Thorvald, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p41-42.

and Rief M. Chung, ed., 1997), p41-42.
The Caribbean Disaster Mitigation Project: Introducing Disaster Mitigation in Highly Vulnerable Small Islands, Keith B. Ford and Jan C. Vermeiren, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p29-30.

Coastal Flood Hazard Analysis Using Digital Photogram-metry, Margery Overton, Cheryl Petrina and John Fisher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p187-188.

Combined Structural and Non-Structural Flood Hazard Mitigation, Barbara D. Hayes, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p25-26.

Community Involvement in Hazard Mitigation, Subodh A. Kumar, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p282.

Comparison of Hazard and Acceptable Risk Criteria, David S. Bowles, Loren R. Anderson and Terry F. Glover, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p346-366.

A Continuing Education Program Involving A Partnership Among Building Designers, Constructors, and Code Enforcers, Michael A. Cassaro, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p92-96.

Creating of a Data Base of Small Earth Dam for Natural Disaster Reduction, Shigeru Tani, Kenichi Ushikubo and Souji Harima, (Natural Disaster Reduction, George W.

Souji Harnina, (vanitral Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p72-73.
Damage Analysis of a Water Distribution System Subject to Natural Hazards, James Bates, Matthew J. Cassaro and Michael A. Cassaro, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p357-358.

Development of Flood Hazard Boundary Information, R. Cris Hughes and Gregory W. Lowe, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p365-366.

Development of Natural and External Man Induced Design Code Requirements Applicable to Special Facilities, John D. Stevenson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p149-150

DSHA Versus PSHA for Critical Structures, Ellis L. Krin-

Distrix Versus Park for Crincal Structures, 2018 L. Krintizsky, Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p241-242. Earthquake-Initiated Hazmat Releases: An Assessment, Michael K. Lindell and Ronald W. Perry, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p237-238.

Embedded Sensors for Improved Early-Warning Emergen-CRESPONSE to Damaged Structures, Peter L. Fuhr, Dryver R. Huston and Edward Von Turkovich, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p39-40.

Estimate the Hazards of Bank Burst in the Lower Yellow River, Changxing Shi and Qingchao Ye, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p920.

Flood Hazard Zonation in a Multihazard Environment, James E. Beavers and Frank H. Thomas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p345-346.

A Framework for Estimating Losses Due to Hurricane Extreme-Winds, Gregory L. F. Chiu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p287-288.

Geo-data System for Landslide Hazard Assessment, Cas-

sandra T. Rogers, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p70-

GIS Gains Ground as Disaster Mitigation Tool, CE Sept. 96, p19-20.

Hazard Assessment of Debris Fans at Rico, Colorado, B. Christopher Wilbur, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1432-1445.

Hazard Mitigation in the Built Environment, Susan Dowty, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p383.

Improving the Effectiveness of Post Earthquake Investigations, Susan K. Tubbesing, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p327-328.

Institutional Issues in Natural Hazard Mitigation, Daniel J. Alesch, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p367-368.

Insurance and Damage Mitigation - Incentive or Disincentive, George R. Walker, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p195-196.

Integrated Planning Decision Support System (IPDS), Mario Mejía-Navarro and Luis A. García, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p189-190.

Integrated Planning Decision Support System (IPDS) Application: Glenwood Springs, Colorado, Mario Mejfa-Navarro and Luis A. García, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p386-387.

Investigation of Some Heavy Flood Hazards in Small Alpine Catchments in Austria, A. Watzinger, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p715.

Joint Effort by ASCE and FEMA to Develop Flood Hazard Mitigation Standards, Clifford E. Oliver and Harry B. Thomas, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p337-338.

A Knowledge-Based System For International Hurricane Risk Management, Surya K. Gunturi, Chris Austin, Aida RiveraMarzan, Ping Zhang, John Lieberman, Paul Van-derMarck, Mark Broido and Auguste C. Boissonnade, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p15-16.

Life-Cycle Cost Analysis with Natural Hazard Risk, Steph-anie E. Chang and Masanobu Shinozuka, IS Sept. 96,

Meteoroid Hazards in the Lunar Environment, Frank J. Rooney and John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1999). 1996), p653-662.

Mitigation of Flood Hazard on Alluvial Fans, Julianne J. Miller and Richard H. French, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2324-2329.

More Ethical Practice, Not Training, Dan Feger, P.E., CE Nov. 96, p38,40.

Mortality and Morbidity Patterns Associated with the Octo-ber 12, 1992 Egypt Earthquake, Josephine Malilay, Ibrahim Fayez Elias, David Olson, Thomas Sinks and Eric Noji, (Natural Disaster Reduction, George, W. Housner, ed. and Riley M. Chung, ed., 1997), p266-268.

Multi-Hazard Risk Assessment of Lifelines: Methodologies and Research Needs, Erik Vanmarcke and Ricardo Palma, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p359-360.

Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997, 0-7844-0153-5, 432pp.

Natural Hazard Zonation, Walter W. Hays, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p361-362.

Natural Hazards Mitigation in South Carolina, Charles Lindbergh and Maurice R. Harlan, (Natural Disaster Re-duction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p86-87.

Optimum Risk Management with Uncertain Hazard and Vulnerability Information, Lawrence A. Twisdale and Peter J. Vickery, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p88-

Peru's Program for Disaster Mitigation 1992-1995, Julio Kuroiwa and Dusan Zupka, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p84-85.

Practitioners' Forum, AE Sept. 96, p85-87.

A Rapid Barrier Island Hazard Mapping Technique as a Basis for Property Damage Risk Assessment and Mitiga-tion, David M. Bush, William J. Neal and Orrin H. Pilkey, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p185-186.

Reader Dismayed, Roy Gittings, CE Dec. 96, p30-31.

Reducing Glacial-Lake Outburst Hazards in the Khumbu Himal, Richard Kattelmann and Teiji Watanabe, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p258-259.

Risk Assessment of Rockfall Hazard at Horse Mesa Dam: A Case History, Peter M. Kandaris and Kenneth M. Euge, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1402-

Runoff Forecasting Using a Local Approximation Method, A. W. Jayawardena, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2535.

Space Debris, Trisha Chhabildas, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1270-1273.

Space Debris Hazard to Defense Systems, Gregory H. Canavan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p20-25.

Tornado and Hail Risk Modeling: An Event Based Approach, Khalid I. Bouzina, Mohan Sharma, Auguste Boissonnade and Surya Gunturi, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p19-20.

Toward Risk-Consistent Wind Hazard Design/Mitigation Criteria Using Probabilistic Methods, Lawrence A. Twis-dale, Peter J. Vickery and Andrew C. Steckley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p256-257.

Train/Vehicles Wind-Induced Hazard and Its Mitigation, Masaru Matsumoto and Tatsuo Maeda, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p131-132.

Use of GIS Mapping to Illustrate the Sensitivity of Wind Hazard Insurance Loss Estimation to Modeling Parameters, Andrew Steckley, Lawrence A. Twisdale and Peter J. Vickery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p201-202.

Volcanic Hazards and Aviation Safety, Thomas J. Casadevall, Theodore B. Thompson and John W. Ewert, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p363-364.

Wind Hazards for Low-Rise Structures and Single Family Dwellings: A Possible Mitigation, H. W. Tieleman, T. A. Reinhold and M. R. Hajj, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p389-390.

Wind Hazards in the United States, Peter J. Vickery, Law-rence A. Twisdale and Andrew C. Steckley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p139-140.

With Respect to Coasts, Darryl Hatheway, CE Dec. 96,

Filling of Pipelines with Undulating Elevation Profiles, Chyr Pyng Liou and William A. Hunt, HY Oct. 96, p534-539.

Physical Modeling to Determine Head Loss at Selected Surcharged Sewer Manholes, K. H. Wang, T. G. Cleve-land, C. Towsley and D. Umrigar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3835-3840.

Theories of Ditch Drainage in Layered Anisotropic Soil, G. Barua and K. N. Tiwari, IR Nov./Dec. 96, p321-330.

Artificial Gravity, Zachary Zutavern, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1315-1318.

Critical Evaluation of Risk Assessment: A Look from the Inside Out, Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996),

Development of Worker Safety in the Environmental Field in the Past 25 Years, David R. Smith, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), 942-54.

Environmental Worldviews and Water Resources, Robert E. O'Connor, Richard J. Bord and Ann Fisher, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p10-18.

A Framework for Sanitation and Health Risk Assessment, Charles G. Gunnerson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2390-2395.

Hazard Ranking of Landfills Using Fuzzy Composite Programming, Michael E. Hagemeister, David D. Jones and Wayne E. Woldt, EE Apr. 96, p248-258.

Health Risk Sensitivity to Variable and Uncertain Parameters, Reed M. Maxwell and Susan D. Pelmulder, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1285-1290.

Management of Contaminated Groundwater Using Natural Attenuation, David F. Laney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2011-2020.

Medical-Technical Problems of Human Protection, Victor S. Koscheyev, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1002-

Microgravity's Effects on the Muscular System of the Human Body, Susie Newton, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1298-1302.

Regional Groundwater Management with Health Risk As-sessment, Susan D. Pelmulder and Yung-Hsin Sun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

The South Bay Ocean Outfall, Frank X. Collins, Gregory W. McBain, Jon Y. Kaneshiro, Luciano Meiorin and Lar-ry Stout, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2044-2049.

Space Habitat Environmental Health Risk Assessment and Management, Gerald J. Smith and George W. Morgenthaler, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1008-1019.

Development of Worker Safety in the Environmental Field in the Past 25 Years, David R. Smith, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p42-54.

Heat of Hydration of Pure Cement Compounds with Steam, Wei-Ming Lin, T. D. Lin, Chao-Lung Hwang and Yaw-Nan Peng, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p585-591.

Heat and Moisture Absorption Effects in Composites; The-ory and Experiments, A. Szekeres and R. A. Heller, (Ma-terials for the New Millennium, Ken P. Chong, ed., 1996), p63-72.

High-Resolution, Short-Term Lake Forecasts for Lake Erie, John G. W. Kelley, David J. S. Welsh, Keith W. Bed-ford, David J. Schwab, Jay S. Hobgood and Brendon Hoch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p367-378.

An Update on Surface Renewal Estimation of Evapotranspiration, R. L. Snyder, D. Spano, P. Duce and K. T. Paw , (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p430-435

Heat transfer

Drift Apex Temperature Distributions due to Cylindrical Heat Sources, W. G. Culbreth and J. J. Ventresca, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p435-437.

Effect of Repository Underground Ventilation on Emplacement Drift Temperature Control, Hang Yang, Yiming Sun, Daniel G. McKenzie and Kalyan K. Bhattacharyya, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p417-419.

HPS: A Space Fission Power System Suitable for Near-Term, Low-Cost Lunar and Planetary Bases, Michael G. Houts, David I. Poston and William A. Ranken, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p973-983.

Implementation of Runtime Visualization for Tough2, H. Xin Yang and Srikanta Mishra, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p308-309.

Long Term Prediction of Far-Field Heat Conduction, Bahram Nassersharif and Lixing Ma, (High Level Radio-active Waste Management, Technical Program Committee, 1996), p438-441

Medical-Technical Problems of Human Protection, Victor S. Koscheyev, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1002-

Natural Ventilation of an Exothermic Waste Repository, George Danko and Steven Saterlie, (High Level Radioac-tive Waste Management, Technical Program Committee, 1996), p426-428.

Thermal Management with Ventilation, George Danko,
Thomas A. Bucheck, John J. Nitao and Steven Saterlie, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p420-422.

Heat transfer coefficient

Mixed Convection Heat Transfer Coefficients for Horizon-tally Emplaced Waste Packages, J. J. Ventresca, W. C. Culbreth and C. Lawson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p451-453.

Modeling Ice-Cover Melting Using a Variable Heat Trans-fer Coefficient, Semaan Sarraf and Xiu Tao Zhang, EM Oct. 96, p930-938.

Heat treatment

Corrosion-Resistant Steel Reinforcing Bars, David Darwin, Carl E. Locke, Jr., Matthew R. Senecal, Shawn M. Schwensen and Jeffrey L. Smith, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p482-491.

Mechanical Behavior of Confined Reactive Powder Con-cretes, Éric Dallaire, Olivier Bonneau, Mohamed Lachemi and Pierre-Claude Aïtcin, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p555-563.

Mechanical Properties of Reinforcing and Prestressing Steels after Heating, I. Cabrita Neves, João Paulo C. Ro-drigues and António de Pádua Loureiro, MT Nov. 96,

p189-194

Surface Reactivity of High Level Waste Matrices Charac-terized by Radiometric Emanation Method, Vladimír Balek, Zdeněk Málek and A. Clearfield, (*High Level Ra*dioactive Waste Management, Technical Program Committee, 1996), p474-476.

Heated water discharge

Data Analysis for Computer Modeling of Thermal Dis-charges, Chun-Hou Orr and Shu-Fang Peng, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3758-3763.

- Cold Weather Testing of Outdoor Gas-Fired Heaters, De-bendra K. Das, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p410-423
- Computerized I&M Programs for Oil-Fired Space Heating Boilers, Alexander P. Economopoulos, EY Aug. 96, p61-74
- Postoccupancy Indoor Environmental Quality Evaluation of an Institutional Building, Brian A. Rock, P.E. and Craig A. Hillman, AE Sept. 96, p88-94.

Radiation Hydrodynamics of a Slightly-Submerged Body, P. Ananthakrishnan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p832-835.

Environmental Impacts of Autoclaved Cellular Concrete, M. C. Latona, R. D. Neufeld, L. E. Vallejo, W. Hu and C. Kelly, (Engineered Contaminated Soils and Interac-tion of Soil Geomembranes, Jay N. Meegoda, ed., Luis E.

ton of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p57-69.
Evaluation of Lead-Bearing Phases in Municipal Waste Combustor Fly Ash, J. F. Sandell, G. R. Dewey, L. L. Sutter and J. A. Willemin, EE Jan. 96, p34-40.
Flushing of a Pb(II) Contaminated Soil Using HCl, EDTA, and CaCl₃, Brian E. Reed, Patrick C. Carriere and Roder-

and CaC15, Orlan E. Reed, Patrick C. Carriere and Roberic Moore, EE Jan. 96, 948-50.

From Wasteland to Paradise, CE Feb. 96, p10,12.

Geochemical Modeling of Lead in Vadose Zone, K. V. Nedunuri, R. S. Govindaraju, A. P. Schwab and L. E. Erickson, (North American Water and Environment Control gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1221-1226.

Modeling Bacterial Decay Coefficient During SSDML Process, T. R. Sreekrishnan, R. D. Tyagi, J. F. Blais, N. Meunier and P. G. C. Cambell, EE Nov. 96, p995-1002.

Multiphase Distribution of Cohesive Sediments and Heavy Metals in Estuarine Systems, Parmeshwar L. Shrestha and Gerald T. Orlob, EE Aug. 96, p730-740.

Operational Strategy for Metal Bioleaching Based on pH Measurements, Y. G. Du, R. D. Tyagi and T. R. Sreekrishnan, EE July 95, p527-535.

Retention of Multiple Heavy Metal Ions by Fly Ash, A. Sridharan, N. S. Pandian and C. Rajasekhar, American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996, p. 1608-1613. Treatment of Metal Industrial Wastewater by Fly Ash and Cement Fixation, C. H. Weng and C. P. Huang, EE Nov. Dec. 94, p1470-1487.

Changes in Bacterial Aerosols with Height Above Aeration Tanks, Bernard Sawyer, K. C. Rao, Parnell O'Brien, Gil-bert Elenbogen, David R. Zenz and Cecil Lue-Hing, EE May 96, p368-373.

Corrections, CE Nov. 96, p41.

How High Is That Mountain? Tom Buchanan, CE Oct. 96,

p39.
Tall, Taller, Tallest, Norman D. Witteveen, P.E., CE Oct. 96, p39.

Herbicides
Alachlor Transport in Laboratory Soil Columns, Mutasem El-Fadel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1999-2004.

Treatability of s-Triazine Herbicide Metabolites Using Powdered Activated Carbon, Craig D. Adams and Tam-my L. Watson, EE Apr. 96, p327-330.

Heuristics

Application of Discrete Event Methodologies to Urban Multimodal Transportation Systems, Angela Di Febbraro and Simona Sacone, (Applications of Advanced Technologies in Transportation Engineering, Yorgos Stephanedes, ed. and Francesco Filippi, ed., 19 p154-158.

Design Heuristic for Globally Minimum Cost Water-Distribution Systems, G. V. Loganathan, J. J. Greene and T. J. Ahn, WR Mar/Apr. 95, p182-192.

A Heuristic Model for Particle Entrainment into Suspen-sion, Yarko Niño and Marcelo García, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p812-815.
Reliability-Based Design of Water-Distribution Systems,

Rajesh Gupta and Pramod R. Bhave, EE Jan. 96, p51-54.

High frequency excitations

HF Interference in Space from Terrestrial Sources, Marisa McCoy, John P. Basart and Monte Taylor, (Engineeri Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p854-860.

High occupancy vehicles HOV Fix on I-66, Peter F. Bonaccorsi, CE July 96, p64-66 Researchers Plan First Test of Automatic Highways, CE Nov. 96, p24

High strength bolts

Field Study of Pretension in Large-Diameter A490 Bolts, Charles J. Oswald, Robert J. Dexter and Steven K. Brauer, BE Aug. 96, p121-126.

High strength concretes

Applications of High-Performance Concrete in Columns and Piers, S. K. Ghosh, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p385-395. Architect Chooses Slenderwall for Gothic Church, CE July

96, p84.

Behavior of High-Strength Concrete Beam-Column Joints, Michael E. Kreger and Elias I. Saqan, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p420-430.

Behavior of Two Long-Span High Strength Concrete Pre-stressed Bridge Girders, Theresa M. Ahlborn, Carol K. Shield and Catherine W. French, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p141-152.

Computational Modeling of Early Age HPC, Rob ter Steeg, Jan Rots and Ton van den Boogaard, (Worldwide Ad-vances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p542-553.

Constitutive and Structural Behavior of Siliceous High-Strength Concretes After a Thermal Cycle at High Temperature, Roberto Felicetti and Pietro G. Gambarova, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p583-592.

Constitutive Relationships of Mortar-Aggregate Interfaces in High Performance Concrete, Oral Büyüköztürk and Brian Hearing, (Worldwide Advances in Structural Concrete and Masonry, A. E. McCabe, ed., 1996), p452-461. Schultz, ed. and S. L.

Damage Caused by Projectile Impact to High Strength Concrete Elements, A. N. Dancygier, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p484-495.

The Effect of Moisture on Spalling of Normal and High Strength Concretes, N. Khoylou and G. L. England, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

Fast Track Basics, James D. Grove and Kevin B. Jones, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p466-474.

High Performance Concrete Applications in Bridge Structures in Virginia, Celik Ozyildirim, Jose Gomez and M. Elnahal. (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p153-163.

High Performance Concrete for Giles Road Bridge, Amin Einea, Xiaoming Huo, Mohsen Saleh and Maher K. Tadros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p133-140.

High Performance Highway Bridge Substructures, Robert W. Barnes and John E. Breen, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p176-187.

High-Strength, Rapid-Setting Concrete with Blended Cement, Billy D. Neeley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1627-1636.

Influence of Steel Fibers on Design Stress-Strain Curve for High-Strength Concrete, L. Taerwe and A. Van Gysel, EM Aug. 96, p695-704.

Influence of the Yield Strength of Steel Fibres on the Toughness of Fibre Reinforced High Strength Concrete, Lucie Vandewalle, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p496-505.

Lateral Load Behavior of High Strength Fiber Reinforced Concrete Columns, Ramesh Nagarajah and David H. Sanders. (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p396-407.

Mechanical Behavior of Confined Reactive Powder Concretes, Eric Dallaire, Olivier Bonneau, Mohamed Lachemi and Pierre-Claude Aïtcin, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p555-563.

Permeability of High-Strength Concrete Containing Low Cement Factor, Tarun R. Naik, Shiw S. Singh and Mohammad M. Hossain, EY Apr. 96, p21-39.

Progress in Chemical Admixtures: Where Are We? Mosongo Moukwa, CE Mar. 96, p6.

Reliability Evaluation of Stender HSC Columns, Sofia M. C. Diniz and Dan M. Frangopol, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p242-245.

Reliability of High-Strength Concrete Columns, Sofia M. C. Diniz and Dan M. Frangopol, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p213-222.

San Angelo High Performance Concrete Bridge in Texas, Mary Lou Ralls, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L.

McCabe, ed., 1996), p164-175.

Seismic Analysis of Concrete Towers of the San Diego-Coronado Bridge and Evaluation of a High Performance Concrete Retrofit, Robert A. Dameron and Daniel R. Parker, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p530-541.

Size Effects in the Fracture of Fiber Reinforced Materials, Roberta Massabó and Alberto Carpinteri, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p462-473.

Some Phenomenological Aspects of High Performance Concretes, and their Consequences for Numerical Analysis, Ravindra Gettu, Ignacio Carol and Pere C. Prat, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p506-517.

Strain Localization in Confined High-Strength Concrete Columns, Daniel Cusson, François de Larrard, Claude Boulay and Patrick Paultre, ST Sept. 96, p1055-1061.

Stress-Strain Relationship of High-Strength Concrete in Compression, T. H. Wee, M. S. Chin and M. A. Mansur, MT May 96, p70-76.

Structural Behaviour of High Strength Concrete Columns, Robert Park, (Worldwide Advances in Structural Con-crete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p365-374.

Telling Florida's Water Story, David W. Landis and Blair K. Hanuschak, CE Feb. 96, p40-43.

Ten Year Performance of a High Performance Concrete Used to Build Two Experimental Columns, Éric Dallaire, Michel Lessard and Pierre-Claude Aitcin, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p375-384.

Tensile Response of Reinforced High Strength Concrete Members, S. P. Shah and C. Ouyang, (Worldwide Ad-vances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p431-442.

High strength steel

Barriers to the Use of High Performance Steel in I-Girder Highway Bridges, Richard Sause, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p108-115.

Bridges of the 21st Century with High Performance Steel, Wagdy G. Wassef, John M. Kulicki and Philip A. Ritchie, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Moham-

madi, ed., 1996), pl 16-124.

Development of High Performance Steels for Commercial and Military Applications, Eric M. Focht and Thomas W. Montemarano, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p91-99.

Monammadi, ed., 1996), p91-99.
Material Development for High-Performance Bridge Steels,
J. M. Chilton and S. J. Manganello, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p100-107.
A Probabilistic Framework for Brittle Fracture Assessments of Structures —Constraint and Ductile Tearing Effects, Claudio Ruggieri and Robert H. Dodds, Jr., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p878-881. p878-881

High technology

Real-Time Construction Staking, Don K. Nasland and David Paul Johnson, CE June 96, p46-49. Translucent Structural Beacon, Drew A. Norman, CE Feb.

96, p50-52.

Highway accident potential

Automated On-Scene Management of Traffic Accidents, George M. Vasilakis and Yorgos J. Stephanedes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p292-295.

Design of a Freeway Control System Based on Artificial Intelligence Methods for Travel Time Detection, Reinhart D. Kühne, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p439-443.

Guardrail End-Types, Vehicle Weights, and Accident Severities, J. L. Gattis, M. S. Alguire and S. R. K. Narla,

TE May/June 96, p210-214.

The Highway Safety Expert System: A New Approach to Safety Programs, Tarek Sayed and Frank Navin, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p346-362.

Impact of Freeway Geometric and Incident Characteristics on Incident Detection, H. M. Al-Deek, S. S. Ishak and A.

A. Khan, TE Nov./Dec. 96, p440-446.

Medical Service Routing and Location Analysis for Free-way Emergency Needs, Kevin P. Hwang, (Applications of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p281-285.

Preliminary Features of a Decision Support System for Incident Detection, John Hourdakis and Athanassios P. Chassiakos, (Applications of Advanced Technologies in Transportation Engineering, Vorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p227-232.

A Sequential Hypothesis-Testing Based Freeway Incident Response Decision-Making System, Samer M. Madanat, Hua-Liang Teng and Pen-Chi Liu, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p286-291.

Single-Station Incident Detection Algorithm (SSID) for Sparsely Instrumented Freeway Sites, Charalambos N. Antoniades and Yorgos J. Stephandees, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p218-221.

Wavelet Transforms for Incident Detection on Motorways, Simon Cohen and Bian-shun Jing, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p.222-226.

Highway construction

Aggregates for Construction from Vitrified Chromium Contaminated Soils, Jay N. Meegoda, W. Kamol-pornwijit, David A. Vaccari, A. S. Ezeldin, L. Walden, W. A. Ward, B. A. Noval, R. T. Mueller and S. Santora, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p31-46.

The Analysis of Freeway Reconstruction Impacts on Travellers, Vittorio Astarita, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

p460-464.

Behavior of Crumb Rubber Modified Hot Mix Asphalt, Anil Misra, H. P. Niu and Yi-Herng Lee, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p144-153

Buying Wetlands, CE Aug. 96, p20.

Challenges of an Advance Utility Contract for a Major Highway Widening Project in Norfolk, Virginia, Gary M. Hart, Peter S. Fortin and Gary L. Heisler, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p348-355

Concept Ecology Integrated Project Engineering and Envi-ronment; Relating a Project to the Surroundings, David S. Reutter, Roger J. Menendez, Peter J. Bottone and Robert L. Whitman, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p753-758.

Evaluating Efficiency of Rock Blasting Using Data-Envelopment Analysis, James Odeck, TE Jan/Feb. 96,

Evaluation of Engineering Properties of Problematic Soils in Highway Construction, W. Virgil Ping, Sean McDonald and Robert K. H. Ho, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p721-730.

Green Light, John Casey, CE May 96, p56-59

HOV Fix on I-66, Peter F. Bonaccorsi, CE July 96, p64-66. An Irresistible Offer, Max D. Crumit, P.E., Wafic M. Ar-noush, P.E. and Scott L. Montgomery, P.E., CE Aug. 96, p40-43.

Largest California Highway Design-Build Project Opens, CE Oct. 96, p26,28.

Major Brooklyn Interchange Being Upgraded, CE July 96,

Modeling the Blue Ridge, CE Aug. 96, p20,22.

New Public/Private Highway, CE Aug. 96, p10.

Ohio Transportation Goes to the Mat to Protect a Creek, CE Mar. 96, p82.

Shakwak Highway Project—Construction Challenges, Robin Walsh, Donaldson MacLeod and Dennis Cook, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p640-651.

Total Bids Only, CE Mar. 96, p24.

Use of Remediated Petroleum Contaminated Soils in Highway Construction, Jay N. Meegoda, Robert T. Mueller and Frank Palise, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p1-16.

Women Engineers Take High Road in California's Transportation Scene, NE July 96, p11.

Geometric Design of Compound Horizontal Curves, B. K. Roy, TE July/Aug. 94, p674-683.

Human Factors in Highway Geometric Design, George Kanellaidis, TE Jan./Feb. 96, p59-66.

Intersection of Spiral Curve with Circle, Olcay Öztan and Orhan Baykal, SU Feb. 95, p3-12.

Largest California Highway Design-Build Project Opens, CE Oct. 96, p26,28.

Highway engineering

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Comparison of Load Restriction Timings Determined Using FHWA Guidelines and Frost Tubes, Nazli Yesiller, Craig H. Benson and Peter J. Bosscher, CR Mar. 96, p6-24.

Influence of Support Stiffness for Cantilever Beams Subjected to Modulated Filtered White Noise, Gongkang Fu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p689-692.

Highway environmental impact Immobilization of Metals and Solids Transported in Urban Pavement Runoff, John Sansalone, Steven Buchberger and Joseph Koran, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3115-3120.

Water Quality Mitigation for the San Joaquin Hills Trans-portation Corridor, Stanley D. Polasik, John H. Knutson and James H. Lenhart, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3109-3114.

Highway improvements

Evaluating Earth Retaining Systems, CE Aug. 96, p10.

Negative Binomial Analysis of Intersection-Accident Fre-quencies, Mark Poch and Fred Mannering, TE Mar/Apr. 96, p105-113.

Highway maintenance

The Analysis of Freeway Reconstruction Impacts on Trav-ellers, Vittorio Astarita, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p460-464

Evaluation of Road Maintenance Automation, Arif Osmani, Carl Haas and W. Ron Hudson, TE Jan./Feb. 96, p50-58.

Mechanistic-Probabilistic Vehicle Operating Cost Model, Curtis F. Berthelot, Gordon A. Sparks, Terry Blomme, Lyle Kajner and Mark Nickeson, TE Sept/Oct. 96, p337-341.

Rough Road Ahead, CE Aug. 96, p10.

Training of Highway Maintenance Personnel for Hazmat Incident Response, Eugene R. Russell, Sr., El Apr. 96,

A Wheeled Mobile Robot for Automated Pavement Crack Sealing, K. J. Mueller, D. Hong and S. A. Velinsky, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p178-184.

Highway management

Modeling Freeway Lane Changing Behavior, Haris N. Koutsopoulos, Moshe E. Ben-Akiva, Rabi G. Mishalani and Kazi I. Ahmed, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p455-459

Multimedia Data Management in a Highway Information System, Kelvin C. P. Wang and Xuyang Li, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-

nowsky, ed., 1996), p607-612.

Highway planning Human Factors in Highway Geometric Design, George Kanellaidis, TE Jan./Feb. 96, p59-66.

An Automatic System for the Definition of the Setting Rules for Speed Diagrams, Francesco Saverio Capaldo and Rodolfo Grossi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos Stephanedes, ed. and Francesco Filippi, ed., 19 p193-197

Design and Analysis of Approach Terminal Sections Using Simulation, John D. Reid, Dean L. Sicking and Gene W.

Paulsen, TE Sept./Oct. 96, p399-405.

DGT Architecture for Traffic Data Management Systems, Adrián Marín Puigpelat and Jesús López López, (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p238-242.

Guardrail End-Types, Vehicle Weights, and Accident Seventies, J. L. Gattis, M. S. Alguire and S. R. K. Narla, TE May/June 96, p210-214.

The Highway Safety Expert System: A New Approach to Safety Programs, Tarek Sayed and Frank Navin, (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p346-362.

Impact of Freeway Geometric and Incident Characteristics on Incident Detection, H. M. Al-Deek, S. S. Ishak and A. A. Khan, TE Nov./Dec. 96, p440-446.

Major Brooklyn Interchange Being Upgraded, CE July 96, p12.

Medical Service Routing and Location Analysis for Free-way Emergency Needs, Kevin P. Hwang, (Applications of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p281-285.

Preliminary Features of a Decision Support System for Incident Detection, John Hourdakis and Athanassios P. Chassiakos, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p227-232.

A Sequential Hypothesis-Testing Based Freeway Incident Response Decision-Making System, Samer M. Madanat, Hua-Liang Teng and Pen-Chi Liu, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p286-291.

Single-Station Incident Detection Algorithm (SSID) for Sparsely Instrumented Freeway Sites, Charalambos N. Antoniades and Yorgos J. Stephanedes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p218-221.

Use of OMT in a Transport Human Engineering Prospect, T. Bellet and H. Tattegrain-Veste, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p363-367.

Wavelet Transforms for Incident Detection on Motorways, Simon Cohen and Bian-shun Jing, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p222-226.

Highway structures

Corrosion-Resistant Steel Reinforcing Bars, David Darwin, Carl E. Locke, Jr., Matthew R. Senecal, Shawn M. Schwensen and Jeffrey L. Smith, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p482-491.

Dynamic and Quasi-Static Design of High-Rise Buildings Subjected to Wind Loads, Okey Onyemelukwe and Guil-lermo Claure, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p141-142.

Highway transportation

Analysis of Data Collected from Two Italian Freeways, E. Volta, T. Vernazza, C. Ardemagni and S. Grosso, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p243-247.

Applications of Predictive Numerical Simulations Using Calibrated Macroscopic Traffic Flow Models, Ronald Kates, Marcus Hoops and Hartmut Keller, (Applications of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p394-397.

Dynamic Vehicle Allocation Under Real Time Information: Operational Considerations and Potential Efficiencies, Amelia C. Regan, Hani S. Mahmassani and Patrick Jaillet, (Applications of Advanced Technologies in Transpor-tation Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p690-694.

An Enhanced Kalman Filtering Algorithm for Dynamic Freeway OD Matrix Estimation and Prediction, Samer Madanat, James Krogmeier and Shou-Ren Hu, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p423-428.

Outage Probability in Mobile Radio Communications in a Three-Dimensional Space, Silvano Pupolin, Luciano Tomba and Michele Zorzi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p271-275

p271-275.
Technologies for a Multimedia Based Highway Information System in the Gigabit Networking Environment, Kelvin C. P. Wang, Robert P. Elliott and James P. Turner, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p490-499.
The Use of Artificial Neural Networks in Advanced Traveler Information and Traffic Management Systems, Gaetano Fusco and Stefano Gori, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p341-345. p341-345.

Highways

Highways
S1 Billion Texas Tollway, CE May 96, p8.
Aid-to-Decision for Variable Message Sign Control in Motorway Networks during Incident Condition, Jean-Marc Morin, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p378–382.
ASCE Group Gets Its Own Piece of a Freeway, CE Feb. 06, v68

96, p68.

Balancing Aviation, Highway, and Development Needs: Multimodal Planning at Indianapolis International Air-port, John W. Myers, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996),

Cover-Subsidence Sinkhole Evaluation of State Road 434, Longwood, Florida, Jon Foshee and Brian Bixler, GT

Nov. 94, p2026-2040.

Delay Estimation and Optimal Length for Four-Lane Divided Freeway Workzones, David R. Martineli and Danquing Xu, TE Mar/Apr. 96, p114-122.

Density and Conditioning Characteristics of Motorway Ve-hicular Traffic Flow, V. Torrieri, D. Gattuso, G. Musolino and A. Vitetta, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

pesign and Construction for Asphalt Pavements in Perma-frost Areas: Case Study of Qinghai-Tibet Highway, Nin-gyuan Li and Ralph Haas, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p866-877.

Design and Construction of a Bonded Fiber Concrete Overlay of CRCP, Hadi H. Shirazi, Masood Rasoulian and Bill King, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1647-1658.

Electronic Signatures Are Revolutionizing Highway Programs, Michael J. Vecchietti and Lawrence I. Neff, CP Oct. 96, p264-266.

Engineers Establish Bridge Safety Site, CE Nov. 96, p8. Evaluation of Bridge Decks and Pavements at Highway Speed using Ground Penetrating Radar, Kenneth R. Maser, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p820-828.

Field Observations of Instrumented Highway Sections with Different Frost Protections, J.-M. Konrad, G. Dore and M. Roy, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p652-663.

Fly Ash and Tire Chips for Highway Embankments, M. Basheer, C. Vipulanandan and M. W. O'Neill, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p593-602.

Geometric Design of Compound Horizontal Curves, B. K. Roy, TE July/Aug. 94, p674-683.

Government Looks to Automated Future on Highways, CE

Feb. 96, p16-17. Grading Design of Side Slopes Fitting Roadside Topogra-phy, George Kanellaidis, TE Jan./Feb. 96, p87-90. Haute Cuisine and Highways? John C. Laughland, CE July

96, p29.

How High Is That Mountain? Tom Buchanan, CE Oct. 96,

page Monitoring on Motorway: Pedestrian Detection Using Image Processing, Salah Bouzar, Roland Glachet, Jean-Marc Blosseville and François Lenoir, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p124-128.

Innovative N.Y. Bridges Add Highway Clearance, CE July

96, p19-20.

he Kobe Earthquake: Ground Shaking, Damage and Loss, Charles A. Kircher, (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p908-916. The Kobe Earth

Laboratory Study of Large Stone Asphalt Paving Mixtures, Joe W. Button, W. W. Crockford and E. G. Fernando, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p603-611.

Minimizing Costs of Northern Highways by Using BST, D. R. MacLeod and Robin Walsh, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p935-946.

New Approach to Roadway Performance Indices, Chiu Liu and Robert Herman, TE Sept./Oct. 96, p329-336.

Northern Climate Weathering Tests on Sealed Concrete, Luh-Maan Chang, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p141-152

On the Web, CE Dec. 96, p20.

Protecting an American Folklore Legend, Arthur J. Sortet, III and Harry B. Thomas, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p274-275.

Relocation of Existing Pipelines at New Highway Crossings, Karl J. Rubenacker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p290-297.

Researchers Plan First Test of Automatic Highways, CE Nov. 96, p24.

Restaurants and Roadways: Food for Thought, John E. Abraham, CE Apr. 96, p6.

Scottsdale Builds Bird Haven in Shadow of Freeway, CE Feb. 96, p12,14.

A Short Term Forecasting Model for Freeway Traffic Mon-itoring, and Control, R. Camus, G. Longo and F. San-torini, (Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p418-422.

Significance of Tests for Highway Materials, E. Ray Brown, P. S. "Ken" Kandhal, Dah Yinn Lee and K. Wayne Lee, MT Feb. 96, p26-40.

Structural Forum, SC Nov. 96, p95-98. Tolls Ready to Roll, ET Mar/Apr. 96, p7.

Transportation Update, Casey Dinges, CE Jan. 96, p98. Turnkey Procurement Speeds Highway Work, ME May/ June 96, p10.

A Two-Level Approach for the Control of Freeways, A. Alessandri, A. Di Febbraro and A. Ferrara, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p429-433.

Uniform Criteria for Level-of-Service Analysis of Free-ways, Feng-Bor Lin, Chang-Wei Su and Hsin-Hsiun Huang, TE Mar/Apr. 96, p123-130.

Parameters in Bridge Restrainer Design for Seismic Re-trofit, M. Saiidi, E. Maragakis and S. Feng, ST Jan. 96, p61-68.

Stability of Beams in an Elastic Foundation, Fady F. Bar-soum and William F. Carroll, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1143-1146.

Calibration and Simulation of Non-Gaussian Translation Processes, M. Grigoriu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p804-807.

Loading Cycles for Fatigue Reliability Assessment of Miter Gates at Navigation Locks on the Upper Mississippi River, Bilal M. Ayyub, (*Probabilistic Mechanics &* Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p854-857.

Aqueduct in Los Angeles Is ASCE Landmark, NE Jan. 96, p5.

ASCE's Orange County Branch Reaches into Past with Historic Landmark Designations, CE Nov. 96, p74-75.

Civil Engineering Education: An Historical Perspective, Lawrence P. Grayson, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p44-52.

Composite Bridge Reopens Trail to Historic Lighthouse, CE Apr. 96, p96.

Coring Technique Reinforces Historic Masonry, CE May 96, p13-14.

DOT Crew Excavates Historic Train Cars, CE Nov. 96, p15,19.

Dynamic Response of Hagia Sophia, A. S. Cakmak, C. L. Mullen and M. N. Natsis, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p200-210.

Excavation Cautious for Memorial at Arlington Cemetery, CE Sept. 96, p14.

Extending the Legacy: Planning America's Capital for the 21st Century, Reginald W. Griffith, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p25-33.

Grounded by History: Airports and Historic Resources, Charlene K. Roise, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996).

Historic Concrete Structures Assessment and Repair, Je-rome P. O'Connor, James M. Cutts and Gregory R. Yates, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1055-1062.

Monitoring Systems on Historic Buildings: The Brunelle-schi Dome, Gianni Bartoli, Andrea Chiarugi and Vittorio

Gusella, ST June 96, p663-673.

Plans for Embassy Appear in Show, CE Nov. 96, p23. The Return of Masonry as a Structural Material, Daniel P. Abrams, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), pl-12.

Returning Veteran, Charles A. Baumgartner and William E. Beyer, CE Apr. 96, p68-71.

San Diego's Historic Dulzura Conduit: New Solutions, Hans H. Torabi and Harold B. Tennant, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p340-347. Stone Bridge Safety Assessed, CE May 96, p23

Structural Studies of Historical Buildings IV, Frederick S.

Merritt, AE Mar. 96, p42-43. Vermont to Inventory Historic Bridges Prior to Project Ini-

tiation, CE Jan. 96, p12.

"'Meigs Among the Ruins': Montgomery C. Meigs and the Construction of the United States Capitol Extension", Dean A. Herrin, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p96-97.

History

27 Years Documenting Engineering Heritage, Eric DeLony, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p162-173

ADR, 25 Years of Progress, Robert A. Rubin, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p21-29.

ASCE's Orange County Branch Reaches into Past with Historic Landmark Designations, CE Nov. 96, p74-75.

Author Responds to Accusations of Carelessness, Mark L. Peckham and David A. Sutter, CE July 96, p28-29.

Benjamin Wright-The Father of American Civil Engineering. Neal FitzSimons, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr.,

ed., 1996), p98-107.

Building the Infrastructure of the New Federal City: 1793-1800, Robert J. Kapsch, (Civil Engineering History: En-gineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs,

Jr., ed., 1996), p74-85.
The Canadian Habbakuk Project by Lorne W. Gold, Robert Ettema, CR Mar. 96, p58-59.

Ettema, CR Mar. 96, p58-59.
Changes in OSHA in the Last 25 Years, Satish Mohan,
(Civil Engineers Influencing Public Policy, Maureen K.
Cotton, ed., 1996), p93-112.
Civil Engineering Education: An Historical Perspective,
Lawrence P. Grayson, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p44-52.

Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996, 0-7844-0209-4,

Dam Engineering Exhibit Wins Prize for New Museum in Arizona, NE Dec. 96, p9.

Artzona, rei. Dec. 90, p9.
Early Surveys in the Nation's Capital, Steven M. Pennington, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p86-95.

Jaske, ed. and Francis E. Origgs, Jr., ed., 1996), pol-97. The Engineer and the Smithsonian Institution's Civil Engineering Collections, William E. Worthington, Jr., (Civil Engineering History: Engineers Make History, Jerry R. Ropers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p34-43.

Engineering and History: Manifestations in Monuments, Henry Petroski, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), 1155-161 1996), p155-161.

Engineers of Dreams Is Well Worth the Read as Petroski Zeroes in on Bridges, Augustine J. Fredrich, NE Nov. 96, p15.

p13.

Expected Moments Alogrithms for Flood Frequency Analysis, William L. Lane and Timothy A. Cohn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2185-2190.

Extending the Legacy: Planning America's Capital for the 21st Century, Reginald W. Griffith, (Civil Engineering Mistory, Engineer Med. Bistory, Engineer

21st Century, Reginald W. Griffith, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p25-33.
Geophysical Characterization of Florida Limestone—An Investigative Case History, D. S. Saxena, R. M. Dickin-son and A. Saxena, (Case Histories of Geophysics Ap-plied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p73-85.
Granded the History: Aimorts and Historic Resources.

Grounded by History: Airports and Historic Resources, Charlene K. Roise, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p223-233.

History and Heritage in Coastal Engineering in The Netherlands, Eco W. Bijker, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p390-412.

History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996, 0-7844-0196-9, 610pp.

history and heritage of German Coastal Engineering, Hanz D. Niemeyer, Hartmut Eiben and Hans Rohde, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p169-213.

History of Coastal Engineering in Australia, Michael R. Gourlay, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p1-88.

History of Coastal Engineering in Canada, J. William Kamphuis, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p89-102.

History of Coastal Engineering in Denmark, Torben Sørensen, Jørgen Fredsøe and Per Roed Jakobsen, (His-tory and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p103-141.

History of Coastal Engineering in France, Luc Hamm, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p142-168.

338

History of Coastal Engineering in Great Britain, Rendel Palmer, ed. and Tritton Limited Development and Engi-neering Consultants, ed., (History and Heritage of Coast-al Engineering, Nicholas C. Kraus, ed., 1996), p214-274.

History of Coastal Engineering in Italy, Leopoldo Franco, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p275-335.

History of Coastal Engineering in Japan, Kiyoshi Hori-kawa, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p336-374.

History of Coastal Engineering in Mexico, J. Antonio Maza, Rodolfo Silva and Carlos Sánchez. (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p375-389.

History of Coastal Engineering in Portugal, F. Vasco Costa, F. Veloso Gomes, F. Silveira Ramos and Claudino M. Vicente, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p413-428.

The History of Coastal Engineering in South Africa, D. H. Swart, ed., (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p429-464.

History of Coastal Engineering in Spain, M. A. Losada, R. Medina, C. Vidal and I. J. Losada, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p465-499.

History of Coastal Engineering in Taiwan, Ching-Ton Kuo, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p500-512.

History of Coastal Engineering in the USA, Robert L. Wiegel and Thorndike Saville, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p513-600.

History Reigns at ASCE's Orange County Branch, CE Feb. 96, p68,70.

How to Make Our Heroes-Their Heroes, Francis E. Griggs, Jr., (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p144-154.

Identifying Trends from Streamflow Records—A Case Study, Joseph A. Van Mullem, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1675-1680.

The Importance of Being Historical: Civil Engineers and Their History, Jane Morley, El Oct. 94, p419-428.

J.A.L. Waddell and the Diffusion of Civil Engineering Techniques, George F. W. Hauck and Louis W. Potts, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p53-65.

Management of the Hanford Engineer Works in World War II, Harry Thayer, 1996, 0-7844-0160-8, 225pp.

Mixed Views Voiced on Book about the Northwest Passage, Augustine J. Fredrich, NE Feb. 96, p6,7.

Montgomery C. Meigs: The Eclectic Engineer, Dean A. Herrin, (Civil Engineering History: Engineers Make His-tory, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p66-

Octave Chanute: One of the First in Flight, David T. Biggs, NE Feb. 96, p15.

On the Shoulders of Giants-Part II, Francis E. Griggs, Jr., El Jan. 96, p17-25.

On the Shoulders of Giants-Part Three, Francis E. Griggs, Jr., El Apr. 96, p55-64.

Program for Estimating the Remaining Fatigue Life of Steel Railway Bridges, Vinaya Sharma and John Choros, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p223-229.

Re-engineering Cowboy Heaven (Available only in Focus on Structures Special Edition), Richard G. Weingardt and John F. Davis, CE Jan. 96, p10A-13A.

Sanitary Engineers in American Cities: Changing Roles from the Age of Miasmas to the Age of Ecology, Martin V. Melosi, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p108-122.

So Mrs. Roebling—What's Your Side of the Story—About the Brooklyn Bridge? Patricia D. Galloway, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p23-24.

A Surveying Trip Report from George Washington's Diary, Michael P. Johnson and William P. Johnson, Jr., (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p1-12.

Water Wisdom, Caption Mistakes, Sanjay Chauhan and Kent C. Turner, CE May 96, p26.

The World's Oldest Civil Engineering Professor, Daniel S. Turner, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p13-

"Acts of God": The Symbolic and Technical Significance of Foundation Failures, Jane Morley, CF Feb. 96, p23-31

"'Meigs Among the Ruins': Montgomery C. Meigs and the Construction of the United States Capitol Extension", Dean A. Herrin, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p96-97.

Buckling of Composite Panels with Central Holes, David H. Farnham and Walter J. Horn, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p374-377.

- Behavior of Cold-Formed SHS Beam-Columns, Raef M. Sully and Gregory J. Hancock, ST Mar. 96, p326-336. Composite Action of Foamed and Lightweight Aggregate
- Concrete, Yasser M. Hunaiti, MT Aug. 96, p111-113.
- Damage Evaluation in Steel Box Columns by Cyclic Load-ing Tests, Satish Kumar and Tsutomu Usami, ST June 96, p626-634.
- Fire Resistance of Circular Steel Columns Filled with Fiber-Reinforced Concrete, V. K. R. Kodur and T. T. Lie, ST July 96, p776-782.
- Fire Resistance of Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie and V. K. R. Kodur, ST Jan. 96, p30-36.
- Nailed Tubular Connections under Axial Loading, Jeffrey A. Packer, ST Aug. 96, p867-872.
- New Guidelines for Fatigue Design of HSS Connections, A. M. van Wingerde, J. A. Packer and J. Wardenier, ST Feb. 96, p125-132.
- Nonlinear Finite-Element Model of Hollow Masonry, E. Y. Sayed-Ahmed and N. G. Shrive, ST June 96, p683-690.

Effects of Soil Nonhomogeneity on SASW Testing, Nenad Gucunski, Vahid Ganji and M. H. Maher, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1083-1097.

Regional Flood Frequency with Hierarchical Region of Influence, Zolt Zrinji and Donald H. Burn, WR July/Aug. 96, p245-252.

Simplified Analysis of Thin-Walled Composite Members, A. Ghorbanpoor and B. Omidvar, ST Nov. 96, p1379-

1383 Upscaled Soil-Water Retention Using van Genuchten's Function, Timothy R. Green, James E. Constantz and David L. Freyberg, HE July 96, p123-130.

Honeycomb structures

Evaluation of a Bi-Directional Aluminum Honeycomb Impact Limiter Design, Marvin J. Doman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p357-359.

Hoppers

- Segregation in Hopper Flows, Masami Nakagawa, Xiaoshan Lin and G. G. W. Mustoe, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p386-389.
- Uncertainty Analysis of Dredge Production with Correlation, Said M. Easa, WW Sept./Oct. 94, p499-507.

- Modeling Horizontal Diffusion with Sigma Coordinate Sys-tem, Wenrui Huang and Malcolm Spaulding, HY June 96, p349-352.
- Simulation of Dilute Gas-Solid Flows in Horizontal Channels, Cliff K. K. Lun and Hong S. Liu, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p390-393.

Horizontal loads

- Estimating Transverse Strength of Masonry Infills, Richard Angel and Joseph Uzarski, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p101-111.
- Three-Dimensional Failure Analysis of Composite Mason-ry Walls, Subhash C. Anand and Kishore K. Yalaman-chili, ST Sept. 96, p1031-1039.

- A Comparison of Seismic Design Using ASD and LRFD, Jeffrey R. Soulages, Jon A. Heintz and James O. Malley, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p542-549.
- Largest Seismic Base-Isolated Hospital Tops Out, CE June 96, p8.
- The New Madrid Earthquake: Preparing Nurses, Stephanie K. VanArsdale and Roy B. VanArsdale, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p97-98.
- Response of Base Isolated USC Hospital Building in the 1994 Northridge Earthquake, Satish Nagarajaiah and Xiaohong Sun, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p212-223.
- Screening Hospitals and Fire Stations for Seismic Potentials in City of Tehran, F. Nateghi-A, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p349-350.
- Seismic Analysis, Design and Evaluation of Hospitals— Vulnerability Studies by Energy Methods, Omar D. Car-dona and Jorge E. Hurtado, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p319-320.
- Seismic Design Doubles Lateral Resistance (Available only in Structures special issue), James O. Malley, CE Sept. 96, p14A-16A.

- An Analysis of Damage from Hurricane Andrew; A Dis-senting View, Leonard J. Morse-Fortier, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p293-294.
- An Assessment of Wind Damage to Wood-Frame Houses, Maher Jaafari and Henry Liu, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p347-348.
- Bad Vibrations, Lawrence W. Gubbe, P.E., CE Aug. 96,
- Effects of Ground Subsidence on a House, R. M. Bennett, E. C. Drumm, G. Lin, T. Triplett and L. Powell, CF Nov. 96, p152-158.
- Performance of Single Family House Foundations During Northridge Earthquake, Robert W. Day, SC May 96,
- A Predicting Method of Typhoon Wind Damages, Yasushi Mitsuta, Takeshi Fujii and Ichiro Nagashima, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p970-973.
- Wind Hazards for Low-Rise Structures and Single Family Dwellings: A Possible Mitigation, H. W. Tieleman, T. A. Reinhold and M. R. Hajj, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p389-390.

Wind-Resistant Tie-Downs for Mobile Homes, Anatol Lon ginow, Donald F. Meinheit and John E. Pearson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p966-973.

Economic Comparison between Drywall and Conventional Partitions, Ronie Navon, David Carmel and Arnon Bentur, AE Dec. 96, p129-134.

Forecasting House Rental Levels: Analytical Rent Model versus Neural Network, Heng Li and Vera Li, UP Dec. 96, p118-127.

Housing Losses, Mary C. Comerio, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p167.

Implications Derived from Recent Research in Mexico on Confined Masonry Structures, Sergio M. Alcocer, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p82-92.

An Innovative Plastic Housing System, E. Burnett, A. Arenja and L. Holroyd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p545-554.

On Housing Administration and Legislation of Egypt, A. S. Elnashai and M. M. Soliman, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p280-281.

Range of Impacts of Some Recent U.S. Disasters and The Implications for Housing Recovery, Claire B. Rubin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p168-170.

Sanitary District Brings in the Sleeves to Enlarge Sewer, CE Aug. 96, p78.

Strong Ground Motion Characteristics and Damage Distribution of Housings by an Epicentral Region Earthquake of Mag.7.2 in KOBE, Japan of 1995, Yoshinori Iwasaki, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), pl.47-148.

Unique Coalition Plans to Revitalize Neighborhood, CE

Nov. 96, p12-13.

Water-Price Effect on Residential and Apartment Low-Flow Fixtures, Donald E. Agthe and R. Bruce Billings, WR Jan./Feb. 96, p20-23.

Bayesian Model for Fate and Transport of Polychlorinated Biphenyl in Upper Hudson River, Laura J. Steinberg, Kenneth H. Reckhow and Robert L. Wolpert, EE May 96, p341-349.

Human behavior

Catalysts for Improvement, Gary D. Bates, P.E., ME Nov./ Dec. 96, p5.

Engineering Sales: Process of Understanding, Larry G. Crowley, ME Mar./Apr. 96, p40-43.

Examination of Emerging Consciousness in Engineering Management, Amarjit Singh, ME July/Aug. 96, p50-57. Fear Not: The Art of Risk Communication, Christine Barr,

ME Jan./Feb. 96, p18-22.

Fuzzy Drivers Make Good Models, Monica Maldonado, ET June/July 96, p1,9.

Human Biomechania es Inform Seismic Protection, ET

Apr./May 96, p10-11. Measuring Coherency of Human-Induced Rhythmic Loads Using Force Plates, A. Ebrahimpour and L. L. Fitts, ST July 96, p829-831.

Muly 90, pa.29-031.

Measuring Mutual Confidence in UK Construction Projects, A. K. Munns, ME Jan./Feb. 96, p26-33.

Rules of Thumb, Nancy Gibson and John Whitaker, ME Nov/Dec. 96, p34-39.

To Be Successful, Joan Lloyd, ME Nov/Dec. 96, p7-8.

'Acts of God": The Symbolic and Technical Significance of Foundation Failures, Jane Morley, CF Feb. 96, p23-

Human ecology

Lunar Neighborhoods: Architecture for Extreme Environments, Milton Schwartz, Jeffrey Schwartz, John Bergquist, Carsten Keller, Preston Kelsey and Todd Stringer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1027-1031.

Medical-Technical Problems of Human Protection, Victor S. Koscheyev, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1002-

Readers Respond to Thomey Letter, Norm Hoffman, P.E., James S. Pol, Jim Coppock, P.E., J. Frank Brennan, P.E., John A. Mundell, P.E. and F. Weston Starratt, P.E., CE Aug. 96, p28-29.

Space Infrastructure Planning, J. Michael Snead, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p360-366.

Human factors

Any New Address Stress? James Donald Strong, CE Nov. 96, p36,

Architecture on the Moon: The Importance of Human Factors Considerations in the Design of a Lunar Base, John Bergquist, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1038-1044.

Artificial Gravity, Zachary Zutavern, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1315-1318.

Building Large Space Bases in Low Earth Orbit, J. Michael Snead, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p367-377.

Challenges in the Construction of a Lunar Base, Roy Sargent and Keith Hampson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p881-888.

Design and Construction of Zero-Gravity Gymnasium, Patrick Collins, Sunao Kuwahara, Tsuyoshi Nishimura and Takashi Fukuoka, (Engineering, Construction, and Oper-ations in Space, Stewart W. Johnson, ed., 1996), p200-205

Design Live Loads for Crowds in Motion, A. Ebrahimpour and R. L. Sack, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

Mohammadi, ed., 1996), p420-427.

Dynamic Service Actions for Floor Systems - Human Activity, Per-Erik Eriksson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p413-419.

Effect of Concrete Workmanship on Strength Reliability of R/C Beams, E. H. Khor, D. V. Rosowsky and M. G. Stewart, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p238-241.

Effects of Non-Structural Elements on the Acceleration Response of Tall Multi-Story Buildings Under Wind Excitation, Cindy X. Qiu, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p974-977.

Effects of Zero Gravity on Bones, Jon Capron, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1262-1264.

EPA Targets Suspected Fertility Disrupters, CE July 96,

p25. A Follow-Up Study to: Job Performance Aids to Criticality Safety, Michael A. Rodriguez, (High Level Radioactive Technical Program Committee, 1996), p348-350.

Hazards to Personnel from Tower EMFs, James B. Hatfield, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p499-504.

Human Factors in Highway Geometric Design, George Kanellaidis, TE Jan/Feb. 96, p59-66. The Human Side of L.A. Metro, Donald R. Ciandella, CE

Dec. 96, p36-39.

Human Space Exploration: Justifications and U.S. Space Policy, Arthur M. Hingerty, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p126-132.

Inflatable Habitat Option for a Human Lunar Return Mission, Kriss J. Kennedy, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

p1076-1082.

Innovative Radiation Shields for Lunar Surface Operations, Milton Schwartz and Raymond S. Leonard, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p349-354. Location of a Lunar Base: A Site Selection Strategy, Lawrence A. Taylor and Dong-Hwa S. Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p741-755.

Lunar Settlement Foundation: A Private Community, Dallas G. Bienhoff, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p942-948

Microgravity's Effects on the Muscular System of the Human Body, Susie Newton, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p.1298-1302.

The Moon Within Our Grasp: A Strategy for Renewing Human Exploration of the Moon, Andrew Petro, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p133-139

Proof Loads, Construction Error and the Reliability of Service Proven Structures, Mark G. Stewart, (Probabilistic Mechanics & Structural Reliability, Dan M. Frango-pol, ed. and Mircea D. Grigoriu, ed., 1996), p226-229. Protection from Vibrations, S. Drabkin, P.E. and H. Lacy,

P.E., CE Nov. 96, p30.

The Solar System Cruiser—Interstellar Precursor, Divya Chander, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p302-310.

Solving Aviation and Intermodal Transportation Related Is-Solving Aviation and Intermodal Transportation Related Issues — "A New Prototype for the 21st Century". Clifford Bragdon and Carl Berkowitz, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p212-222.
Space Sickness, Thienga Nguyen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1303-1306.
The Surface Extreme.

Surface Extreme Environment Dwelling System (SEEDS) for Mars, Kurt Anthony Micheels, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1020-1026.

Use of OMT in a Transport Human Engineering Prospect, T. Bellet and H. Tattegrain-Veste, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p363-367.

Whose Fault Was It? Alice C. Dillard, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1274-1277.

Human-computer interaction

Building Process Models for Design Management, David G. Platt, CP July 96, p194-203. IFPATS: A Link Between Distributed AI Systems and Ex-

pert Users, G. J. Krige, CP Apr. 96, p151-156.

Humid areas

Design and Implementation of On-Farm Surface Drainage Projects in the Humid Tropics of Mexico, John C. Tiedeman and Rodolfo Namuche Vargas, (North American

man and Rodolfo Namuche Vargas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2480-2485.
Distributed Hydrologic Modeling of Humid Regions, Fred L. Ogden, Brent A. Watts and B. Saghafian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2909-2914.

Assessing Integrity of Weather Data for Reference Evapotranspiration Estimation, Richard G. Allen, IR Mar./Apr. 96, p97-106.

90, py/-100.
100, py/-101.
Effect of Temperature and Salt Contamination on Carbonation of Cements, Mohammed Maslehuddin, C. L. Page and Rasheeduzzafar, MT May 96, po3-69.
Moisture Conditions and Control in Buildings in Fairbanks, Alaska, Ross Adkins, (Codd Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p372-383.

Relative Humidity in the Near-Field Environment, Wunan Lin, Jeffery J. Roberts and David Ruddle, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p128-129.

Water Vapor Effects on the Corrosion of Steel, John C. Estill and Gregory E. Gdowski, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p457-458.

Acquisition and Use of Coastal-Storm Related Data for Zoning Purposes. Andrew W. Garcia, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p393-394.

An Analysis of Damage from Hurricane Andrew; A Dis-senting View, Leonard J. Morse-Fortier, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p293-294.

Assessing Opal's Impact, David J. Greenwood and Darryl J. Hatheway, CE Jan. 96, p40-43.

An Assessment of Wind Damage to Wood-Frame Houses, Maher Jaafari and Henry Liu, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p347-348.

Biopositive City as Means for Natural Disaster Reduction, Alexandr Tetior, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p329-330

3-30.
Building Codes and Natural Disasters - 2 Case Studies, Kenneth R. Andreason, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p758-764.
Central Pacific Hurricanes-What Do We Know? Thomas A.

Schroeder, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p291-292. Coastal Flood Hazard Analysis Using Digital Photogram-

Coastar Food nacid Manays Using Organ Floridgram-metry, Margery Overton, Cheryl Petrina and John Fisher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p187-188. Design and Construction Criteria for Hurricanes - Prevent-

Design and construction Criteria for Hurricanes - Preventing Your Pre-Engineered Building from Becoming a Scrap Metal Heap, Michael K. H. Yee, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p269-271.

Dynamic and Quasi-Static Design of High-Rise Buildings Subjected to Wind Loads, Okey Onyemelukwe and Guillermo Claure, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung ed., 1997), 414-142.

Housner, ed. and Riley M. Chung, ed., 1997), p141-142.

Effects of Hurricane Luis on Structures in Antigua, Tony Gibbs, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p295-296.

Evacuation Strategies for Public Officials, T. Michael Car-

Evacuation Strategies for Public Officials, T. Michael Carter, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p109-110.
Evaluation of a 47-Story Building Subjected to Hurricane Alicia, Lawrence G. Griffis, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p960-965.
Evaluation of Cracking of the Miami Marine Stadium Hyperbolic Paraboloid Roof Structure, Michael L. Brainer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1659-1668.
An Expert System for Wind-Resistant Residential Con-

1990), p1039-1008.
An Expert System for Wind-Resistant Residential Construction, James R. McDonald, Douglas A. Smith and Kishor C. Mehta, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p982-988.
[Food Harand Zonation, is a Multipherard Engineering in Multipherard Engineering in Multipherard Engineering Inc.

Flood Hazard Zonation in a Multihazard Environment, James E. Beavers and Frank H. Thomas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p345-346.

A. Framework for Estimating Losses Due to Hurricane Estreme-Winds, Gregory L. F. Chiu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p287-288.

ed., 1997), p.267-288.
GIS Application for Miami Transportation System Hurricane Emergency Preparedness, Kangming Xu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p.107-108.
Glazed Opening Designs for Windborne Debris Impact, Journal of the Company of the Property of the Company
seph E. Minor, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p117-118. Hurricane Disaster Mitigation Through Real-time Wind Analysis, Mark D. Powell, Samuel H. Houston and Ignacio Ares, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p289-290. Hurricane-Induced Storm Surge Analysis for the City of New Orleans, LA, David J. Mark and Norman W.

Scheffner, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p343-344.

Hurricanes Erin, Marilyn and Opal, Kishor C. Mehta, James R. McDonald and Douglas A. Smith, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p46-47.

The Importance of Dissemination and Instruction in Hurri-cane Warnings, Earl J. Baker, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p391-392.

Institutional Issues in Natural Hazard Mitigation, Daniel J. Alesch, (Natural Disaster Reduction, George W. ner, ed. and Riley M. Chung, ed., 1997), p367-368

A Knowledge-Based System For International Hurricane Risk Management, Surya K. Gunturi, Chris Austin, Aida RiveraMarzan, Ping Zhang, John Lieberman, Paul Van-derMarck, Mark Broido and Auguste C. Boissonnade, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p15-16.

Mitigation of Windstorm Disasters, Kishor C. Mehta and Ernst W. Kiesling, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p205-

Natural Disaster Losses to Conventional Construction and their Mitigation (An Insurance Company Response to Catastrophic Losses Since Hurricane Hugo), Edward M. Lantsch, Rose Geier Grant and Laird Macdonald. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

Natural Hazards Mitigation in South Carolina, Charles Lindbergh and Maurice R. Harlan, (Natural Disaster Re-duction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p86-87.

Optimum Risk Management with Uncertain Hazard and Vulnerability Information, Lawrence A. Twisdale and Peter J. Vickery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p88-

Performance of Laminated Glass Units under Simulated Windborne Debris Impacts, Richard A. Behr and Paul A. Kremer, AE Sept. 96, p95-99.

Post-Hurricane Investigations: Quantifying Damage, Greg-ory L. F. Chiu, Sara Wadia-Fascetti and Mussaddeque Hossein, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p74-75.

Practical Modeling of Hurricane Surface Wind Fields, Edward F. Thompson and Vincent J. Cardone, WW July/Aug. 96, p195-205.

Protection of the Building Envelope in Maintaining Struc-tural Integrity, Clifford Oliver, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed.,

Range of Impacts of Some Recent U.S. Disasters and The Implications for Housing Recovery, Claire B. Rubin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p168-170.

A Rapid Barrier Island Hazard Mapping Technique as a Basis for Property Damage Risk Assessment and Mitiga-tion, David M. Bush, William J. Neal and Orrin H. Pilkey, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p185-186.

Reducing the Vulnerability of Transmission Lines in Hurricane Regions by Choosing Minimum Life Cycle Cost Designs, Peter J. Vickery and Lawrence A. Twisdale, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p245-246.

Residential Construction Failures Caused by Hurricane Andrew, Wimal Suaris and Mohammed S. Khan, CF Feb.

95, p24-33.

Roof Sheathing Uplift Resistance for Hurricanes, Edward Sutt, Kallem Muralidhar and Timothy Reinhold, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p974-981.

A Shoreline Risk Index for Northeasters, David Kriebel, Robert Dalrymple, Anthony Pratt and Vincent Sakovich, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p251-252.

Structural Damage due to Hurricane Marilyn in St. Thomas and Culebra, Luis A. Godoy, Roberto Huyke, Ricardo R. Lopez, J. A. Martinez-Cruzado and Raul Zapata, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p135-136.

Use of GIS Mapping to Illustrate the Sensitivity of Wind Hazard Insurance Loss Estimation to Modeling Parameters, Andrew Steckley, Lawrence A. Twisdale and Peter J. Vickery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p201-202.

Vulnerability Curves for Buildings in Tropical-Cyclone Regions, John Holmes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p78-81.

Wind Hazards for Low-Rise Structures and Single Family Dwellings: A Possible Mitigation, H. W. Tieleman, T. A. Reinhold and M. R. Hajj, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p389-390.

Wind Hazards in the United States, Peter J. Vickery, Law-rence A. Twisdale and Andrew C. Steckley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p139-140.

M. Chung, ed., 1997), p139-140.
Wind-Induced Failures of Steel Roof Decks, Víctor Figueroa Díaz, Ali Saffar, Samuel I. Díaz Santiago and Bernardo Deschapelles, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p894-897.

Hybrid simulation

Preliminary Design of 2-Story Buildings Using a Hybrid System, Hyeong-Taek Kang, C. John Yoon and Feng-Bao Lin, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p335-340.

A Two-Level Approach for the Control of Freeways, A. Alessandri, A. Di Febbraro and A. Ferrara, (Applications) of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p429-433.

Hydration

Behavior of Fresh Mortar in a Vacuum and Microstructure of Mortar Hardened in a Vacuum, L. J. Powers-Couche and T. D. Lin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p608-

Effect of Copper Slag on the Hydration of Blended Cementitious Mixtures, B. Mobasher, R. Devaguptapu and A. M. Arino, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1677-1686.

Enhancing Performance of Soundless Chemical Demolition Agents, Jimmie Hinze and Andrew Nelson, CO June 96,

Heat of Hydration of Pure Cement Compounds with Steam, Wei-Ming Lin, T. D. Lin, Chao-Lung Hwang and Yaw-Nan Peng, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p585-591.

Lunar Concrete Made with the Dry-Mix/Steam-Injection Method, T. D. Lin, Liang Tseng and Sam Chou, (Engi-neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p592-599

Pore Structure Evolution and State of Pore Water in Hydrating Cement Paste at Cryogenic Temperatures, J-Y. Jehng, D. T. Sprague, S. Bhattacharja and W. P. Halperin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p600-607.

Strength Growth as Chemo-Plastic Hardening in Early Age Concrete, Franz-Josef Ulm and Olivier Coussy, EM Dec.

96, p1123-1132.

Hydraulic conductivity

Bayesian Decision Analysis for Contaminant Travel Time, Marian W. Kemblowski and Hewa A. Wijedasa, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p207-218.

Bearing Capacity of Hydrated Geosynthetic Clay Liners, Robert M. Koerner and Dhani Narejo, GT Jan. 95, p82-

Combining Geophysical and Well Data for Identifying Best Well Locations, Geza Pesti, William E. Kelly, Istvan Bo-gardi and Robert J. Kalinski, WR Mar./Apr. 96, p97-104.

Comparisons of Site Characterization Methods Using Mixed Data, Donna M. Rizzo, Theodore P. Lillys and David E. Dougherty, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p167-179.

D. Wankum, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation,

Lakshmi N. Reddi, ed., 1996), p751-761.

DNAPL Recovery System at a Railroad Tie Treating Facility, Richard Broad, III, David F. Atwater and Riaz Ahmed, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p743-750.

The Effect of Measurement Scale on the Worth of Hydraulic Conductivity Data: Slug Tests and Pumping Tests, Willy Zawadzki and Roger Beckie, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J.

S. Roth, ed., 1996, p1034-1051.
Electrical Resistivity of Compacted Clays, Zeyad S. Abu-Hassanein, Craig H. Benson and Lisa R. Blotz, GT May

96, p397-406.

Estimation of In Situ Hydraulic Properties of Saprolite, Gordon M. Matheson, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p66-73.

Geostatistical Simulation, Parameter Development and Property Scaling for GWTT-95, Sean A. McKenna and Susan J. Altman, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), p181-

Hydraulic Conductivity of Desiccated Geosynthetic Clay Liners, B. Tom Boardman and David E. Daniel, GT Mar. 96, p204-208.

Hydraulic Conductivity of Frozen Granular Soils, Orlando B. Andersland, David C. Wiggert and Simon H. Davies, EE Mar. 96, p212-216.

Infiltration Properties at Two Sites in the Konza Prairie, R. S. Govindaraju, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1267-1272.

Ia, ed., 1996), pl 201-1272. Lanfill Site Evaluation and Application of MODFLOW to simulate Hydraulically Conductive Zones in Bedrock As-sociated with Diabase Dikes in North Carolina, M. A. Ponti, Jr., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p988-1002.

On Conductivity of Soils with Preferential Flow Paths, R. S. Govindaraju and J. Lin, (North American Water and Environment Congress & Destructive Water, Chen-

Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996, p.1730-1735.

Permeability of Clay Liners with Contaminants, Puvvadi V. Sivapullaiah and Asuri Sridharan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p506-511.

Random Network Modeling for Determination of Repre-sentative Specimen Size of Compacted Clays, Suri Than-gavadivelu, Lakshmi N. Reddi and Sunii Menon, (Uncer-taints, in the Geologic Environment) from Theory to tainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-

Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p.1303-1317. Sand Variability from Ground Penetrating Radar Data, Charles T. Young and Jon P. Doucette, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p.368-382. Statistical Sample Size for Construction of Soil Liners, Craig H. Benson, Huaming Zhai and Salwa M. Rashad, GT Oct. 94, p.1704-1724. Unsaturated Hydraulic Conductivity of Two Compacted Barrier Soils, J. S. Meerdink, C. H. Benson and M. V. Khire, GT July 96, p.565-576.
Using Cavity Well to Determine Aquifer Thickness and Constants, Mohammad Saleem, IR May/June 94, p.504-519.

Winter Effects on Hydraulic Conductivity of Compacted Clay, C. H. Benson, T. H. Abichou, M. A. Olson and P. J. Bosscher, GT Jan. 95, p69-79.

Hydraulic design

Apron Reconstruction at Kansas City International Airport, John R. Anderson and Renita M. Mollman, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p158-169.

Hydraulic Design of Subsurface Flow Wetlands, Edward L. Marsteiner, Thomas L. Theis, Anthony G. Collins and Thomas C. Young, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2421-2426.

A Knowledge Based System for the Design of Open Chan-nels, James M. Crum and Michael E. Mulvihill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4125-4130.

Using HEC-RAS to Compute Scour at Bridges, Gary W. Brunner, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1565-1574.

Hydraulic engineering

Capillary Pressure-Saturation Relationships in Fracture, Zitong Ye, Bing Han, Sishen Li and Jiafa Zhang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3869-3873.

Environmental Hydraulics: New Research Directions for the 21st Century, ASCE Task Committee on Hydraulic Engineering Research Advocacy, HY Apr. 96, p180-183.

Experimental Uncertainty and Measurement Errors in Hy-draulic Engineering, Fred L. Ogden, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1135-1138.

Plumbing the Hydraulic Secrets of Ancient Inca City Holds Great Fascination for Denver Civil Engineer, NE May

96, p16.

Restoration Design for Urban Streams: Anacostia River Basin, Maryland, Meg Burns, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4198-4201.

Hydraulic fill

Deterministic and Probabilistic Analyses of Preload Design at a Hydraulic Fill Site, S. Thevanayagam, E. Kavazan-jian, Jr., A. Jacob and S. Nesarajah, (*Uncertainty in the* Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1417-1431.

Geosynthetic Tubes for Confining Pressurized Slurry: Some Design Aspects, Dov Leshchinsky, Ora Leshchin-sky, Hoe I. Ling and Paul A. Gilbert, GT Aug. 96, p682-

Performance of San Fernando Dams During 1994 North-ridge Earthquake, J. P. Bardet and C. A. Davis, GT July 96, p554-564.

Hydraulic fracturing

A Proposed Poroelastic Model for Hydraulic Fracturing Breakdown Pressure in Porous Rocks, Xiaofeng Huang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p208-211.

Soil Fracture Technique Stops Blast Shock Waves, CE May 96, p12.

Hydraulic gradients

Design Relationship for Filters in Bed Protection, K. J. Bakker, H. J. Verheij and M. B. de Groot, HY Sept. 94, p1082-1088.

On Conductivity of Soils with Preferential Flow Paths, R. S. Govindaraju and J. Lin, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1730-1735.

Upscaling of Pore-Scale Concepts to Develop Models of NAPL Ganglion Dynamics, Rao S. Govindaraju and Lakshmi N. Reddi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p454-465.

Hydraulic jump

Formation and Propagation of Tidal Bore, Nitish C. Ma-zumder and Somnath Bose, WW May/June 95, p167-

Hydraulic Jump in Sloping Channels, Mustafa Gunal and Rangaswami Narayanan, HY Aug. 96, p436-442.

Incipient Jump Conditions for Flows over a Vertical Sill, Iwao Ohtsu, Youichi Yasuda and Hideki Hashiba, HY Aug. 96, p465-469.

Numerical Simulation of Hydraulic Jump, Anand Raman and M. Hanif Chaudhry, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4052-4057.

Physically Based Hydraulic Jump Model for Depth-Averaged Computations, Abdul A. Khan and Peter M.

Steffler, HY Oct. 96, p540-548.

Study of Hydraulic Jump Lengths on Inclined Channel Beds, Tiao J. Chang, Cheng F. Li and Hong Y. Sun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Transition from Hydraulic Jump to Open Channel Flow, S. Wu and N. Rajaratnam, HY Sept. 96, p526-528.

Hydraulic loading

Design Relationship for Filters in Bed Protection, K. J. Bakker, H. J. Verheij and M. B. de Groot, HY Sept. 94, p1082-1088

One-Dimensional Clarifier Model with Sludge Blanket Heights, Randall W. Watts, Spyros A. Svoronos and Ben Koopman, EE Dec. 96, p1094-1100.

Hydraulic models

Analysis of Bank Stabilization in Steep Complex Streams Using A Two-Dimensional Model, Raymond Walton, Wilfredo A. Moneda and Jeffrey B. Bradley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p352-357.

Comprehensive Modelling of Water Distribution Networks, Bryan W. Karney, Samuel S. Kpo and Kai-Wah Tang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p4107-4112.

Design of a Floodplain Road Crossing Using Two Dimensional Modeling, Nathan R. South, Andrzej J. Kosicki and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4300-4305.

Design of the Inlet/Outlet Tower for the Eastside Reservoir Project, Robert P. McBean and Clifford D. Dillon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1783-1788.

Effects of Approach Flow Conditions on Pump Sump De-sign, Gustavo Arboleda and Mutasem El-Fadel, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p376-381.

Filling and Emptying System Model Study for the Innova-tive Lock Design, Richard L. Stockstill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3141-3146.

Hydraulic and Sediment Models for Design of Restoration of Former Tdal Marshland, Guang-dou Hu, M. L. John-son and R. B. Krone, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Raiph T. Cheng, 1996), p215-228.

Hydraulic Model Study of the Prado Dam Spillway, Chris D. Bahner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3800-3805.

Impact of Reservoir Flood-Control Operation on Interior-drainage Facilities, Michael Lindquist, David Ford and Pete Hall, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2939-2944.

Object Orientation in Hydraulic Modeling Architectures, D. P. Solomatine, CP Apr. 96, p125-135.

Predicting Stage-Discharge Curves in Channels with Bank Vegetation, Stephen E. Darby and Colin R. Thorne, HY Oct. 96, p583-586.

Sanitary Sewer System Modeling Model Comparison Ra-cine, Wisconsin, Robert W. Carr and Thomas J. Bunker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1760-1764. The Scour at Bridges Management Program in Rhode Is-land, Edward J. Kent, Jeffrey S. Glenn and Joseph T. Boardman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p489-498.

A System Approach for Identifying and Improving Hydrau-lic Numerical Modeling Reliability, Bernard B. Hsieh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p2725-2730.

Three-Dimensional Simulation of River Ice Jams, Mark A. Hopkins, Steven F. Daly and James H. Lever, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p582-593.

The Timberlake Dam Failure: A Hydrometeorological Assessment, J. Warner, G. V. Loganathan, R. J. Kane, M. Gillen, D. F. Kibler and K. Kostura, (North American) Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2522-2527.

Two Dimensional Modeling of the Mobile River Delta and the Mobile Bay System, Conor C. Shea, Charles D. Powell and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3662-3667.

Uncertainty of Hydraulic Parameters, Peggy A. Johnson, HY Feb. 96, p112-114.

White River Fish Screen Project - Hydraulic Modeling, Dennis Dorratcague, Wayne Porter and Larry Swenson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p310-315.

Hydraulic performance

Effects of Approach Flow Conditions on Pump Sump Design, Gustavo Arboleda and Mutasem El-Fadel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p376-381.

Effects of Approach Flow Conditions on Pump Sump Design, Gustavo Arboleda and Mutasem El-Fadel, HY Sept.

96, p489-494

Filling and Emptying System Model Study for the Innova-tive Lock Design, Richard L. Stockstill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3141-3146.

Hydraulic Model Study of the Prado Dam Spillway, Chris D. Bahner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3800-3805.

Hydraulic Performance of Open Channel Breaching, Juan A. González and Ben Chie Yen, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p334-339.

McAlpine Intake Model Study for Innovative Lock Design, John E. Hite, Jr. and Larry Dalton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3135-3140.

Quasi Two-Dimensional Hydraulic Analysis of Drop Struc-tures, William C. Taggart, Katherine J. Chase and Peter L. Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p600-605.

Sacramento River Pedestrian Bridge, Charles Redfield and Iri Strasky (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p153-160.

SpatioTemporal Stochastic Open-Dhannel Flow, Timothy K. Gates and Muhammad A. Al-Zahrani, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p346-351.

Hydraulic properties

Addressing Non-Aqueous Phase Liquids and Dissolved Plumes at Two Adjacent Superfund Sites with Commingled Groundwater Contamination, Jeffrey A. Dhont and Udai P. Singh, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p812-823.

Application of High-Resolution Schemes to Free Surface Flows in Irregular Channels, Ke-Qiang Zheng and Eddy J. Langendoen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p201-206.

Characterization of Canal Operations under Ideal Anticipa-tory Control, E. Bautista, A. J. Clemmens and T. S. Strel-koff, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1887-1892.

Comparison of Spatial Variability of Infiltration Properties at Two Sites in Konza Prairie of East-Central Kansas, R. S. Govindaraju, J. K. Koelliker, M. K. Banks and A. P. Schwab, HE July 96, p131-138.

Estimation of In Situ Hydraulic Properties of Saprolite, Gordon M. Matheson, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p66-73.

Evaluation of Groundwater Travel-Time Calculations for Yucca Mountain, R. W. Barnard, S. J. Altman, B. W. Arnold, C. K. Ho and S. A. McKenna, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p193-195

Large River Diversion Optimization Considering the Un-certainties Involved, M. H. Afshar, A. Afshar and H. Parvazian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p4347-4352

Restoration of Abandoned Meanders on the Middle Fork Forked Deer River, Tennessee, B. J. Doeing, R. A. Gaines and W. A. Thomas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3375-3380.

Hydraulic roughness

Evaluating Hydraulic Roughness in Tunnels, Thomas C. MacDonald and Ken J. Susilo, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3645-3650.

Vegetative Roughness in Flood Control Channels, Gary E. Freeman, David R. Derrick and William J. Rahmeyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1513-1518.

Hydraulic structures

Design Guidelines for Spillway Gates, Chander K. Sehgal, HY Mar. 96, p155-165.

Energy Dissipators edited by D.L. Vischer and Willi Hager, Henry T. Falvey, HY Aug. 96, p478.

Full-Scale Test Studies on Prevention of Frost Damage for Retaining Wall Reinforced with Geotextile, Lun Chen, Guangxin Li and Wenfeng Huang, (Cold Regions Engi-neering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p724-735.

Hydraulic Structures by P. Novak, A. I. B. Moffat, C. Nal-luri, and R. Narayanan, Steven Abt, HY Nov. 96, p674. Local Scour Downstream of Hydraulic Structures, Gijs J.

C. M. Hoffmans and Krystian W. Pilarczyk, HY Apr. 95,

A Method to Study Suspended Sediment Induced Flow Characteristics Changes, D. Zhou and C. Mendoza, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1447-1452.

On Silt Abrasion Erosion of Three Gorges Hydraulic Turbine in the Future, Shehua Huang, Wei Li and Liangju Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3856-3862.

Probabilistic Assessment of Miter Gates, Nathan M. Kathir, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p866-869.

Risk Based Analysis of Major Rehabilitation of Hydraulic Structures Using REPAIR, David Moser, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2498-2503. Selection of the Form of Calculated Flood Hydrograph in Projecting Water Release Facilities, D. M. Yaroshevskii, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Uncertainty and Risk Analyses for FEMA Alluvial-Fan Method, Bing Zhao and Larry W. Mays, HY June 96, p325-332.

Hydraulic transients

Numerical Simulation of Hydraulic Transients in Hydropower Plant Using Safety Membranes, Fusheng Ni, Peicheng Hu and Oiaohong Wang, HY June 96, p298-

Hydraulic transportation Unsteady Flow in Hydraulic Capsule Pipeline, C. W. Lenau and M. M. El-Bayya, EM Dec. 96, p1168-1173.

Abwasser-Hydraulik: Theorie Und Praxis (Sewer Hydraulics: Theory and Practice) by Willi H. Hager, Ben Chie Yen, HY Oct. 96, p591.

Alluvial Channel Geometry: Theory and Applications, Pierre Y. Julien and Jayamurni Wargadalam, HY Apr. 95, p312-325.

Alluvial Fan: Proposed New Process-Oriented Definitions for Arid Southwest, Richard H. French, Jonathan E. Fuller and Steve Waters, WR Sept./Oct. 93, p588-598. Backwater Computation for Transcritical River Flows, C. Beffa, HY Dec. 96, p745-748.

Bed Configuration and Hydraulic Resistance in Alluvial-Channel Flows, Fazle Karim, HY Jan. 95, p15-25.

Channel Fiows, razie Karim, FT Jan. 93, p.15-25.
The Birth and Success of Orange County's Hydrology and Hydraulics Technical Group, Chenchayya T. Bathala, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2259-2263.

Bridge Hydraulic and Scour Analysis Using FESWMS-2DH, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1555-1564.

Controlled Excavation Along a Prescribed Path, Eugeniusz

Budny and Witold Gutkowski, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p227-234. Controlled Semiactive Hydraulic Vibration Absorber for Bridges, William N. Patten, Ronald L. Sack and Qiwei He, ST Feb. 96, p187-192.

Demonstration of the Smart Crane Ammunition Transfer System, E. Craig Bradley, Steven M. Killough and John C. Rowe, (Robotics for Challenging Environments, Lau-ra A. Demsetz, ed., 1996), p192-198.

Detailed Measurements of Scour at Bridges, David S. Mueller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2541-2549.

Determining Rehabilitated Sewer Flow Capacity, ASCE Task Committee on Flow Characteristics of Pipeline Infrastructure Committee of the Pipeline Division, TE May/June 96, p258-261.

Energy Dissipation Devices in Bridges using Hydraulic Dampers, E. A. Delis, R. B. Malla, M. Madani and K. J. Thompson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), pl 188-1196.

Mohammadi, ed., 1990, p. 180-1190.
Environmental Hydraulics: New Research Directions for the 21st Century, ASCE Task Committee on Hydraulic Engineering Research Advocacy, Hy Apr. 96, p. 180-183.
Floodplain analysis of the Lower Santa Margarita River in Camp Pendleton Marine Air Base, California, Ruh-Ming

Li, Anna Lantin and Hank Fehlman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1870-1874.

Flora Wang, Noted Hydrologist, Was Louisiana State Pro-fessor, NE Oct. 96, p6.

ed., 1996), p1432-1445.

Fundamentals of Hydraulic Dredging, 2nd ed., Thomas M. Turner, 1996, 0-7844-0147-0, 258pp. Hazard Assessment of Debris Fans at Rico, Colorado, B. Christopher Wilbur, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, HEC-RAS (River Analysis System), Gary W. Brunner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Hydraulic and Engineering Considerations in Designing Constructed Treatment Wetlands for a Lake Restoration, C. Charles Tai, Donthamsetti V. Rao and Jonathan Polinkas, (North American Water and Environment Congress & Des p257-262.

Hydraulic Effects of Habitat Structures in Flood Control Channels, Rebecca Seal, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1519-1524.

Hydraulic Residence Time of CSTRs under Unsteady-State Condition, Jian Peng, EE Nov./Dec. 94, p1446-1458.

Hydraulic Studies for a Large Wetland, Stephane Asselin, Phillip R. Mineart and Pierre-Yves Saugy, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p512-517.

Hydraulics of Subsurface Flow Constructed Wetlands, A. T. Hjelmfelt, Jr. and A. L. Thompson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p52-57.

The Impact of Numerical Precision on Optimal Groundwater Hydraulic Control, David P. Ahlfeld and R. Guy Riefler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p618-621.

Infiltration Properties at Two Sites in the Konza Prairie, R. S. Govindaraju, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p1267-1272.

Interdisciplinary Research of Mountainous Areas: Past, Present, and Future, Robert D. Jarrett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2445.

Mixing of a Bent-over Jet in Crossflow, Paul C. K. Chu and Joseph H. W. Lee, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p910-913.

Modeling Seasonal Furrow Irrigation, N. S. Raghuwanshi and W. W. Wallender, IR July/Aug. 96, p235-242.

Modeling the Response of ER Damper: Phenomenology and Emulation, Scott A. Burton, Nicos Makris, I. Kon-stantopoulos and P. J. Antsaklis, EM Sept. 96, p897-906.

Next Generation Flood Damage Analysis Program, Michael W. Burnham, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3788-3793.

Numerical Model for Sea Outfall Hydraulics, Zhen-Ren Guo and James J. Sharp, HY Feb. 96, p82-89.

Optimum Simulation and Control of Fixed-Speed Pumping Stations, Mark T. Yin, John F. Andrews and Michael K. Stenstrom, EE Mar. 96, p205-211.

Organizing a Local Water Resources Technical Group, Thomas G. Sands, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2254-2258.

River Hydraulics, U.S. Army Corps of Engineers, 1996, 0-7844-0159-4, 145pp.

Salinity and Hydraulic Issues at a Constructed Wetlands, W. G. Hines, J. E. Burkstaller and A. F. Gove, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1178-1183.

Searching for Optimal Combinations of Stormwater Deten-tion Basins, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2264-2269.

Selection of Sediment Transport Relations Part III: Numerical Ranking of Sediment Transport Relations, David T. Williams and Pierre Y. Julien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2843-2848.

Selection of Sediment Transport Relations: Part II, Rang of Dimensionless Numbers, David S. Smith and David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2837-2842. Siting of Grade Control Structures, Chester C. Watson, John Smith and David S. Biedenharn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p286-291.

South Carolina Department of Transportation's Statewide Program of Bridge Scour Evaluation, Randall D. Williamson, Dean D. Hatfield and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p729-735.

Turbulence in Open-Channel Flows by Iehisa Nezu and Hiroji Nakagawa, Ching-Jen Chen, EM June 96, p590.

Two-Dimensional Hydraulics of Recirculating Ground-Water Remediation Wells in Unconfined Aquifers, W. M. Stallard, K. C. Wu, N. Shi and M. Yavuz Corapcioglu, EE Aug. 96, p692-699.

Uncertainty Analysis of Reservoir Sedimentation, Hyun-Suk Shin and Jose D. Salas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2294-2299.

Uncertainty and Risk Analyses for FEMA Alluvial Fan Method, Bing Zhao and Larry Mays, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p180-190.

Uncertainty of Hydraulic Parameters, Peggy A. Johnson, HY Feb. 96, p112-114.

Utilizing Geomorphic Analogs for Design of Natural Stream Channels, Scott Gillilan, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2799-2804.

Hydrocarbons

Application of the Hydrocarbon Spill Screening Model to Field Sites, James W. Weaver, (Non-Aqueous Phase Liq-uids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p788-

Aquifer Transmissivity Computations Based on Data from Pump-and-Treat Facilities, Walter Z. Tang, Dean F. Ra-deloff and Vassilios A. Tsihrintzis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1273-1278.

Biodegradation Modeling of a Closed Landfill Site, Sai K. R. Edavally, Lawrence H. Woodbury and G. Pad-manabhan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2510-2515.

Deciphering LNAPI. Migration Pathways in a Heterogene-ous Hydrogeologic Setting, Mark K. Levorsen and Chris-tine Dreier Bynum, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment a Remediation, Lakshmi N. Reddi, ed., 1996), p836-847.

Discovery of Abundant, Accessible Hydrocarbons Nearly Everywhere in the Solar System, A. Zuppero, (Engineer-ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p791-799.

Editor's Note, Thomas L. Theis, EE Dec. 96, p1049. Enhancement of In Situ Zero-Valent Metal Treatment of

Contaminated Groundwater, D. R. Reinhart, C. Clausen, Geiger, N. Ruiz and G. Afiourny, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Asand Remediation, Lakshmi N. Reddi, ed., sessment 1996), p323-332.

A Field Test of NAPL Removal by High Molecular Weight Alcohol Injection, Ronald W. Falta, Scott E. Brame, Cin-dy M. Lee, John T. Coates, Charles Wright, Sarah Price, Patrick Haskell and Eberhard Roeder, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p257-268.

Innovative Bioventing System Construction/Operation in Cold Regions, Kimberly K. Stricklan and Randall L. Mattzela, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p351-359.

Interference by Natural Organics in Diesel Analyses, Paul Dworian, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p71-81. Laser Induced Fluorescence and Cone Penetrometer Testing for Delineation of Hydrocarbons, Benjamin J. Timer-son and Donald M. Moran, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment a Remediation, Lakshmi N. Reddi, ed., 1996), p115-126.

NAPI. Detection, Measurement, and Distribution in the Subsurface Environment, David W. Ostendorf, Alan J. Lutenegger, Russell J. Suchana, Paul S. Cheever and Samuel J. Pollock, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p91-102.

Modeling Ground-Water Remediation at an Oil Refinery, Ko-Hui Liu and Greg McNulty, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p824-835.

Petroleum Hydrocarbon Removal via Volatilization and Bi-odegradation at McGrath, Alaska, Paul C. Ramert and Wayne L. Eberhardt, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996),

P94-103.
P34-105.
P36-105.
P37-105.
P38-105.
P39-105.
/p

Reductive Pyrolysis for the Destruction of Chloromethane: A Reaction Pathway Model Based on Thermodynamic and Thermokinetic Considerations, Varadarajan Ravin-Massoud Pirbazari, Badri N. Badriyha and Sidney W. Benson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1367-1372.

Surfactant Enhanced Gravity Drainage (SEGD) of Dense Nonaqueous Phase Liquids: A New Concept in the In-situ DNAPL Remediation, Milind D. Deo and Ju-Woung Yoon, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p393-404.

Ultimate Transverse Strength and Reliability Analysis of Offshore Production Ships, Xiaozhi Wang and Lars M. Serhaug, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p146-149.

Hydrodynamic configurations

Accuracy of a 3D Hydrodynamic Model Verification due to the Relative Magnitude of Forcing Functions, Bernard B. Hsieh, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3452-3457.

Ensuring Consistency of Groundwater Modeling Results with Indirect Evidence, S. Vomvoris, A. Scholtis and P. Vinard, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p133-134.

The Fate of Pathogenic Organisms in Mamala Bay, John P. Connolly and Alan F. Blumberg, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4090-4095.

A Hydrodynamic FVM Algorithm on Arbitrary Grids, Jinglian J. Liu, Billy H. Johnson, Bharat K. Soni and Victor L. Zitta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3668-3673.

Modeling Combined Stresses on Aquatic Ecosystems, Jam-ie D. Anderson, Ian P. King and Gerald T. Orlob, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3998-4003.

Observations of Tidal Circulation in Mamala Bay, Hawaii, Peter Hamilton, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3880-3885.

Simulating DBP Precursor Transport in Sacramento Delta, Paul H. Hutton, Nirmala Mahadevan and Francis I. Chung, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3557-3562. Simulation of Pesticide Transport for Verification of the DWRDSM, Christopher Enright and Paul Hutton, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3563-3568.

Transport Modeling of the Coastal Waters of Oahu, Hawaii. Alan F. Blumberg and John P. Connolly, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4084-4089.

Two- and Three-Dimensional Hydrodynamic Modeling of the Salton Sea, California, Christopher B. Cook and Ger-ald T. Orlob, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3752-3757.

Zonification of Areas with Inundation Risk by Means of Mathematical Modeling in the Rosario Region, Argenti-na, G. A. Riccardi, E. D. Zimmermann and R. A. Navar-10, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Hydrodynamic pressure

A Complete Three Dimensional Analysis of Pressures on a Vertical Cylinder by Earthquakes Including Fluid-Structure Interaction, Bang-Fuh Chen, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p519-522.

Dynamic Effects of Sediment and Foundation on Dam Hydrodynamic Effects of secument and roundation on Dam Hydrodynamic Pressure Under Vertical Ground Accelerations, Kuo-Chyang Chang, Tin-Kan Hung, David A. Margo and Jeen-Shang Lin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p511-514.

Procedure for Time-Domain Seismic Analyses of Concrete Dams, R. Yang, C. S. Tsai and G. C. Lee, EM Feb. 96, p116-122

Hydrodynamics

3D Model of Estuarine Circulation and Water Quality Induced by Surface Discharges, Wenrui Huang and Mal-colm Spaulding, HY Apr. 95, p300-311.

Application of a Coupled 3-D Hydrodynamics-Sediment-Water Quality Model, Xinjian Chen and Y. Peter Sheng, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p325-339.

Application of a Hydrodynamic Model in Design of the Kingman Lake Wetland Restoration Project, Karen M. Nook and William G. Grosskopf, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p58-63.

Application of Circulation and Sediment Transport Modeling within San Diego Bay, Thomas L. Johnson and Clau dio Fassardi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p596-607

Application of the Q-3D SHORECIRC Model to Surfbeat, A. R. Van Dongeren, I. A. Svendsen and F. E. Sancho, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p233-244.

Behaviour-Oriented Models of Shoreface Evolution, Marcel J. F. Stive, Huib J. De Vriend, Peter J. Cowell and Alan Wm. Niedoroda, (*Coastal Dynamics* '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p998-

Buoyant Plumes from Multiport Diffuser Discharge in Deep Coflowing Water, María M. Méndez-Díaz and Gerhard H. Jirka, HY Aug. 96, p428-435.

COASTMAP: An Integrated System for Environmental Monitoring, Modeling and Management, Thomas Opishinski, Malcolm L. Spaulding and Craig Swanson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Complete Hydrodynamic Border-Strip Irrigation Model, Vivekanand Singh and S. Murty Bhallamudi, IR July/

Aug. 96, p189-197.

Concrete Penetration by Eroding Projectiles: Experiments and Analysis, Vladimir M. Gold, George C. Vradis and James C. Pearson, EM Feb. 96, p145-152.

Determination of Bridge Scour Velocity in an Estuary, Billy L. Edge, Stephan N. Vignet and John S. Fisher, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1720-1729.

Dilution of Dense Bottom Plumes, Ole Petersen and Torben Larsen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p906-909.

Dominant Eddy Simulation in Turbulent Flow, J.-B. Zhang and V. H. Chu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p438-441.

Experimental Investigation of the Temporal Intermittency in the Transition to Turbulence of a Plane Mixing Layer, A. L. W. Bokde, D. A. Jordan, Jr. and R. W. Miksad, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1070-1073.

A Graphical Environment for Multi-Dimensional Surface Water Modeling, Alan K. Zundel and Norman L. Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p.201-212.
Hydraulic Studies for a Large Wetland, Stephane Asselin, Phillip R. Mineart and Pierre-Yves Saugy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p512-517.
Hydrodynamic Behavior of Partly Vegetated Open Channels, Dan Naot, Ichisa Nezu and Hiroji Nakagawa, HY

Nov. 96, p625-633.

Hydrodynamic Flow Modeling at Confluence of Two Streams, K.-H. Wang, T. G. Cleveland, S. Fitzgerald and

X. Ren, EM Oct. 96, p994-1002. Hydrodynamic Model and Sensitivity Analysis for San

Hydrodynamic Model and Sensitivity Analysis for San Juan Bay, P. R. Lisa J. Wolf and Gavin Gong, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p505-517.
Hydrodynamic Modeling for Assessing Engineering Alter-natives for Elevating the Kennedy Causeway, Corpus Christi, Texas, Cheryl A. Brown, Nicholas C. Kraus and Adele Militello, (Estuarine and Coastal Modeling, Mal-colm L. Spaulding and Ralph T. Cheng, 1996), p681-604. 694

Hydrodynamic Simulations in Sediment-Carried Contami-nant Modeling for the Buffalo River, New York, Ruo-chuan Gu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1039-1044.
Influence of Foundation Nonlinearity on Offshore Towers
Response, Mohamed H. El Naggar and Milos Novak, GT

Sept. 96, p717-724.

Laterally Excited Flexible Tanks with Nonuniform Density Liquid, Yu Tang, EM Oct. 96, p948-956.

Modeling Changing Freshwater Delivery to Apalachicola Bay, FL, W. K. Jones and Wenrui Huang, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T.

Cheng, 1996), p116-127.

Cheng, 1990), p116-127.

Modeling Natural Hydrodynamic Systems with a Differential-Turbulence Column, Brett Brunk, Monroe Weber-Shirk, Anna Jensen, Gerhard Jirka and Leonard W. Lion, HY July 96, p373-380.

Modeling the Effect of Reduced Nitrogen Loading on Water Quality. Y. Peter Sheng, Eduardo A. Yassuda and Changlu Yang, (Estuarine and Coastal Modeling, Malcoim L. Spaulding and Ralph T. Cheng, 1996), p644-658.

Modeling the Fate of Copper Discharged to San Francisco Bay, Carl W. Chen, Daniel Leva and Adam Olivieri, EE

Oct. 96, p924-934.

Get. 20, pp24-234.
Modeling the Periodic Stratification and Gravitational Circulation in San Francisco Bay, California, Ralph T. Cheng and Vincenzo Casulli, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p240-254.

Modelling Eddy Formation in Coastal Waters: A Comparison between Model Capabilities, Duncan Galloway, Eric Wolanski and Brian King, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng. 1996), p13-25.

Modelling of Hydro- and Lithodynamic Processes in Kollobrzeg Region, Leonard Gajewski, Elžbieta Zawadz-ka, Juliusz Gajewski and Andrzej Lewandowski, (Coast-al Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p891-902.

Monitoring Results of a Nearshore Disposal Berm, Emre N. Otay, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p547-558.

Multi Dimensional Modeling of Water Quality Using the Finite Element Method, Ian P. King and John F. De-George, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p340-354.

Multiphase Distribution of Cohesive Sediments and Heavy

Metals in Estuarine Systems, Parmeshwar L. Shrestha and Gerald T. Orlob, EE Aug. 96, p730-740.

Nearshore Hydrodynamic and Water Quality Modeling for Water Intake Evaluation and Design, Kwang K. Lee, Bing Shen and Chung Shyan Wu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2456-2461.

Nested Three-Dimensional Hydrodynamic Modeling of the Delaware Estuary, John S. Ramsey, Robert P. Hamilton, Jr. and David G. Aubrey, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

p53-65

348

Numerical Modeling on the Ofunato Bay Ecosystem Including the Oyster Farming, Tomohiko Terasawa, Kisa-buro Nakata and Koichi Taguchi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p530-541.

Numerical Simulation of Temperature in the New York Bight, S. Rao Vemulakonda, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p66-79.

Oblique Reflection Characteristics of Rubble-Mound Structures, Michael Isaacson, David Papps and Etienne Mansard, WW Jan./Feb. 96, p1-7.

Pollutant Transport Across Porous Stream Beds, C. Mendo-za and D. Zhou, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1581-1586.

Probabilistic Analysis of Ocean Outfall Mixing Zones, Hening Huang, Robert E. Fergen, John R. Proni and John J. Tsai, EE May 96, p359-367.

J. Tsai, EE May 96, p359-367.
A Quantitative Skill Assessment of Numerical Hydrodynamic Models of Coastal Currents, Timothy R. Keen and Scott M. Glenn, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p26-40.
Radiation Hydrodynamics of a Slightly-Submerged Body, P. Ananthakrishnan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p832-835.
The Bole of Circulation Patterns on the Simulation of Control

The Role of Circulation Patterns on the Simulation of Constituent Transport in San Juan Bay, Puerto Rico, Gavin Gong and James D. Bowen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p518-529.

Shear Stresses and Hydrodynamics of Combined Waves and Currents, R. D. MacIver, R. R. Simons and A. J. Grass, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed., 1996), p676-685.

Slowly-varying Components of Hydrodynamic Field at the Wall of Breakwater of Gdańsk North Port, Piotr Wilde and Eugeniusz Sobierajski, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

Stochastic Response of Offshore Structures Excited by Drag Forces, Arvid Naess and Solomon C. S. Yim, EM

May 96, p442-448.
Study of Surf-Zone Macroturbulence and Mixing Using Delta '93 Field Data, A. Rodriguez, A. Sánchez-Arcilla, J. Gomez and E. Bahia, (*Coastal Dynamics* '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p305-

Systematic Analysis of Long-Term Fate of Disposed Dredged Material, Norman W. Scheffner, WW May/June

96, p127-133.

Oct. 94, p837-856. Wave Induced Nearshore Circulation in the Ebro Delta, A. Sánchez-Arcilla, F. Collado, M. G. Coussirat and A. Ro-driguez, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p437-448.

Wave Scattering by Submerged Elliptical Disk, S. Zhang and A. N. Williams, WW Jan./Feb. 96, p38-45.

Hydroelasticity

Plow, Andrzej Kozakiewicz, B. Mutlu Sumer and Jørgen Fredsøe, WW Nov./Dec. 94, p515-534.

Hydroelectric power Canal Control and Automation for the Central District System, Michael A. Drain and Eric R. Hixson, (North Amertem, Michael A. Drain and Eric R. Hisson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2384-2389. Editorial, Sharon deMonsabert, EY Apr. 96, p1. Hydroelectric Pumped Storage Technology: International Experience, Task Committee on Pumped Storage of the

Experience, Task Committee on Pumped Storage of the Committee on Hydropower of the Energy Division of the American Society of Civil Engineers, (A. Hassan Makarechian, chmn.), 1996, 0-7844-0144-6, 390pp. Managing Sediments in Reservoirs at FERC, Shou-shan Fan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), 2024-2024.

p2084-2090.

Mixing Processes in the Dangava River Estuary, B. Hakansson, E. Zaharchenko and H. B. Wittgren, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3276-3277. Parametric Study on Performance of Cross-Flow Turbine, C. B. Joshi, V. Seshadri and S. N. Singh, EY Apr. 95,

p28-45.

Penstock Safety: Proactive or Reactive, EY Apr. 96, p2-9. Retrofit of Black Butte Hydroelectric Project Pe George A. Inverso, John A. Schwartz, Stephen M. Hart, Erik Bodholt and Billy Ferguson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p469-476. Sound Way to Save Fish, John Nestler and Gene Ploskey.

CE Sept. 96, p58-61.
Turbulence Model for Depth-Averaged Flows in Navigation Installations, Hector R. Bravo and Forrest M. Holly, Jr., HY Dec. 96, p718-727.

Hydroelectric power generation
Desilting Basin System of the Dul Hasti Hydroelectric Project, Daniel Develay, Jean Binquet, E. Divatia and C. R. Venkatesha, HY Oct. 96, p565-572.
Developing a Rating Table for the Central Diversion Dam Radial Gates, Michael A. Drain, (North American Water

and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3598-3603.

Streamflows Prediction Models for the Colombian Generation System Considering El Niño Effect, Oscar J. Mesa, Ricardo A. Smith, Pedro J. Restrepo, José E. Salazar, Luis F. Carvajal and Juan D. Velásquez, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1477-1482.

Hydroelectric powerplants

Aeration of Reservoirs and Releases TVA Porous Hose
Line Diffuser, Mark H. Mobley and W. Gary Brock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1311-1316.

e Costs and Benefits of Dam Removal on the Elwha River, Paula M. Engel, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), P4288-4293.
Flow through Vertical Barrier Screens - A Numerical Model, M. E. Allen, M. P. Cherian and L. J. Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1111-1116.

Getting Wet with Metric, Frederick A. Locher, (North

Getting Wet with Metric, Frederick A. Locher, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3685-3689. Impact of Anthropogenic Activities in Rivers Upon Accu-racy of Hydrological Forecasts and on Development of Forecasting Methodologies— Experiences From the Sto-vak-Hungarian Reach of Danube, K. Hajtasova and A Svoboda, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1718.

1996), p1718.

The Influence of Peak-Regulation of the Three Gorges Power Plant on Navigation, Xinhua Yu, Xiang Fu and Changming Ji, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

Juvenile Fish Separator Design, Daniel M. Katz, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1117-1122.

Mitigation of Predation at a Juvenile Bypass Outfall Site, J. DenBleyker and L. J. Weber, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p893-898.

Modeling the Ecological Impacts of Flaming Gorge Dam Operations, S. C. L. Yin, K. E. LaGory, J. W. Hayse, I. Hiohowskyi, R. A. Van Lonkhuyzen and H. E. Cho, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1911-1917

Numerical Simulation of Hydraulic Transients in Hydro-power Plant Using Safety Membranes, Fusheng Ni, Peicheng Hu and Qiaohong Wang, HY June 96, p298-

Plans for Testing and Evaluating the New Autoventing Tur-bines at TVA's Norris Hydro Project, Paul Hopping, Pa-trick March, Thomas Brice and Joseph Cybularz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1299-1304.

Reliability Analysis in Support of Risk Assessment for Non-Routine Closure/Shutdown of Hydroelectric Generating Stations, T. V. Vo, T. R. Blackburn, L. O. Casazza, P. G. Heasler, N. L. Mara, T. M. Mitts and H. K. Phan, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p326-345.

Results of Field Evaluations of the New Modular Inclined Fish Diversion Screen, F. C. Winchell, S. V. Amaral, E. P. Taft, T. C. Cook, A. W. Plizga, E. M. Paolini and C. W. Sullivan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p881-886.

Spawning a Hydroelectric Plant, Zbigniew R. Matus and Ronald E. Israelsen, CE Mar. 96, p56-58.

White River Fish Screen Project - Hydraulic Modeling, Dennis Dorratcague, Wayne Porter and Larry Swenson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p310-315.

White River Fish Screen Project Planning and Design, Morton D. McMillen and Wayne Porter, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1123-1128.

Hydroelectric resources

Decision Support, R. B. Allen, CE July 96, p53-55.

Spawning a Hydroelectric Plant, Zbigniew R. Matus and Ronald E. Israelsen, CE Mar. 96, p56-58.

Corrosion and Hydrogen Permeation Inhibition by Thin Layer Zn-Ni Alloy Electrodeposition, D. H. Coleman, B. N. Popov and R. E. White, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1281-1287.

A New Hydrogen Microsensor for Space Applications, Jessica Knoll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1285-1289. Optimization of a 550-/690-MPa High-Performance Bridge

Steel, A. B. Magee, J. H. Gross and R. D. Stout, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1561-1570.

Volcanic Glass -- Oxygen Ore on the Moon, Carlton C. Allen, John M. Woodell and David S. McKay, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p756-761.

Hydrogen peroxide

Advanced Oxidation Processes for Removal of Natural Organics and Pesticides from Drinking Water, Badri N. Ba-driyha and Massoud Pirbazari, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3010-3016.

Hydrogen sulfide

Aeration of Reservoirs and Releases TVA Porous Hose Line Diffuser, Mark H. Mobley and W. Gary Brock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1311-1316.

Gas-Phase Removal of H₂S and NH₃ with Dielectric Barrier Discharges. Moo Been Chang and Tian Deng Tseng, EE Jan. 96, p41-46.
Study of Biological Reactors for Control of Odor, VOC and Toxic Emissions from Wastewater Treatment Plants, Todd S. Webster, Joseph S. Devinny, Edward M. Torres and Shabbir S. Basrai, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p571-576.
Water-Treatment Plant Helps Clean the Air of Institute Congress.

Water-Treatment Plant Helps Clean the Air of Jupiter, CE Mar. 96, p82.

Application of GIS in Site Selection for Nuclear Waste Dis-posal Facility, Grant Sheng, Isaac N. Luginaah and John Sorrell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p95-97.

The Application of Time Domain Electromagnetics to a Regional Groundwater Investigation in Western Washington, Rory Retzlaff and Robert H. Anderson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p27-41.

Ensuring Consistency of Groundwater Modeling Results with Indirect Evidence, S. Vomvoris, A. Scholtis and P. Vinard, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p133-134.

Examination of Exploration Options of the Yucca Mountain CHn Unit, Kurt E. Suchsland, Jerry L. King and Richard D. Memory, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p300-302.

meni, Technical Program Communec, 1990, p. 200-200.

Ground Water Variability at Sanitary Landfills—Causes and Solutions, John Oneacre and Debbie Figueras, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p965-987.

Hydraulic Analysis of Linear Dewatering Systems, Jerzy M. Sawicki, IR Nov./Dec. 96, p348-353.

Isotopic Systematics of Saline Waters at Aspö and Laxe-mar, Sweden, Bill Wallin and Zell Peterman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p41-42.

Landform Grading and Slope Evolution, Horst J. Schor and Donald H. Gray, GT Oct. 95, p729-734.

Lanfill Site Evaluation and Application of MODFLOW to simulate Hydraulically Conductive Zones in Bedrock Associated with Diabase Dikes in North Carolina, M. A. Ponti, Jr., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996),

Localized Alteration of the Paintbrush Nonwelded Hydrologic Unit within the Exploratory Studies Facility, Z. E. Peterman, R. W. Spengler, F. R. Singer and S. C. Beason, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p46-47

Model Uncertainty for the Advection-Dispersion Equation, Wade E. Hathhorn, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p881-896.

Nine-Component Vertical Seismic Profiling at Yucca Mountain, Nevada, A. H. Balch, Cemal Erdemir, R. W. Spengler and W. Clay Hunter, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p155-156.

Regression and Inverse Analyses in Regional Ground-Water Modeling, Andrew R. Piggott, A. Ghosh Bobba and Kent S. Novakowski, WR Jan/Feb. 96, pl-10.

Simulation of Regional Ground-Water Flow on a Transboundary Flowline; Trans-Pecos, Texas and Chihuahua, Mexico, Barry J. Hibbs, Bruce K. Darling, John M. Sharp, Jr. and John B. Ashworth, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1323-1330.

Site Characterisation of a Complex DNAPL Site—An Australian Experience, J. M. Duran and J. A. Grounds, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p800-811.

Hydrographic surveys Catastrophic Floods and Their "Risk" in the Rivers of Al-bania, Miriam Bogdani, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p919.

Hydrograpas Ar-A-Station Temporal Variations in Flow Under Drought and Flood Conditions and Associated Sediment Prob-lems, Muhammad Ashiq, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1881-1886.

Developing Parameters for a Quasi-Distributed Runoff Model Using GIS, Thomas A. Evans and John C. Peters, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2707-2712.

Direct Sizing of Small Stormwater Pump Stations, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2072-2077.

Field Verification of Dem-Derived Watershed Response, Randal F. Bodnar, Mark Michelini and Rafael G. Quimpo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3206-3211.

roundwater Flow Component of a Wetland-Dynamics Model, Hector R. Bravo and Gregory H. Brown, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2793-2798.

Performance of a Virtual Runoff Hydrograph System, Pa-trick Carriere, Shahab Mohaghegh and Razi Gaskari, WR Nov./Dec. 96, p421-427.

Selection of the Form of Calculated Flood Hydrograph in Projecting Water Release Facilities, D. M. Yaroshevskii, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2446.

Statistical Distributions and Natural Hydrograph, Nazeer Ahmed, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p292-297.

A Verification System for Probabilistic Hydrograph Fore-casts, Edwin Welles and Momcilo Markus, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p223-224.

Chung, ed., 1997), p.225-229.

Hydrologic aspects
Advanced Hydrologic Forecasting Products for Flood and
Drought Mitigation, John J. Ingram, Edwin Welles and
Dean T. Braatz, (Natural Disaster Reduction, George W.
Housner, ed. and Riley M. Chung, ed., 1997), p.227-228.
Debris Flow Events at Mountainous Creeks near Santiago,
Chile- Hydrologic Analysis, X. Vargas and P. Lara,
(North American Water and Environment Congress &
Destructive Water, Chenchayya Bathala, ed., 1996),
a1550,1551 p1550-1551.

pi30e-1331.

Discrete-Fracture Modeling of Thermal-Hydrological Processes at G-Tunnel and Yucca Mountain, John J. Nitao and Thomas A. Buscheck, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p117-118.

Dose Rates from Repository Performance Assessment, Robin K. McGuire and John A. Vlasity, (High Level Ra-dioactive Waste Management, Technical Program Com-

mittee, 1996), p325-326.

Implementation of Watershed Planning in Chester County Pennsylvania, Robert G. Traver, (North American Water

rennsylvania, Robert G. Traver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3975-3980.

Indirect Evidences for Quantification of Groundwater Flow: Assessment of the Consistency of Geohydrological Groundwater Flow Models and Hydrochemical Mixing/Reaction Models of the Aspö Hard Rock Laboratory, Peter Wikberg and Ingwar Rhen, (High Level Radioactive Waste Management. Technical Program Committee. Waste Management, Technical Program Committee, 1996), p145-147.

Large River Diversion Optimization Considering the Uncertainties Involved, M. H. Afshar, A. Afshar and H. Par-vazian, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p4347-4352.

Regulatory Perspective on Future Climates at Yucca Mountain, Neil M. Coleman, Norman A. Eisenberg and David J. Brooks, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p255-257

Scoping Analysis of In Situ Thermal-Hydrological Testing at Yucca Mountain, Thomas A. Buscheck and John J. Nitao, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p130-132.

Unsaturated Flows Around a Horizontal Hole with Constant Heat Input, Y.-T. Chen and R. F. Boehm, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p125-127.

Hydrologic data

County-Wide Drainage Study Using GIS, J. J. DeVries and T. V. Hromadka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3623-3628.

Geophysical Log Interpretation Using Neural Network, S. Pezeshk, C. V. Camp and S. Karprapu, CP Apr. 96,

p136-142.

Modeling Climate Change Impacts on Water Resources, Brian Hurd, Paul Kirshen and Mac Callaway, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1834-1839.

Urbanization and Hydrologic Consequences in Simi Valley, California, M. Ali Tabidian, James M. Evensen, Jr., Don D. Adelman and Steve Elliott, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3332-3337.

The Use of Hydrologic Budget Techniques in Assessing Site Suitability for Wetland Creation, William R. Arcieri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Hydrologic models

Application of Mathematical Models for Flood Forecasting in Sri Lanka, G. T. Dharmasena, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1549.

Development of a Hydrologic Model with Both Spatially Distributed and Physically Based Capabilities, Dennis L. Johnson and Arthur C. Miller, (North American Water and Environment Congress & Destructive Water, Chen-

and Entironment Congress as Destructive Water, Con-chayya Bathala, ed., 1996), p3200-3205.

Development of a Regional Atmospheric-Hydrologic Model for the Study of Climate Change in California, ZhiQiang Chen, M. Levent Kavvas, Liqin Tan and Su-Tzai Soong, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1093-1098.

Disaggregation Modeling Process for Climatic Time Series, Susan Firor, Brad A. Finney, Robert Willis and John A. Dracup, WR May/June 96, p205-212.

Distributed Hydrologic Modeling of Humid Regions, Fred L. Ogden, Brent A. Watts and B. Saghafian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2909-2914.

Dormant Season Evaporation: Challenges to the Current Models, Jerry L. Hatfield and John H. Prueger, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p219-224.

Effect of Climate Change on Hydrologic Regime of Two Climatically Different Watersheds, Athanasios Loukas and Michael C. Quick, HE Apr. 96, p77-87.

Estimation of High Spring Floods Causing Inundation in Non-Studied Rivers of the West Siberian Plain, E. A. Asabina, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3702-3703.

Extracting Watershed Characteristics from Spatial Digital Data Using GIS, A Case Study of the Great Miami River Basin, Maged Hussein and Franklin W. Schwartz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p515-521.

Floodplain Mapping Using Continuous Hydrologic and Hydraulic Simulation Models, A. Allen Bradley, Paula J. Cooper, Kenneth W. Potter and Thomas Price, HE Apr.

Hydrologic Modeling System, John Peters and Arlen Feld-man, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3776-3781.

Hydrology Handbook, Second edition (M&R No. 28), Task Committee on Hydrology Handbook of Management Group D of the American Society of Civil Engineers,

351

Group D of the American Society of Civil Engineers, 1996, 0-7844-0138-1, 800pp.
Impact of Reservoir Flood-Control Operation on Interior-drainage Facilities, Michael Lindquist, David Ford and Pete Hall, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, 2000-0044-

ed., 1996), p2939-2944.
Impacts of Climate Change in the Missouri River Basin,
Rollin H. Hotchkiss, Steven F. Jorgensen, Ranjan S. Muttiah, Jeffrey G. Arnold, Thomas A. Fontaine, Scott J. Kenner and John M. Antle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3399-3404.

Localized Alteration of the Paintbrush Nonwelded Hydrologic Unit within the Exploratory Studies Facility, Z. E. Peterman, R. W. Spengler, F. R. Singer and S. C. Beason, (High Level Radioactive Waste Management, Tech-

nical Program Committee, 1996), p46-47.

Results of a GIS/HEC-1 Interface Module, Paul A. DeBarry, (North American Water and Environment Congress Destructive Water, Chenchayya Bathala, ed., 1996),

SAMS: Software for Simulating Streamflow Series, J. D. Salas, N. Saada, D. Frevert and W. Lane, (North Ameri-can Water and Environment Congress & Destructive

Water, Chenchayya Bathala, ed., 1996), p3387-3392. Isimulating Atrazine Transport with HSPF in an Agricultural Watershed, Anne-Marie Laroche, Jacques Gallichand, Robert Lagacé and Alain Pesant, EE July 96, p622-630. Simulation of Catchment Response Using RC Network, M. J. Abedini, W. T. Dickinson and R. P. Rudra, (North

American Water and Environment Congress & Destruc-American water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3381-3386. Status Report - Task Committee on GIS Models and Dis-tributed Models of the Watershed, Rafael G. Quimpo, Paul A. DeBarry and E. James Nelson, (North American

Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2915-2920.

Storm-Water Management Implementation through Model-ing and GIS, Uzair M. Shamsi, WR Mar/Apr. 96, p114-

Stormwater Management Plan Updated for Climate System Changes, Yuan Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1846-1851.

Hydrologic properties
The Effect of Climatic Change on Hydrologic Variables,
Jason R. Westmacott and Donald H. Burn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1465-1470.

Hydrology Handbook, Second edition (M&R No. 28), Task Committee on Hydrology Handbook of Management Group D of the American Society of Civil Engineers,

1996, 0-7844-0138-1, 800pp.

Initial Studies to Assess Microbial Impacts on Nuclear Waste Disposal, J. M. Horn, Annemarie Meike, R. D. McCright and B. Economides, (High Level Radioactive Waste Management, Technical Program Committee, 1906) - 72 1996), p7-8.

Karst Water Inventories Using Thermography, C. Warren Campbell, Joseph W. Foster and Mohamed Abd El Latif, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3910-3914. A Program to Assess Microbial Impacts on Nuclear Waste

Containment, Joanne Horn and Annemarie Meike, (High Level Radioactive Waste Management, Technical Pro-

Level Radioactive Waste Management, Technical Program Committee, 1996, p.1-3.

A Progress Report on the Large Block Test, W. Lin, D. Wilder, J. Blink, P. Berge, S. Blair, V. Brugman, K. Lee, M. Owens, C. Radewan, Ramirez A., N. Rector, J. Roberts, D. Ruddle and J. Wagoner, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p122-124.

Restoration of Abandoned Meanders on the Middle Fork Forked Deer River, Tennessee, B. J. Doeing, R. A. Gaines and W. A. Thomas, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3375-3380.

The Use of Hydrologic Budget Techniques in Assessing Site Suitability for Wetland Creation, William R. Arcieri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3956-3961.

Advanced Hydrologic Forecasting for Flood and Drought Mitigation, John J. Ingram, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p455.

Analyzing Drought with a Simplified Climate Model, Mi-chael L. Anderson and M. Levent Kavvas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1075-1080.

Application of One- and Two-Dimensional Flow Models for an Evaluation of Riverine Wetland Hydrologic Func-tions, C. Charles Tai, Chou Fang and Apurba K. Borah, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p46-51.

The Birth and Success of Orange County's Hydrology and Hydraulics Technical Group, Chenchayya T. Bathala, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2259-2263.

Calibration of Sediment Transport Model for the Upper End of Elephant Butte Reservoir, Mohammed A. Samad, Drew C. Baird and Frank P. Montoya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2288-2293.

California's Response to Drought, Chester V. Bowling and Scott A. Jercich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p869-874.

Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996, 0-7844-0190-X, 965pp.

Concept Ecology Integrated Project Engineering and Environment; Relating a Project to the Surroundings, David S. Reutter, Roger J. Menendez, Peter J. Bottone and Robert L. Whitman, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Berbehol et 10065-175 Bathala, ed., 1996), p753-758.

Development of a Multivariate Vulnerability Indicator, Wilbert O. Thomas, Jr., Betty Bonn and Albert V. Romano, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p303-304.

Development of the San Joaquin County Hydrology Manual, T. V. Hromadka, J. J. DeVries, M. Callahan and J. Pulver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2078-2083.

Discussions of a 3D Numerical Simulation of Transient Regional Groundwater Flow and Transport, Bernard B. Hsieh, Mansour Zakikhani and William D. Martin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Distributetd Parameter Hydrologic Modeling and NEX-RAD for River Forecasting: Scale Issues Facing the National Weather Service, Michael Smith, Dong Jun Seo, Bryce Finnerty and Victor Koren, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p140-145.

Editor's Note, Thomas L. Theis, EE Jan. 96, p3.

Editorial, M. L. Kawas, HE Jan. 96, pl.

Emerging Concepts for Management of Salinity and Drain-age in Irrigated Regions, M. E. Grismer, (North Ameri-cam Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2126-2129.

Flora Wang, Noted Hydrologist, Was Louisiana State Pro-fessor, NE Oct. 96, p6.

Forcing Function and Climate Change, Bijaya P. Shrestha, Lucien Duckstein and Eugene Z. Stakhiv, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2151-2156. Fuzzy Rule-Based Estimation of Flood Probabilities under

Climatic Fluctuations, Istvan Bogardi, Roland Reiter and Peter Nachtnebel, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p61-79. Groundwater Flow Component of a Wetland-Dynamics

Model, Hector R. Bravo and Gregory H. Brown, (North American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996), p2793-2798. Hazard Assessment of Debris Fans at Rico, Colorado, B. Christopher Wilbur, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1432-1445.

The HEC NexGen Software Development Project, Darryl W. Davis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3770-3775.

ed., 1996), p.57/0-57/5.
Hydrologic Impact of Great Flood of 1993 in South-Central
Kansas, Marios Sophocleous, A. J. Stern and S. P. Perkins, IR July/Aug. 96, p.203-2-10.
Hydrologic Risk, Robert C. Patev, (Risk-Based Decision
Making in Water Resources VII, Yacov Y. Haimes, ed.,
David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p416-418.

p416-418.

Hydrologic Theory of Dispersion in Heterogeneous Aqui-fers, Sergio E. Serrano, HE Oct. 96, p144-151.

Hydrology Handbook, Second edition (M&R No. 28), Task
Committee on Hydrology Handbook of Management
Group D of the American Society of Civil Engineers, 1996, 0-7844-0138-1, 800pp.

Impact of Anthropogenic Activities in Rivers Upon Accuracy of Hydrological Forecasts and on Development of Forecasting Methodologies— Experiences From the Slovak-Hungarian Reach of Danube, K. Hajtasova and A. Svoboda, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1718.

The Importance of Plant Community Structure on Form and Function of Created Wetland Systems, Richard A. Or-son, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1197-1202.

Indianapolis Uses New Radar Technology to Refine Hyeto-graphs for CSO Model and SSES Studies, Patrick L. Stevens, (North American Water and Environment Con-

Stevens, (North American Waler and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1236-1241.
Integrated Hydrological/Ecological/Economic Modeling for Examining the Vulnerability of Water Resources to Climate Change, John P. Kochendorfer and Jorge A. Ramirez, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2157-2162.
Interdisciplings Research of Mountainous Areas: Past Interdisciplings.

Interdisciplinary Research of Mountainous Areas: Past, Present, and Future, Robert D. Jarrett, (North American

resent, and runter, Robert D. Jarreta, Voron American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2445. International Technology Transfer of Hydrologic Components, Eugene A. Stallings, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), 232-233-234. 1997), p325-326.

Looking for Evidence of Climatic Change in Streamflow Time Series, K. H. Hamed and A. R. Rao, (North American Water and Environment Congress & Destructive

water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996., pl 459-1464.
Maryland SHA's Procedure for Assessing Existing Bridges for Scour Vulnerability and for Rating Unknown Foundations, Leonard N. Podell, Stanley R. Davis and Dan Sajedi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2766-2774.

North American Water and Environment Congress & Destructive Water, CD-ROM (Windows version only), Chenchayya Bathala, ed., 1996, 0-7844-0166-7, 1340pp. Object-Oriented Analysis of South Florida Hydrologic Sys-tems, Todd S. Tisdale, CP Oct. 96, p318-326.

On Communicating Hydrologic Risk, Rafael G. Quimpo, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p265-271.

Organizing a Local Water Resources Technical Group, Thomas G. Sands, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2254-2258.

Overview of Drought Response Strategies, Darrell G. Fontane and Donald K. Frevert, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p857-862.

chayya Bathala, ed., 1996), p857-862.

A Paradox at the rocky Mountai Arsenal, Colorado: Benefits of Applied Research, Robert D. Jarrett, Joseph P. Capesius and Mark A. Gonzalez, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1553-1554.

Performance Assessment Modeling of the Proposed Genting Island Repository Facility, Yudi U. Imardjoko, Daniel B. Bullen and Sofyan Yatim, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p172-175.

Performance of a Virtual Runoff Hydrograph System, Pa-trick Carriere, Shahab Mohaghegh and Razi Gaskari,

WR Nov./Dec. 96, p421-427.

Periodic Variation in Karst Stream Losses, C. Warren Campbell, Mohamed Abd El Latif and Larry Foster, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Physicostatistical Approach to River Delta Hydrology, V. F. Polonsky, HY June 96, p333-340.

Quantitative Monitoring of Plata River Basin Waters, V. F. de sa e Benevides and R. M. Coimbra, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1719.

Rainfall Depth—Duration Relationship for South Italy, Vito Ferro and Vincenzo Bagarello, HE Oct. 96, p178-

Rational-Method Equation and HEC TD-15, T. V. Hromad-ka, II and R. J. Whitley, IR Jan./Feb. 96, p15-18.

Reduction of Downstream Impacts Through Use of Varia-ble Detention Basin Volume Requirements, Conor C. Shea, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1858-1863.

Runoff Curve Number: Has It Reached Maturity? Victor M. Ponce and Richard H. Hawkins, HE Jan. 96, p11-19.

Runoff Forecasting Using a Local Approximation Method, A. W. Jayawardena, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2535.

Search for Physically Based Runoff Model—A Hydrologic El Dorado, David A. Woolhiser, HY Mar. 96, p122-129.

Searching for Optimal Combinations of Stormwater Deten-tion Basins, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2264-2269.

Sediment Impacts on Yield from a Two-Reservoir System in Puerto Rico, Gregory L. Morris, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2103-2108.

Slope Instability from Ground-Water Seepage, Muniram Budhu and Roger Gobin, HY July 96, p415-417.

Streamflows Prediction Models for the Colombian Generation System Considering El Niño Effect, Oscar J. Mesa, Ricardo A. Smith, Pedro J. Restrepo, José E. Salazar, Luis F. Carvajal and Juan D. Velásquez, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1477-1482.

A Study into Effectiveness of Urban Best Management Practises, Robert G. Traver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1852-1857.

Study on Fuzzy ANN and its Application in Runoff Fore-cast, Dunchun Wang and Jiqun Zhang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p456.

The System for the Hydrological Forecasting in Serbia, Bo-jan Palmar and Borjanka Palmar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p716-717.

Uncertainty and Risk Analyses for FEMA Alluvial Fan Method, Bing Zhao and Larry Mays, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p180-190.

Using NOAA's New Climate Outlooks in Operational Hydrology, Thomas E. Croley, II, HE July 96, p93-102.

Water Conservation Definitions From a Hydrologic Viewpoint, Richard G. Allen, Charles Burt, A. J. Clemmens and L. S. Willardson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p899-904.

Watershed Characteristics and Hydrological Parameters vs. Sediment Yield - Northern Regions of Pakistan, Muhammad Ashiq, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1669-1674.

Hydrometeorology

Accidental Situations: Application of Surface-Water Moni-toring Data, P. Berg and T. Vasiljeva, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1338-1339.

Debris Flow Events at Mountainous Creeks near Santiago, Chile- Hydrologic Analysis, X. Vargas and P. Lara, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1550-1551.

Editorial, M. L. Kawas, HE Jan. 96, pl.

Estimation of the Probable Maximum Rainfall and Snow-melt Floods Via Physically Based Model of River Runoff Generation, L. S. Kuchment, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1337.

The Part of Precipitation in Some Ecological Problems of the Dnister Basin, L. Gueiko, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2447-2448.

Policy and Engineering Decision-making under Global Change: Case of the Upper Rio Grande River Basin, Lu-cien Duckstein, Bijaya P. Shrestha and Marvin Waterstone, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p38-60.

System of River Floods Warning in Ukraine, V. Manukalo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1340.

The Timberlake Dam Failure: A Hydrometeorological Assessment, J. Warner, G. V. Loganathan, R. J. Kane, M. Gillen, D. F. Kibler and K. Kostura, (North American) Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2522-2527

Vulnerability of Water Resources to Global Climate Change in the Agricultural Midwest- Ecological, Economic, and Regulatory Aspects, J. Wayland Eheart and Edwin E. Herricks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2145-2150.

Hydrostatic pressure

Limit Design of Axisymmetric Shells with Application to Cellular Cofferdams, P. de Buhan and A. Corfdir, EM Oct. 96, p921-929.

Simulation of Three-Dimensional, Non-Hydrostatic Free-Surface Flows for Estuaries and Coastal Seas, Vincenzo Casulli and Stelling Guus S., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p1-12.

Hydrostatics

Control of Stacking Loads in Final Waste Disposal Accord-ing to the Borehole Technique, Walter Feuser, Eike Bar-nert and Hendrik Vijgen, (High Level Radioactive Waste Management, Technical Program Committee, 1996).

Hyperbolic parabolic shells

Analysis and Design of the Ponce Coliseum in 1969 and 1996, Alex C. Scordelis, Pere Roca and Antonio R. Mari, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

Gabled Hyperbolic Paraboloid Roofs without Edge Beams, Tamara Jadik and David P. Billington, ST Feb. 95,

Hysteresis

Analysis of the Nonlinear Hysteretic Response of an RC Building, Sarwidi and Apostolos S. Papageorgiou, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1099-1106.

A Boolean Material Property Database, S. Dobson, M. Noori and A. Crespo, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p673-676.

Class of Masing Models for Plastic Hysteresis in Struc-tures, James L. Beck and Paramsothy Jayakumar, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1083-1090.

Connections of Large Steerable Antennas, Joseph Antebi and Mehdi S. Zarghamee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p505-509.

Cyclic Testing of Existing and Retrofitted Riveted Stiffened Seat Angle Connections, Majid Sarraf and Michel

Bruneau, ST July 96, p762-775.

Energy Dissipation in Concrete Materials Due to Viscoelas-tic and Damage Mechanisms, Vassilis P. Panoskaltsis, Saurabh Bahuguna and Dimitris Soldatos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p857-860.

Energy-Based Modeling of High Damping Rubber Seismic Isolators for Dynamic Analysis, Peter W. Clark and James M. Kelly, (Analysis and Computation, Franklin Y.

James M. Kelly, (Analysis and Computation, Frankin Y. Cheng, ed., 1996), 200-211.
Hysteresis Effect of Karst Vadose Zone in Spring Kr5, Mt. Kräuterin, Austria, Dachang Zhang, Rudolf Pavuza, Karl Mais and Hans Fischer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1754-1759.

Hysteretic Response and Structural Reliability, Ricardo O. Foschi and Hong Li, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D.

tural Reliability, 'Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p882-885.
Sectional Analysis for Nonlinear System Identification of Concrete Structures, Jie Wang, Manoj B. Chopra and Sashi K. Kunnath, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p339-342.
Seismic Behavior of Masonry Walls: Experimental Simulation, Miha Tomaževič, Marjana Lutman and Ljubo Petković, ST Sept. 96, p1040-1047.
Seismic Behavior of Masonry Walls: Modeling of Hysteretic Rules, Miha Tomaževič and Marjana Lutman, ST Sept. 96, n1048-1054.

Sept. 96, p1048-1054.

Seismic Torsional Provisions: Influence on Element Energy Dissipation, Adrian M. Chandler, Joseph C. Correnza and Graham L. Hutchinson, ST May 96, p494-500.

Smooth Modelling of Oblique Contact with Friction of Tur-bine Blades: Behaviour Analysis Under Random Excita-tion, Erick Tournu, Sergio Bellizzi and Béatrice Costa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996). p760-763

Tuned Mass Dampers for Structures with Bilinear Hystere-sis, Masato Abé, EM Aug. 96, p797-800.

Hysteresis models
Stochastic Linearization of a Boolean Hysteresis Model, S.
Dobson, M. Noori, Z. Hou and M. Dimentberg, (Probabilistic Mechanics & Structural Reliability, Dan M.
Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p502-503.

Hysteretic systems

Hybrid Control of Seismic Response Using Nonlinear Out-put Feedback, A. K. Agrawal and J. N. Yang, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p339-

Hysteretic Systems: Chaotic Region and Control, M. Bat-taini, F. Casciati and L. Faravelli, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p499-502.

Parameter Identification of a Hysteretic Structure, M. Battaini, (Probabilistic Mechanics & Structural Reliability,

taini, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p430-433.
 Random Responses of Discretized Structures with Energy Dissipation Devices, C. W. S. To, M. L. Liu and J. M. Kelly, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p824-827.
 Random Vibration of a Hysteretic Oscillator, Arvid Naess and Vibeke Moe. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p514-517.
 Strchastic Response of a Hysteretic System Under Nonstandard

Stochastic Response of a Hysteretic System Under Nonstationary Excitations, Ismail I. Orabi, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p392-395.

Stochastic Response of Systems with Linear Hysteretic Damping, B. F. Spencer, Jr. and L. A. Bergman, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Kentucky Researchers Complete Composite Foot Bridge, CE Dec. 96, p14-15.

Lateral-Torsional Buckling of Nonprismatic I-Beams, Pra-tyoosh Gupta, S. T. Wang and G. E. Blandford, ST July 96, p748-755.

Redundancy of Prestressed Concrete I-Beam Bridges, Michel Ghosn and Fred Moses, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p688-695.

Guest Editorial, Pat Langhorne, CR Mar. 96, p1-5. Hydraulic Conductivity of Frozen Granular Soils, Orlando B. Andersland, David C. Wiggert and Simon H. Davies, EE Mar. 96, p212-216.

Long-Term Pile Load Testing System Performance in Sa-line and Ice-Rich Permafrost, K. W. Biggar, D. C. Sego and R. P. Stahl, CR Sept. 96, p.149-162. Modeling Ice-Cover Melting Using a Variable Heat Trans-fer Coefficient, Semaan Sarraf and Xiu Tao Zhang, EM Oct. 96, p930-938.

Strengthening Railroad Roadbed Bases Constructed on Icy rengmening Raitroad Roadbed Bases Constructed on Icy Permafrost Soils, V. G. Kondratjev, (Cold Regions Engi-neering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p688-699.

Temporary Snow and Ice Pavement Structures, Robert L. Scher, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p87-120.

1990), p87-120.
Terraforming Mars, Felix Zamora, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1311-1314.
A Unified Viscoplastic Model for the Inelastic Behavior of Ice, Jonah H. Lee and Michel Aubertin, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p828-836.

Using Spaceborne Imaging Radar to Identify Lake Water Resources on the Alaskan North Slope, M. O. Jeffries, K. Morris and G. E. Liston, (Cold Regions Engineering: The Cold Regions Infrastructure--An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p855-865.

Wortley's Winter Wanderings: A Narrative, C. Allen Wortley, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p837-854.

ice control

Case History of a Lined Wastewater Treatment Lagoon Failure, Kelly S. Merrill and Matt Stephl, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p518-532.

Le Jam Mitigation Using Sathback Dubor. Coldman. Princeton. Ice Jam Mitigation Using Setback Dykes: Coldwater River at Merritt, B.C. Spyros Beltaos and Paul F. Doyle, CR

Dec. 96, p190-206.

A New, Low-Cost Ice Control Structure. Part 1: Concept Development, J. H. Lever, G. Gooch and A. Tuthill, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p617-628.

A New, Low-Cost Ice Control Structure. Part 2: Construction and Performance, J. H. Lever, G. Gooch and C. Clark, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p629-639.

Road and Airfield Maintenance, John C. Becker and David C. Esch, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p249-270.

ed., 1996), p249-270.

Snow Guards for Metal Roofs, Wayne Tobiasson, James Buska and Alan Greatorex, (Cold Regions Engineering: Dusia and Ada Oreatorex, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p398-409.

Thermal and Vapor Performance of Insulated Assemblies, Axel R. Carlson, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p384-

391.
West Dock Causeway Bridge Piers, A. B. Christopherson, T. Nottingham, J. W. Pickering and K. W. Braun, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p315-326.

Estimation of Mean Flow Velocity in Ice-Covered Chan-nels, Martin J. Teal, Robert Etterna and John F. Walker,

nels, Martin J. Teal, Robert Etterna and John F. Walker, HY Dec. 94, p1385-1400.

Evaluation of Flow Resistance in Ice-Covered Channels, Florin Braileanu, Robert Etterna and James Wuebben, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p606-616.

Methods for Measuring Discharge under Ice Cover, John F. Walker, HY Nov. 94, p1327-1336.

Modeling Ice-Cover Melting Using a Variable Heat Transfer Coefficient, Semaan Sarraf and Xiu Tao Zhang, EM Cov. 96, 9330-938.

Oct. 96, p930-938.

Numerical Model of Flow Ice-Covered Channel, J. Y. Yoon, V. C. Patel and R. Ettema, HY Jan. 96, p19-26. Predicting Breakup Ice Jams Using Logistic Regression, Kathleen D. White, CR Dec. 96, p178-189.

Risk-Equivalent Seasonal Discharge Programs for Ice-Covered Rivers, Corinne L. Wotton and Barbara J.

Lence, WR May/June 95, p275-282.
Under Cover Transport and Accumulation of Frazil Granules, Hung Tao Shen and De Sheng Wang, HY Feb.

Ice forces

Draining Himalayan Glacial Lakes Before They Burst, Richard Kattelmann and Teiji Watanabe, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1978.

Tornado and Hail Risk Modeling: An Event Based Approach, Khalid I. Bouzina, Mohan Sharma, Auguste Boissonnade and Surya Gunturi, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p19-20.

Ice formation
CPT in Cold Regions Engineering: A Logging and Design Tool, Richard Fortier, Branko Ladanyi and Michel Allard, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p459-470.

Ice jams
Dynamics of River Ice Jam Release, Hung Tao Shen and
Shunan Lu, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the
21st Century, Robert F. Carlson, ed., 1996), p594-605.
Hindsight on River Ice Jam Stability, Spyros Beltaos, CR

Sept. 96, p122-133.

Ice Jam Mitigation Using Setback Dykes: Coldwater River at Merritt, B.C. Spyros Beltaos and Paul F. Doyle, CR Dec. 96, p190-206.

A New, Low-Cost Ice Control Structure. Part 1: Concept Development, J. H. Lever, G. Gooch and A. Tuthill, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p617-628.

Predicting Breakup Ice Jams Using Logistic Regression, Kathleen D. White, CR Dec. 96, p178-189.

Probability Distributions for Peak Stage on Rivers Affected by Ice Jams, Andrew M. Tuthill, James L. Wuebben, Steven F. Daly and Kathleen D. White, CR Mar. 96, p36-57.

Three-Dimensional Simulation of River Ice Jams, Mark A. Hopkins, Steven F. Daly and James H. Lever, (Cold Reriopanis, sieven F. Bay and James H. Level, (cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p582-593.

Under Cover Transport and Accumulation of Frazil Granules, Hung Tao Shen and De Sheng Wang, HY Feb.

Ice loads

Minimum Design Loads for Buildings and Other Struc-tures, Revision of ANSI/ASCE 7-93 (St No. 95-007), American Society of 0-7844-0092-X, 220pp. Civil Engineers,

Minimum Design Loads for Buildings and Other Struc-tures: American Society of Civil Engineers Standard 7-95, Frederick S. Merritt, AE June 96, p80-81.

The Canadian Habbakuk Project by Lorne W. Gold, Robert Etterna, CR Mar. 96, p58-59.

Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996, 0-7844-0190-X, 965pp.

Evaluation of Long-Term Time-Rate Parameters of Subgla-cial Till, C. L. Ho, J. C. Vela, P. U. Clark and J. W. Jen-son, (Measuring and Modeling Time Dependent Soil Be-havior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p122-136.

River Restoration Considerations Beyond Channel Design, William T. Fullerton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3091-3096.

Identification

Actuator Dynamics and Delay Compensation Using Neuro-controllers, Khashayar Nikzad, Jamshid Ghaboussi and Stanley L. Paul, EM Oct. 96, p966-975.

Applications of Space Technology to Aid in Identification of Seismic Hazards, Ronald Blom, Robert Crippen, Andrea Donnellan, Gilles Peltzer and Paul Rosen, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p305-306.

Condition Assessment for Bridge Management, A. Emin Aktan, Daniel N. Farhey, David L. Brown, Vikram Dalal, Arthur J. Helmicki, Victor J. Hunt and Stuart J.

Shelley, IS Sept. 96, p108-117.

Cumulants-Based Analysis of Concentration Data from Soil-Column Studies for System Identification, Rao S. Govindaraju, Bhabani S. Das and Gerard J. Kluitenberg, HE Jan. 96, p41-48.

Damage Estimation Using Substructural Identification in Time Domain, Chung-Bang Yun and Hyeong-Jin Lee, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p846-849.

Generalized Random Decrement Method for System Identification, P. D. Spanos and B. A. Zeldin, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p850-853.

Identification of Conditional Stochastic Gaussian Field, Masaru Hoshiya and Ikumasa Yoshida, EM Feb. 96,

Identification of Structural Damage, S. Hassiotis and K. M. Grigoriadis, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), pl 107-1114.

Identification of Vortex-Induced-Response Parameters in Time Domain, Himanshu Gupta, Partha P. Sarkar and Kishor C. Mehta, EM Nov. 96, p1031-1037. Identification of Wind Spectral Characteristics from Struc-ture Response, K. Pan, N. P. Jones and J. H. Ellis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p482-485.

Parameter Identification of a Hysteretic Structure, M. Battaini, (Probabilistic Mechanics & Structure, M. Bat-taini, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p430-433.

Parameter Models for Estimating In-Situ Tensile Force in Tie-Rods, Stefano Sorace, EM Sept. 96, p818-825.

Statistical System Identification of Structures Using ARMA Models, Joel P. Conte and Satyendra Kumar, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p142-145.

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94,

p2437-2450.

System and Input Identification with Partially Correlated Load Processes, K. Pan, N. P. Jones and J. H. Ellis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

p138-141.

Using Spaceborne Imaging Radar to Identify Lake Water Resources on the Alaskan North Slope, M. O. Jeffries, K. Morris and G. E. Liston, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p855-865.

Economic Efficiency of Regulations for Allocation and Control of Surface Water Withdrawals in Humid Re-gions, J. Wayland Eheart and Kenneth W. Harrison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2713-2718.

Probability Based Estimation of Expected Annual Benefits, Eric D. Loucks, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p298-303.

Image analysis

Accessible Information, William J. Douglas and Izak Maitin, CE June 96, p59-61.

Mallysing Road Traffic Movement Patterns by Image Analysis Using an Array of Transputers, X. Zhang, R. E. Allsop and M. R. B. Forshaw, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

utornated Knowledge-Based System for Stereo Video Metrology, Mohammed Taleb Obaidat and Kam W. Wong, SU May 96, p47-64.

Behavior of Marble under Compression, C.-T. Chang, P. Monteiro, K. Nemati and K. Shyu, MT Aug. 96, p157-

CCATS and CCIDS Technologies for Traffic Data and Incalls and CCIDS Technologies for Trame Data and In-cident Detection. An Overview of the Technology and the Main Applications, V. Picciolo and F. Lemaire, (Ap-plications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p183-187.

Computer Vision and Fracture Process in Cement-Based Materials, Sokhwan Choi and Surendra P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p967-970.

proft-970.
Density and Conditioning Characteristics of Motorway Vehicular Traffic Flow, V. Torrieri, D. Gattuso, G. Musolino and A. Viietta, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p198-202.

Geometric Calibration of CCD Camera Using Planar Object, Mohammed Taleb Obaidat and Kam W. Wong, SU Aug. 96, p97-113.

Giant, Man-Made Eel Inspects City's Sewers, CE Apr. 96,

Image Monitoring on Motorway: Pedestrian Detection Using Image Processing, Salah Bouzar, Roland Glachet, Jean-Marc Blosseville and François Lenoir, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p124-128.

Interferometric Imaging for Deep Space Asset Monitoring, Gary C. Loos, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p214-

223.

Pavement Evaluation with Seismic Tomographic Imaging, S. Nazarian, D. Yuan, D. Doser and K. Dhanasekharan, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p56-72.

Pedestrian Flow Estimation in Urban Environment by Image Processing, P. Vannoorenberghe, C. Motamed, J.-M. Blosseville and J.-G. Postaire, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p119-123.

1996), p119-123.
Results from the PLEIADES Automatic Traffic Surveillance System in the Kent Sector of the Paris-London Corridor, Neil Hoose and Nigel Cox, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p233-237.
Studying Mixed Granular Flows by Image Analysis, Lennart Gustafsson and Peter Gustafsson, (Engineering Methodics V K Lin and T. C. Su. 1996), p100-103.

anics, Y. K. Lin and T. C. Su, 1996), p100-103.

Synthesized Images for Pavement Management System Design, H. D. Cheng and Mario Miyojim, CP Jan. 96, p60-

Uniformity Evaluation of Cohesionless Specimens Using Digital Image Analysis, Chun-Yi Kuo and J. David Frost, GT May 96, p390-396. Vehicle Detection Using Radial Basis Neural Network,

Suryanaryana Manti and Darcy Bullock, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p188-192.

Images
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ME Jan./Feb. 96, p9.

Bechtel Adopts New Network, CE Nov. 96, p27. Enhanced Movements Estimation Methods for High Resolution Airport Surface Radar Images, P. F. Pellegrini, A. Boccellari, E. Piazza and R. Valenti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p92-98.

Spaceborne Fourier Transform Hyperspectral Imager, Leonard John Otten, III, Andrew D. Meigs and R. Glenn Sellar, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p224-230.

Supermaps Help Fight Fires, CE Dec. 96, p20. Testing on the Web, CE Oct. 96, p11.

Impact Benefits/Impacts of Utilizing Depleted Uranium Silicate Glass as Backfill for Spent Fuel Waste Packages, R. B. Pope, C. W. Forsberg, R. C. Ashline, M. D. DeHart, K. W. Childs and J. S. Tang, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p369-371.

limate Change: What the North American Water Engineer Should Know, Maurice Roos, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1471-1476.

Climate Variability Impact on the Water Resources of An-cient Andean Civilizations, Kenneth R. Wright, John A. Dracup and Jonathan M. Kelly, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1840-1845. Effect of Temperature and Galvanization on Cold-Formed Steel, A. B. Abdel-Rahim and D. Polyzois, MT Aug. 96,

Impact-Generated Atmospheric Plumes: The Threat to Sat-ellites in Low-Earth Orbit, M. B. Boslough and D. A. Crawford, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p88-94. Impacts of Sea Level Rise on Coastal Water Resources Management, Chin Y. Kuo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1822-1827.

The Integration of Receiving Water Impacts in the Evaluation Process of Alternative Designs for CSO Abatement

in Process of Alternative Designs for CSO Abatement in Providence, RI, J. Craig Swanson, Joseph Grgin and Peter von Zweck, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1537-1542.

la, ed., 1990), p1337-1342.

Local Damage Assessment of Metal Barriers under Turbine
Missile Impacts, Amde M. Amde, Amir Mirmiran and
Thomas A. Walter, ST Jan. 96, p99-108.

Thomas A. Waiter, S.I. Jan. 30, p. 27-10a.

A Model of Meteoroid Atmospheric Entry with Implica-tions for the NEO Hazard and the Impact of Cornet Shoe-maker-Levy 9 on Jupiter, D. A. Crawford and M. B. Boslough, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p81-87.

in Space, Stewart W. Johnson, ed., 1996), 981-87.
Nonlinear Pounding of Bridges in Earthquakes, Xian Ma and Chris P. Pantelides, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), pl 180-1187.
Nuclear Explosion Near Surface of Asteroids and Comets -

II. General Description of the Phenomenon, O. N. Shu-bin, V. Z. Nechai, V. N. Nogin, D. V. Petrov and V. A. oin, v. Z. Nechai, V. N. Nogin, D. V. Petrov and V. A. Simonenko, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p74-80.
Optimal Detection of Short-Warning Near-Earth Object Threats, Gregory H. Canavan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p26-31.

Performance Characteristics of Polyolefin Fiber Reinforced

Performance Characteristics of Polyotenin Pioer Reinfordace Concrete, V. Ramakrishnan, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p93-102. Random Field of Cumulative Damage by Space Debris Im-pact, A. Der Kiureghian, P. V. Geyskens and M. R. Khalessi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p668-671.

Space Debris Hazard to Defense Systems, Gregory H. Canavan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p20-25.

Space Debris: A Growing Threat, Michelle Mancuso, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1290-1294.

Techniques to Obtain Orbital Debris Encounter Speeds in the Laboratory, Lalit C. Chhabildas, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p8-12.

Impact forces

Impact forces
 The Danger to Satellites from Meteor Storms—A Case Study of the Leonids, P. Brown, J. Jones and M. Beech, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p13-19.
 Earth-Crossing Asteroids and Comets, Tyler Donnell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1278-1280.
 Evaluation of Design Wave Impact Pressures, G. Müller and T. J. T. Whittaker, WW Jan./Feb. 96, p55-58.
 Three-Dimensional Simulation of Structural Pounding During Earthquakes, M. Papadrakakis, C. Apostolopoulou, A. Zacharopoulos and S. Bitzarakis, EM May 96, p423-431.

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Impact loads Barge Collision Design of Highway Bridges, M. W. Whit-ney, I. E. Harik, J. J. Griffin and D. L. Allen, BE May 96, p47-58.

Controlled Semiactive Hydraulic Vibration Absorber for Bridges, William N. Patten, Ronald L. Sack and Qiwei He, ST Feb. 96, p187-192.

He, ST Feb. 96, p187-192.
Damage Caused by Projectile Impact to High Strength Concrete Elements, A. N. Dancygier, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p484-495.
Dynamic Behavior of Continuous and Cantilever Thirwalled Box Girder Bridges, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, BE May 96, p67-75.
Dynamic Responses of Shallow-Buried Flexible Plates Subjected to Impact Loading, Hung-Liang (Roger) Chen and Shen-En Chen, ST Jan. 96, p55-60.

Investigation of Bridge Floor-Truss Behavior in Tied-Arch Span, Thomas E. Cousins, J. Michael Stallings and Brad-ley P. Christopher, CF May 96, p79-86.

Impact tests

Detection of Cracks in Concrete Using the Impact Respons-

Detection of Cracks in Concrete Using the Impact Responses, H. L. (Roger) Chen and Lianfeng Pei, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p620-623.

Energy Dissipation in Dynamic Failure Simulations, Thomas Münz, Karsten Rix and Kaspar Willam, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p1046-1049.

Evaluation of a Bi-Directional Aluminum Honeycomb Impact Limiter Design, Marvin J. Doman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p357-359.

An Experimental Investigation of Sandwich Flat Panels Under Low Velocity Impact, Anthony N. Palazotto, Eric J. Herup and Timberlyn Harrington, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p402-407.

LATWAK: Impact Test to Obtain Pile Lateral Static Stiffness, Jean-Louis Briaud and Marc Ballouz, GT June 96, p437-444.

Structural Forum, SC Nov. 96, p95-98.

Surface Response of a Cracked Layered Half-space Sub-jected to an Antiplane Impact, S. W. Liu, J. C. Sung and M. S. Lin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p616-619.

Three-Dimensional Nonlinear Transient Dynamic Accident Analyses of Waste Packages, Scott M. Bennett, Zekai Ceylan and Thomas W. Doering, (High Level Radioac-tive Waste Management, Technical Program Committee, 1996), p382-384.

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Victor C. Oblas, ME Mar/Apr. 96, p12-16.

Effect of Soil-Structure Interaction on Structural Response, Y. Yong, R. C. Zhang and J. Yu. (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1098-1101.

ics, Y. K. Lin and T. C. Su, 1990), properties.
A Neural Network Impedance Learning Control Model for a Robotic Excavator, Xiaodong Huang, Leonhard Bernold and Gordon Lee, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p213-219.

Impellers

Direct Measurement of Turbulence Structures in a Standard Jar Test Tank Using PIV System, Chen-Yu Cheng, Jo-seph F. Atkinson and Marcus I. Bursik, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3746-3751.

Finite Element Analysis of Longitudinally Stiffened Cylinders in Bending, Q. Chen, A. E. Elwi and G. L. Kulak, EM Nov. 96, p1060-1068.

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sign, Seung-Eock Kim and Wai-Fah Chen, ST Nov. 96, p1259-1265. Practical Advanced Analysis for Unbraced Steel Frame De-

p1239-1205.
Probabilistic Stability Analysis of Shallow Arches, R. P. Nordgren and K. S. Hussain, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p124-127.
Structural Consequences of Imperfection in Thin-Walled Components, Luis A. Godoy and John Carrasquillo, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p265-106. p997-1000.

Technique for Precise Measurement of Large-Scale Silos and Tanks, Xiaoli Ding, Richard Coleman and J. Michael Rotter, SU Feb. 96, p14-25.

Impingement

Modeling Two-Dimensional Turbulent Offset Jets, Ruochuan Gu, HY Nov. 96, p617-624.

Developing the Infrastructure for Lead Assessment and

Developing the Infrastructure for Lead Assessment and Abatement, Joseph S. Carra, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p70-76. Integrated Civil Engineering Curriculum: Implementation and Management Issues, Neil S. Grigg, Marvin E. Criswell and Thomas J. Siller, El Oct. 96, p151-155.

Should Conversion to SI System Continue to be Debated? Autar K. Kaw and Melissa Daniels, EI Apr. 96, p69-72.

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One-Dimensional Finite-Element Model for High Flow Velocities in Porous Media, Blair T. Greenly and Douglas M. Joy, GT Oct. 96, p789-796.

Probabilistic Risk Assessment for Tailings Impoundment Founded on Paleokarst, Dirk Van Zyl, Ian Miller, Victor Milligan and W. James Tilson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p563-585

Recreational Impoundments Retrofit of Existing and Design of New Facilities, Dream L. Atailah and Michael P. Ru-dinica, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2945-2950.

Impregnation Polymer Impregnation to Assist Undisturbed Sampling of Cohesionless Soils, Kevin G. Sutterer, J. David Frost and Jean-Lou A. Chameau, GT Mar. 96, p209-215.

Convex Models for Impulsive Response of Structures, Shyh-Rong Tzan and Chris P. Pantelides, EM June 96, p521-529.

Analysis of Pavement Structural Responses Using In-Situ Instrumentation, Dar-Hao Chen and Michael Murphy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Analyzing Spatial Variability of In Situ Soil Properties, Don J. DeGroot, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p210-238.

Pore Pressure, Y. Abousleiman and A. H-D. Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p935-938. Anelastic Strain Recovery of Deep Cores with Presence of

Comparing Three Techniques for Finding the Overall Lengths of Installed Timber Piles, Shunyi Chen, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), p780-783.

Deformation Characteristics of Piedmont Residual Soils, Chainchye E. Wang and Roy H. Borden, GT Oct. 96,

Down-Hole Collapse Test System, Sandra L. Houston, His-ham H. H. Mahmoud and William N. Houston, GT Apr. 95, p341-349.

Estimating Settlement of Sand Caused by Construction Vi-bration, S. Drabkin, H. Lacy and D. S. Kim, GT Nov. 96, p920-928.

Estimation of In-Situ Test Uncertainty, Fred H. Kulhawy and Charles H. Trautmann, (Uncertainty in the Geolog Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p269-286.

In Situ Characterization of the Microbiota in Yucca Mountain Sediments, David B. Ringelberg, Julia O. Stair, David C. White and Larry H. Hersman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p33-35.

In Situ Measurement of Rockfill Properties, Anne Eckert Clift, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p37-48.

In-Situ Corrosion Testing of Selected HLW Container Materials, E. Smailos, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p462-

46.5.
46.5.
Parameter Models for Estimating In-Situ Tensile Force in Tie-Rods, Stefano Sorace, EM Sept. 96, p818-825.
Scoping Analysis of In Situ Thermal-Hydrological Testing at Yucca Mountain, Thomas A. Buscheck and John J. Nitao, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p130-132.
System Identification and Its Application to Estimating Soil Properties, Steven Glaser, GT July 95, p553-560.

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Jaafari, ME July/Aug. 96, p62-72.

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Critical Issues in the Monitoring and Control of Toxic Air
Contaminants at POTWs, Federico G. A. Vagliasindi and Contaminants at POTWs, Federico G. A. Vagliasindi and Vincenzo Belgiorno, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p81-86.

Evaluation of Lead-Bearing Phases in Municipal Waste Combustor Fly Ash, J. F. Sandell, G. R. Dewey, L. L. Sutter and J. A. Willemin, EE Jan. 96, p34-40.

Managerial Fuzzy Optimal Planning for Solid-Waste Managerial Fuzzy Optimal Planning for Solid-Waste Management Systems, Ni-Bin Chang and S. F. Wang, EE July 96, p649-658.

IAC Network for Composition of Waste-Incineration Facil-ity, Jehng-Jung Kao and Yu-Ying Liao, CP Apr. 96,

Incipient motion
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A Note on the Incipient Motion of Sediment Particles, A. Papanicolaou, P. Diplas, M. Balakrishnan and C. Dancey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p657-660.

Inclusions

Constitutive Relations for Partially Saturated Soils Containing Gas Inclusions, S. Pietruszczak and G. N. Pande, GT Jan. 96, p50-59.

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Materials at Antarctica and Indian Himalayas, R. C.
Pathak, (Materials for the New Millennium, Ken P.
Chong, ed., 1996), 9968-977.

Effect of Reservoir Hedging on Crop Yield Under Deficit
Irrigation Conditions, Arathi T. Seshan and K. Srinivasan, (North American Water and Environment Congress
& Destructive Water, Chenchayya Bathala, ed., 1996),
n226.4322 p4226-4232.

p4226-4232. Effects of Sewage Effluent Irrigation on Paddy, S. Krishnamoorthi, K. Shyamala and P. Govindan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2372-2377. Flash Floods and Their Control in the Indian Arid Zone, K. D. Sharma, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2539.

Impacts of Improved Water Supply and Sanitation on the Rural Population of India, Padmavathy Bogabathini, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Indian Programme on Deep Geological Disposal of Radio-active Waste, A. N. Prasad, K. Balu, R. K. Mathur and P. K. Narayan, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p22-24.

Irrigation Policy for Realization of High Agropotential of Bihar State in India, I. N. Sinha, IR Jan./Feb. 96, p31-39.

Multiobjective Optimization of Multireservoir System, S. Mohan, K. Elango and M. G. Devamane, (North Ameri-

Mohan, K. Elango and M. G. Devamane, (vorth American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1968-1975.
Studies on Herbal Desalination, Godavarthy Ramprasad and Varanasi Kaliprasad, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1015-1020.

Water-Related Hazards: India's Experiences, K. S. Murty, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

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Wetland etland Designs for Environmental Protection— Application in India, Subijoy Dutta, Dennis A. Haag and Jon B. Kraft, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3722-3727.

Indian reservations

Dormant Season Alfalfa Water Balance on the NIIP, Brian Boman, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p231-236.

Partnerships for Diversity in Water Resources Education, Neil S. Grigg, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p4016-4020.

Salinity Management for the Upper Gila River, G. T. Orlob and E. W. Wessman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4257-4262.

Water Resources Planning for the Fort Peck Indian Reservation, Montana, Deb Madison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4026-4029.

Performance Assessment Modeling of the Proposed Genting Island Repository Facility, Yudi U. Imardjoko, Daniel B. Bullen and Sofyan Yatim, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p172-175.

Traditional People and a Modern Mining Company Work-ing Towards Sustainability in Indonesia, Bruce E. Marsh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2982-2992.

Applications of CFD Flow Modelling in Building Design, J. R. Sinclair, P. A. Irwin, K. M. Matsui, M. Vanderheyden and F. Kriksic, Guilding an International Communi-y of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p997-1004. Indoor Air Quality Cost Comparisons in Three Typical Buildings, Peter Rojeski, Jr. and Harmohindar Singh, AE

Sept. 96, p107-114.

Indoor Environmental Quality Needs Warrant Multi-Faceted Actions, David A. Harris, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p77-83.

Measurement of Indoor Bioaerosol Levels by a Direct Counting Method, Demetrios J. Moschandreas, Daniel

Counting Method, Demetrios J. Moschandreas, Daniel K. Cha and Jon Qian, EE May 96, p374-378. Postoccupancy Indoor Environmental Quality Evaluation of an Institutional Building, Brian A. Rock, P.E. and Craig A. Hillman, AE Sept. 96, p88-94. Wind Tunnel Modeling of Atmospheric Dispersion in the Vicinity of Buildings, P. Saathoff, H. Wu and T. Stathopoulos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1131-1134.

Industrial parks

Industrial parks
Ponding Study of January 1993 Storm Event within Airport Industrial Park, Oceanside, California, George Hsu and Yen-Hsu Chen, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2282-2287.

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Industrial plants
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Dealing with Uncertain and Highly Variable Geotechnical
Conditions Beneath the Inco Smelter in Copper Cliff, Karlis J. Jansons, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1383-1401.

Development of Natural and External Man Induced Design Code Requirements Applicable to Special Facilities, John D. Stevenson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p149-

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River Dnister Pollution with Toxic Waste as a Result of Accident at Potassium Fertilizers Factory, Valeriu Ropot, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Seismic Isolation of Industrial Tanks, Victor A. Zayas and Stanley S. Low, (Building an International Community of

Stamey S. Low, (buttaing an international Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1205-1212.
Structural Damage due to Hurricane Marilyn in St. Thomas and Culebra, Luis A. Godoy, Roberto Huyke, Ricardo R. Lopez, J. A. Martinez-Cruzado and Raul Zapata, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p135-136.

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Industrial relations

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Structures Firm Adds Industrial Focus, CE Dec. 96, p22. Talk Needed for Research Application, Neil S. Grigg, CE Oct. 96, p38.

Industrial wastes

Brownfields Boom, Monica Maldonado, CE May 96, p36-40

Concrete Reinforcement with Recycled Fibers from Carpet Industrial Waste, Youjiang Wang, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p792-798.

Controlling Brazil's Pollution: Federal versus State Taxes and Fines, Antonio Estache and Kangbin Zheng, IS June 96, p83-93.

Dilution of Dense Bottom Plumes, Ole Petersen and Torben Larsen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p906-909.

Double Duty Water Treatment, CE Mar. 96, p8.
Experimental Studies of Merging Plumes, G. A. Daviero and P. J. W. Roberts, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p918.

Microstructural and Phase Characteristics of Phosphogypsum-Cement Mixtures, Amitava Roy, Ramesh vakaalva and Roger K. Seals, MT Feb. 96, p11-18.

Phosphogypsum Slag Aggregate-Based Asphaltic Concrete Mixes, Paul T. Foxworthy, Raju S. Nadimpalli and Roger K. Seals, TE July/Aug. 96, p300-307.

Resilient Modulus of Cement-Stabilized Phosphogypsu M. I. Pericleous and J. B. Metcalf, MT Feb. 96, p7-10. Treatment of Metal Industrial Wastewater by Fly Ash and Cement Fixation, C. H. Weng and C. P. Huang, EE Nov./Dec. 94, p1470-1487.

Industrial water

Analysis of Long-term Supply-demand Planning of Water Resources in Taiwan, Shiang-Kueen Hsu, Nien-Sheng Hsu and William W-G. Yeh, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3153-3157.

Identification of Regional (Third Party) Impacts Associated with the Truckee River Operating Agreement, Charles Borda, Tom MacDiarmid, Rangessan Narayanan, Thom-as Harris, Karl MacArthur and Shawn Stoddard, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4036-4041.

Interruptible Option Contracts, John F. Scott, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3569-3573.

CEOs Warned: Enviro Business Won't Pick Up, ME Jan./ Feb. 96, p11.

New on the Web, CE Apr. 96, p8.

Inelastic action

Alternate Load Factor (Autostress) Design for Short to Me-dium Span Continuous Steel Bridges, C. C. Fu, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p298-306.

An Analysis of Strong-Discontinuities in Inelastic Solids with Applications to the Finite Element Simulation of Strain Localization Problems, F. Armero and K. Garikipati, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p136-139.

Class of Masing Models for Plastic Hysteresis in Structures, James L. Beck and Paramsothy Jayakumar, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996).

A Damage Mechanics-Based Approach to Structural Dete-rioration, Baidurya Bhattacharya and Bruce Ellingwood, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Implications of Measured Near-Field Ground Motion on Structural Response, Wilfred D. Iwan, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1213-1220.

In-Plane Inelastic Buckling and Strengths of Steel Arches, Yong-Lin Pi and N. S. Trahair, ST July 96, p734-747.

Inelastic Behavior of Asymmetric Multistory Buildings, Juan C. De la Llera and Anil K. Chopra, ST June 96, p597-606.

Inelastic Response of Columns after Sudden Loss of Bracing, Rae-Hak Yoo and Raymond H. Plaut, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p378-381.

Inelastic Strains of Porous Saturated Media, Victor N. Ni-kolaevskiy, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p927-930.

Insight into the Inelastic Response to a Fully Nonstationary Earthquake Ground Motion Model, Bor-Feng Peng and Joel P. Conte, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p269-272.

Localization of Inelastic Deformation in Elasto-Plastic Pore Solids Saturated by Liquid, Igor A. Garagash, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p931-934.

Loss of Capacity of Concrete Shear Walls, Hassan Sassi and Richard Ranous, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

Revised Rule for Concept of Strong-Column Weak-Girder Design, Han-Seon Lee, ST Apr. 96, p359-364.

Shakedown Tests of One-Third-Scale Composite Bridge, M. G. Barker, P. M. Bergson, C. E. French, R. T. Leon, T. V. Galambos and F. W. Klaiber, BE Feb. 96, p2-9.

1. V. Galamoos and F. W. Manoer, B. Feb. 90, p.2-7.

A Unified Viscoplastic Model for the Inelastic Behavior of Ice, Jonah H. Lee and Michel Aubertin, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p828-836.

Yield-Interaction Relationships for Curved I-Girders, Charles G. Schilling, BE Feb. 96, p26-33.

360

Inertia

Effective Moment of Inertia of Elasto-Plastic Beams, Barry T. Rosson and Ronald K. Faller, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p254-257.
Seismic Bearing Capacity of Foundation on Cohesionless Soil, L. Dormieux and A. Pecker, GT Mar. 95, p300-303.

From Cholera to Cancer to Cryptosporidiosis, Daniel A. Okun, EE June 96, p453-458.

Alachlor Transport in Laboratory Soil Columns, Mutasem El-Fadel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p199-2004.

Comparison of Spatial Variability of Infiltration Properties at Two Sites in Konza Prairie of East-Central Kansas, R. S. Govindaraju, J. K. Koelliker, M. K. Banks and A. P. Schwab, HE July 96, p131-138.

Complete Hydrodynamic Border-Strip Irrigation Model, Vivekanand Singh and S. Murty Bhallamudi, IR July/ Aug. 96, p189-197.

Desorption of Soil Contaminants Due to Rainwater Infiltration, Anand Prakash, HY Sept. 96, p523-525.

Effects of Spatially Variable Intake on Surface Irrigation Advance, Dani Or and Wynn R. Walker, IR Mar/Apr. 96, p122-130.

Erosion and Stability of a Mine Soil, Tien H. Wu, Alan T. Stadler and Chin-wah Low, GT June 96, p445-453.

Groundwater Monitoring For a Tunneling Project, James C.
Burton and John e. Shamma, (North American Water
and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p691-696.
Hysteresis Effect of Karst Vadose Zone in Spring Kr5, Mt.

Kräuterin, Austria, Dachang Zhang, Rudolf Pavuza, Karl Mais and Hans Fischer, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1754-1759.

Infiltration Properties at Two Sites in the Konza Prairie, R. S. Govindaraju, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1267-1272.

Initial-Inflow-Variation Impacts on Furrow Irrigation Eval-uation, D. Renault and W. W. Wallender, IR Jan./Feb.

96, p7-14.

Lateral Diversion in the PTn Unit: Capillary-Barrier Analysis, Michael L. Wilson, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Modeling in Water Losses Evaluation for Nonhomogeneous Furrow Set, Z. Popova and R. Kuncheva, IR Jan./

Modeling Transport of Bromide in Furrow-Irrigated Field, Behzad Izadi, Bradley King, Dale Westermann and Ian McCann, IR Mar/Apr. 96, p90-96. No-Dig Gains Ground, Luis Aguiar, Thomas G. Scheller, P.E., James T. Cowgill, P.E. and Iqbal Noor, CE Aug.

96, p54-57

Optimal Well Locations for Groundwater Mound Control, Maili Wang and Kevin Lansey, (North American Water and Environment Congress & Destructive Water, Chen-

and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996, p940-945.

Preliminary Studies of a Karst Warm Spring in Mt. Kräuterin, Austria, Dachang Zhang, Rudolf Pavuza, Hans Fischer and Karl Mais, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1279-1284.

Soil-Limiting Flow from Subsurface Emitters. I: Pressure Measurements, U. Shani, S. Xue, R. Gordin-Katz and A. W. Warrick, IR Sept./Oct. 96, p291-295.

Infiltration rate

Development of a Hydrologic Model with Both Spatially Distributed and Physically Based Capabilities, Dennis L. Johnson and Arthur C. Miller, (North American Water

Jonnson and Arthur C. Muller, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3200-3205. Simulation of Catchment Response Using RC Network, M. J. Abedini, W. T. Dickinson and R. P. Rudra, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3381-3386.

Infinite elements

Application of the Infinite Element Method to Solution of the Fokker-Planck Equation, W. Yi, S. F. Wojtkiewicz, L. A. Bergman and B. F. Spencer, Jr., (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p685-688.

Inflatable structures

Analyses of Lunar Membrane Structures for Potential Failure Scenarios, James Day and Phil Richter, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1052-1058.

Artificial Recharge Using Inflatable Rubber Dams, Michael R. Markus, Curtis A. Thompson and Matt Ulukaya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Design and Performance Criteria for Inflatable Structures in Space, Marvin E. Criswell, Willy Z. Sadeh and Jenine Abarbanel, (Engineering, Construction, and Operations

Adabanet, (engineering, construction, and operations in Space, Stewart W. Johnson, ed., 1996), p1045-1051. Development Testing of the Mars Pathfinder Inflatable Landing System, Tommaso P. Rivellini, (Engineering, Construction, and Operations in Space, Stewart W.

Johnson, ed., 1996), p1059-1068.

Flood Protection Using Inflatable Dams, R. H. Plaut, S. Liapis and D. P. Telionis, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p264-265.

1771), p.204-203.

A Framing System for a Lunar/Martian Inflatable Structure, Jenine E. Abarbanel, Ted A. Bateman, Marvin E. Criswell and Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p.1069-1075.

Inflatable Habitat Option for a Human Lunar Return Mission, Kriss J. Kennedy, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

p1076-1082.

Los Angeles River as a Water Source for a Freshwater Reservoir, Philip O. Lowe and Novin Rashedi, (North Amer-

crown, rump o, Lowe and toolin Rashed, (votrin American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3987-3992. Lunar Base Development Stages, Willy Z. Sadeh and Marvin E. Criswell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p912-919

Title: "Self-Constructing Space Systems", Daniele Bedini, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1032-1037.

Direct Sizing of Small Stormwater Pump Stations, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2072-2077.

Identification of a General Linear Model for Reservoir Inflows Forecasting, J. Ribeiro, J. Rousselle, J. D. Salas and H. Ta Trung, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2354-2359.

Initial-Inflow-Variation Impacts on Furrow Irrigation Eval-uation, D. Renault and W. W. Wallender, IR Jan./Feb.

No-Dig Gains Ground, Luis Aguiar, Thomas G. Scheller, P.E., James T. Cowgill, P.E. and Iqbal Noor, CE Aug.

Reservoir Operating Rules with Fuzzy Programming, Samuel O. Russell and Paul F. Campbell, WR May/June

96, p165-170.

Strategy for Rapid Evaluation of Waste Containment and Isolation at the Yucca Mountain Site, Larry D. Rickersen, Edward C. Taylor, Janet A. Docka and Jean L. Younker, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p303-304. Uncertainty Analysis of Reservoir Sedimentation, Hyun

Suk Shin and Jose D. Salas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2294-2299.

Achieving Industrial Facility Quality: Integration is Key, Kelly Jean Fergusson and Paul M. Teicholz, ME Jan./ Feb. 96, p49-56.

Bechtel Adopts New Network, CE Nov. 96, p27.

Bentley's Brave New World, CE Oct. 96, p22,24.

Business Development Basics, Mel Hensey, P.E., ME

Nov./Dec. 96, p8-9.

Nov./Dec. 96, p8-9.

Development of Flood Hazard Boundary Information, R. Cris Hughes and Gregory W. Lowe, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p365-366.

Every Road That Rises Must Converge on GIS, Eric Rasmussen, ET Oct./Nov. 96, p8.

Hazard Mitigation in the Built Environment, Susan Dowty, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p383.

Latin American Infrastructure Database Formed, CE Dec. 96, p22.

On the Web, CE Nov. 96, p8

On the Web, CE Dec. 96, p20.

Secret Strategies Revealed, ME May/June 96, p11.

Summary of Responses to Participant Questionnaire, Yacov Y. Haimes, David A. Moser and Eugene Z. Stakhiv, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p422-434.

Time for an Integrated Approach to Facility Management, Paul Scarponcini, CP Jan. 96, p3.

Where the Interstate Meets the Information Highway, John Lynch, CP Apr. 96, p91-92.

Information centers

A Concept in Networking, Kevin A. Taylor, ME Nov./Dec. 96, p9-10.

Houston Transtar: Total Traffic Control, CE July 96, p12. SQIG: A DOE Complex-Wide Approach to Savings through Sharing, Michael J. Chestnut and Robert R. Rinderman, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p310-311.

Information management

Automated Generation of Productivity Functions, Alan D. Automated Generation of Productivity Functions, And D. Russell and Simaan AbouRizk, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p261-267.

CELL - A Vertically Integrated Learning Resource, Michael Bertz and Nelson C. Baker, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p248-354.

Computer-Based Undergraduate Integrated Civil Engineer-ing Curricula at WPI, Guillermo F. Salazar, Leonard D. Albano, Roberto Pietroforte and P. Jayachandran, (Cor puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p140-146.

Computers Aid Federal Contract Awards, CE July 96, p8. A Conceptual Model for Construction Clients' Require ments Processing, Chimay J. Anumba and Nosa F. O. Evbuomwan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p431-437.

Data Exchange: File Transfer, Transaction Processing and Data Exchange: Pite Transler, Transaction Processing and Application Interoperability, James Andrew Arnold and Paul Teicholz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p438–444. Vanegas, ed. and Paul Chinowsky, ed., 1996), p438–445. A Data Management Model for Change Control in Collaborative Design Environments, Karthik Krishnamurthy and

Kincho H. Law, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p536-543. Editor's Letter, Bob McCullouch, ME July/Aug. 96, p3-4.

Editorial, Kincho H. Law, CP July 96, p173.

The Electronic Highway System for the Building Industry, Paul Mark Evans, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p262-272.

Examples and Characteristics of Shared Project Models, Martin Fischer and Thomas Froese, CP July 96, p174-

Geographic Data Exchange Format in Taiwan, Wei-hsin Ho

and Ge-wen Lee, SU Aug. 96, p114-131.

Global Project Documentation and Communications Using HTML on the World Wide Web, L. Y. Liu, A. L. Stumpf and S. Y. Chin, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p15-20.

Harnessing the Internet for Civil Engineering Course Deliv-ery, Rafael G. Quimpo, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p355-361.

Historical Perspective of Spatial Flow Data Visualization Techniques in GIS, Young-Kyun Lee and Sang-Ki Hong, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p167-173.

Paul Chinowsky, ed., 1996), p167-173.
A Hybrid Approach to Integration in Construction, E. T. Thompson, J. H. M. Tah and R. Howes, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p417-423.
Information Technology for Better Management of Change, Cost and Schedule in Construction Projects, Feniosky Peña-Mora and Hong Chen, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p613-619.

1996), p613-619.
Integrated Facility Information Systems: Total Information Access. Mike Tidwell and Cal Leckington, (North Amer-

water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4119-4124. An Integrated Intelligent Planning Approach for Modular Construction, Nashwan Dawood, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky,

Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p410-416. Integrating Information with 3D Models for Facility Life-Cycle Support, A. B. Cleveland, Ir., (Analysis and Com-putation, Franklin Y. Cheng, ed., 1996), p253-261. Managing Multiple Views of Design Product Models,

Maher Hakim, (Analysis and Computation, Franklin Y.

Cheng, ed., 1996), p273-277.

Model-Centered World Wide Web Coach. Renate Fruchter and Kurt Reiner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), pj.-7.
Models of Construction Process Information, Thomas Froese, CP July 96, p183-193.

A Multi-Agent Architecture for Foundation Design Envi-ronments, M. R. Halfawy, N. A. B. Yehia, A. S. Bazaraa, A. Dessouki, F. C. Hadipriono and J. W. Duane, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p200-206.

A Multi-Media Information System for Construction Delay Management, Osama Abudayyeh, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p593-599.

Multi-Site Cross-Disciplinary A/E/C Project Based Learn-ing, Renate Fruchter, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p126-132

Multimedia Data Management in a Highway Information System, Kelvin C. P. Wang and Xuyang Li, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p607-612.

Perfecting Bridge Inspecting, Albert Leung, CE Mar. 96,

p59-61

p.99-01. Geoenvironmental Visualization, G. B. Baecher, J. A. Zarge and J. Shapiro, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p.56-62.

Risk Management for Response Planning, Roozbeh Kan-gari and Jacob Kovel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

STEP and the Building Construction Core Model, Thomas Froese, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p445-451.

Sticking with the Web, Peter Salwen, CE June 96, p36-41.

Transferring Knowledge about High-Level Waste Reposi-tories: An Ethical Consideration, Stefan Berndes and Klaus Kornwachs, (High Level Radioactive Waste Ma agement, Technical Program Committee, 1996), p494-

Uncertainty Modeling for Preliminary Design of Structures, Yung-Ching Shen and Larry J. Feeser, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p565-571.

Use of a Technical Clearinghouse during Emergencies, Carl E. Mortensen, Richard K. Eisner, James F. Davis

Carl E. Mortensen, Richard K. Eisner, James F. Davis and Michael S. Reichle, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p309-310.
User Models in Search and Navigation Systems on the In-ternet, Per Christiansson, Robert Lagerstedt and Uno Engborg, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p21-27.

WWW and Multimedia in Undergraduate Civil Engineering, Randy Dymond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p341-347.

ASCE Starts Up Its Own Home Page on the World Wide Web, NE Feb. 96, pl.

ASCE Weaves a Web, CE Jan. 96, p8.

Construction Industry Web Site Opens, CE July 96, p24. Engineers Commune in Virtual Village, CE Jan. 96, p15-

Irving Amron, Civil Engineer Who Was Former ASCE Staff Editor, Dies at 78, NE July 96, p15.

Logging into Water, CE July 96, p14,18.

Model-Centered World Wide Web Coach, Renate Fruchter and Kurt Reiner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1-7.

New on the Web, CE Mar. 96, p8. New on the Web, CE Apr. 96, p8. New on the Web, CE May 96, p8.

New on the Web, CE June 96, p8.

New on the Web, CE Sept. 96, p11. On the Web, CE Oct. 96, p11.

Quality's Place in Cyberspace, ME Mar./Apr. 96, p8.

Quality's Flate in Cyberspace, ME Mai App. 30, po.
Technology Potential and Limitations in a Vitual Design Studio, Mary Lou Maher, (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

User Models in Search and Navigation Systems on the In-ternet, Per Christiansson, Robert Lagerstedt and Uno Engborg, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p21-27.

Web Tour: Antonio Baptista, ET June/July 96, p10-11.

Information system design

Data Exchange: File Transfer, Transaction Processing and Application Interoperability, James Andrew Arnold and Paul Teicholz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p438-444.

Traffic Engineering Recurrent Spatial Knowledge Base: Design and Implementation, Pawan Lingras, CP Jan. 96, p50-59.

Information systems

Information systems
Advanced Traveller Information Systems: Experience from the PLEIADES and ROMANSE Projects, D. J. Jeffery and R. J. Meckums, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

An Analysis of Effect of Dynamic Traffic Information Con-sidering Driver's En-Route Route Switches, Yasunori lida, Nobuhiro Uno and Tetsuro Hasegawa, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p604-608.

Development and Application of Urban Information Strategies, E. G. Shinakis, M. McDonald and A. Richards, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p310-314.

Dynamic Vehicle Allocation Under Real Time Information:
Operational Considerations and Potential Efficiencies,
Amelia C. Regan, Hani S. Mahmassani and Patrick Jailtet, (Applications of Advanced Technologies in Transpor-tation Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p690-694.

Electronic Signatures Are Revolutionizing Highway Programs, Michael J. Vecchietti and Lawrence I. Neff, CP

Oct. 96, p264-266.

An Engineering Information System Application for Water Supply and Distribution Systems, Chun-Hou Orr, Sérgio Teixeira Coelho and Helena Alegre, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4214-4219. Estimating Effects of TLC Into Urban Public Road Trans-

port, Luigi Biggiero, Massimo Di Gangi and Bruno Montella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p66-70. An Evaluation of TLC Systems Benefits and Potential Market in Italy, Ennio Cascetta and Bruno Montella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p59-65. Examples and Characteristics of Shared Project Models, Martin Fischer and Thomas Froese, CP July 96, p174-

182

Field Trial Results of VMS Travel Time Display on the Corridor Peripherique of Paris, H. Haj Salem, S. Cohen, E. Sididki and M. Papageorgiou, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p368-372.

Henry's Problem and Its Representation — Representing an Architect's Reasoning Structure, Quinsan Cao, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1058-1064.
 History of Coastal Engineering in Japan, Kiyoshi Horikawa, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p336-374.
 Improvement of Road Network Reliability under Different Route Choice Principles, Shinji Nakagawa, Hiroshi Wakabayashi and Yasunori lida, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p594-598.
 Integrated Facility Information Engineering.

Integrated Facility Information Systems: Total Information Access, Mike Tidwell and Cal Leckington, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4119-4124.

An Integrated Model for Network Traffic Management for

Long Term Disruptions, Mithilesh Jha, Srinivas Peeta and Samer Madanat, (Applications of Advanced Technol-ogies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p335-340.

Korean Gas Company Digitizes Maps, Records, CE Dec.

Lessons for Rail Access to Airports, Hanan A. Kivett, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p96-105.
Mitigation, Preparedness & Sustainable Development:

Linking Research & Resources in the Global Information Infrastructure, Robert J. Coullahan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p321-322. Modeling Freeway Lane Changing Behavior, Haris N. Koutsopoulos, Moshe E. Ben-Akiva, Rabi G. Mishalani

and Kazi I. Ahmed, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p455-459

p435-439.
Multimedia Data Management in a Highway Information System, Kelvin C. P. Wang and Xuyang Li, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p607-612.
Object-Oriented Model for Integrating Construction Product and Process Information, Annette L. Stumpf, Rajaram Ganeshan, Sangyoon Chin and Liang Y. Liu, CP Inly 06, 7904-212.

jaram Ganeshan, Sangyoon Chin and Liang T. Liu, Cr July 96, p204-212. Passenger Information Terminals: Towards Standardisa-tion, P. Papaioannou, S. Basbas and D. Panayotako-poulos, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p24-29. Perfecting Bridge Inspecting, Albert Leung, CE Mar. 96, 50.4.1

Semantic Comparison of Selective and Constructive Induction, Witold Szczepanik, Tomasz Arciszewski and Janusz Wnek, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p845-851.

SOCRATES - From Research Towards Commercial Implementation, Ian Catling and Richard Harris, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p588-593.

Strategies for the Use of IT in the Construction Industry of Singapore, Krishan Mathur, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1065-1071.

Systems Engineering Firms Merge, CE Dec. 96, p22.

Technologies for a Multimedia Based Highway Information System in the Gigabit Networking Environment, Kelvin C. P. Wang, Robert P. Elliott and James P. Turner, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p490-499.

The Use of Artificial Neural Networks in Advanced Traveler Information and Traffic Management Systems, Gaetano Fusco and Stefano Gori, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

p341-345.

Use of Traffic Information System in Congested Area, A. Pauzié, A. Sarpedon and G. Saulnier, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p305-309.

Utilizing Information Technologies to Better Educate Engineers of Tomorrow, Abbas Aminmansour, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-

sky, ed., 1996), p965-971.

VARIA - Variable Message Sign Control Based on OD-Estimation in a Motorway Network, Thomas Sachse and Hubert Schmid, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p383-387.

VMS Control in Aalborg, Peder Jensen, Lone Jensen, Mar-kos Papageorgiou, Albert Messmer, Habib Haj-Salem and Said Mammar, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), 232, 232. p373-377.

Information theory

Sequence Control for Integrated Structural Design Models, Chang-Ho Lee and Richard Sause, CP July 96, p213-225.

Infrared cameras

Karst Water Inventories Using Thermography, C. Warren Campbell, Joseph W. Foster and Mohamed Abd El Latif, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3910-3914.

The Gaudi-Marseille Experiment: An Example of a Multiservice Remote Payment System, D. Danflous and G. Coquet, (Applications of Advanced Technologies in Transportation Engineering, Vorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p542-546.

Infrastructure

Amtrak Breaks Ground on High-Speed Rail, CE Aug. 96, p16.

Application of BOT System for Infrastructure Projects in China, Liyin Shen, Rowson K. H. Lee and Zhihui Zhang, CO Dec. 96, p319-323.

Approach Philosophy and Risk Considerations for Seismic Design and Evaluation of Railroad Bridges, Kenneth L. Wammel, James R. Beran and Zolan Prucz, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p167-

ASCE Mourns Loss of Industry Leaders in Plane Crash, CE May 96, p71.

ASCE Mourns Loss of Industry Leaders in Plane Crash, NE May 96, p15.

Autonomous Intelligent Cruise Control Using the Fuzzy Logic, Kwang Soo Chang and Jae Sung Choi, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p644-655.

A Boom in Thailand, Charles R. Heidengren, CE Nov. 96, p64-67.

Building Large Space Bases in Low Earth Orbit, J. Michael Snead, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p367-377. Building the Infrastructure of the New Federal City: 1793-1800, Robert J. Kapsch, (Civil Engineering History: En-gineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p74-85.

Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996, 0-7844-0190-X, 965pp.

Company and Project Evaluation Model for Privately Promoted Infrastructure Projects, Antonio Dias, Jr. and Photios G. Ioannou, CO Mar. 96, p71-82.

Composite Applications in the Navy Waterfront Infrastruc-ture, L. J. Malvar, G. E. Warren and C. M. Inaba, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1179-1188.

Composite Materials Edge into Mainstream Construction, CE Mar. 96, p16,19-20.

Condition Assessment of Transportation Infrastructure Using Ground-Penetrating Radar, Kenneth R. Maser, IS June 96, p94-101.

Conference Tracks Progress of Trenchless Technologies, CE June 96, p10,12.

CSFs in Competitive Tendering and Negotiation Model for BOT Projects, Robert L. K. Tiong, CO Sept. 96, p205-

The CSG 2000 Programme: Modernising Europe's Space-port for the Next 20 Years, Juan de Dalmau, (Engineering. Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p413-418.

A Decade of Experience in Developing Pavement Management Systems for Local Agencies, Chi Amy Chow (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p992-998.

Decision-Support System for Infrastructure Preservation, Yung-Ching Shen and Dimitri A. Grivas, CP Jan. 96,

Delaware Authority Puts Money on Composite Bridges, CE Oct. 96, p16-17.

Design Decision Making for Infrastructures under the Restriction of the Energy Consumption, Minoru Matsuo, Yusuke Honjo and Ikuo Sugiyama, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p376-379.

Design-Build Continues to Grow in U.S., CE Dec. 96,

Development of a Multivariate Vulnerability Indicator, Wilbert O. Thomas, Jr., Betty Bonn and Albert V. Romano, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p303-304.

Editorial, Victor C. Li, MT Nov. 96, p183.

The Effects of Natural Hazards on Pipeline Safety, Betty Bonn, Myles Powers, Andy Chernoff, Alan Gregory, Dan Phillips and Donna Roy, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed.,

Engineering Research on Smart Materials and Structural Systems, Ken P. Chong, S. C. Liu and O. W. Dillon, IS June 96, p41-44.

Fiscal '97 Budget Likes Infrastructure, Martin Hight, CE Nov. 96, p116.

Furthering Local Knowledge of Earthquake Related Disas-ters, Experiences Learned from the Kobe Earthquake of January 17, 1995, David B. Swanson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p90-91.

Grants Aid South American Development, CE Dec. 96, p13.

Ground Penetrating Radar for Infrastructure Condition As-sessment and Geophysical Applications: A Review, Udaya B. Halabe, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p812-819.

The Impact of Multiple Failure Modes in Risk Analysis for Civil Infrastructure Management, James H. Lambert, Lori R. Johnson and Yacov Y. Haimes, (Risk-Based De-cision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p80-105.

Impacts of NAFTA on Environmental Engineering, Mark W. Killgore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2306-2311.

Implementing the Knowledge Worker System (KWS) in an Engineering Environment, Bruce C. Goettel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p288-293.

Information of the Charles of the Ch

Integrated Infrastructure Maintenance Management, Carol Subick and Ilker Adiguzel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p207-213.

International Postgraduate Program of Water Resources Engineering in Asia, Thian Yew Gan, El Jan. 96, p6-11. Issues Related to Intelligent Bridge Monitoring, A. Emin Aktan, Arthur J. Helmicki and Victor J. Hunt, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p750-757.

Latin American Infrastructure Database Formed, CE Dec.

96, p22. Life-Cycle Cost Analysis with Natural Hazard Risk, Steph-anie E. Chang and Masanobu Shinozuka, IS Sept. 96, p118-126.

Life-Cycle Costing in Municipal Construction Projects, David A. Arditi and Hany M. Messiha, IS Mar. 96, p5-

The Management and Policies of the BECC, April Lander, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1813-1818.

Materials for the New Millennium, 2 vols., Ken P. Chong, ed., 1996, 0-7844-0210-8, 1776pp.

Materials for Tomorrow's Infrastructure: A Ten Year Plan for Deploying High Performance Construction Materials and Systems, CERF Report #94-5011E, Civil Engineer-ing Research Foundation, 1994, 0-7844-0066-0, 55pp.

Materials for Tomorrow's Infrastructure: A Ten Year Plan for Deploying High Performance Construction Materials and Systems, CERF Report #94-5011E, Civil Engineer-ing Research Foundation, 1994, 0-7844-0059-8, 150pp. Mechanistic-Probabilistic Vehicle Operating Cost Model, Curtis F. Berthelot, Gordon A. Sparks, Terry Blomme, Lyle Kajner and Mark Nickeson, TE Sept./Oct. 96, p337-341. Materials for Tomorrow's Infrastructure: A Ten Year Plan

Distriction of the Constraints of the Constraints of the Constraints of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p656-660.

Multimedia Data Management in a Highway Information System, Kelvin C. P. Wang and Xuyang Li, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p607-612.

New City Breaks Ground, CE Sept. 96, p20,22.

On Reliability Assessment of Infrastructure Systems under Strong Earthquake, Hitoshi Furuta and Naruhito Shiraishi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p632-635.

On the Use of Fiber Reinforced Composites for Infrastruc-

ture Renewal— A Systems Approach, Vistasp M. Kar-bhari, Frieder Seible and Gilbert A. Hegemier, (Materi-als for the New Millennium, Ken P. Chong, ed., 1996), p1091-1100.

Organizing and Managing a Finance-Design-Build Project in Turkey: Fourth Roebling Lecture, 1995, Donald K. Stager, CO Sept. 96, p199-204.

anel on Composites for Infrastructure, Srinivasa Iyer, Charles McClasky, Mark P. Henderson, Hota GangaRao and Peter Head, (Materials for the New Millennium, Ken

P. Chong, ed., 1996), p781. Railroad Bridge Behavior during Past Earthquakes, William G. Byers, (Building an International Community Structural Engineers, S. K. Ghosh, ed. and Jamshi Mohammadi, ed., 1996), p175-182.

Reader Says Feds Overspend on Highways, Kirk R. Barrett, P.E., CÉ Oct. 96, p32,37.

Reassessment and Requalification of Infrastructure: Appli-cation to Offshore Structures, R. G. Bea, IS June 96, p45-53

Recent Advancements in Smart Tagged Composites for In-frastructure, Robert F. Quattrone and Justin B. Berman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1045-1054.

Reengineering Infrastructure Research, F. H.(Bud) Griffis,

Et Jan. 95, p11-18. Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996, 0-7844-0178-0, 248pp. Section Lauds Utah Governor, CE Oct. 96, p74,76.

Space Infrastructure Planning, J. Michael Snead, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p360-366.

Sustainability: Another New Paradigm, Larry Quinn, P.E., CE Oct. 96, p6.

Taxing Matters for Trust Funds, Casey Dinges, CE July 96, p100.

Title: "Self-Constructing Space Systems", Daniele Bedini, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1032-1037.

Transportation of Alaska North Slope Natural Gas to Mar-ket, Donald A. Lannom, David O. Ogbe, Akanni S. Lawal and F. Lawrence Bennett, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p226-237.

Transportation Shortcuts Exist, J. F. Koenen, P.E., CE Oct. 96, p37-38.

U.S. Looks to Mexico for New Infrastructure Projects, CE Oct. 96, p28.

Viewpoint, James T. P. Yao, IS Mar. 96, p1-4

Where the Interstate Meets the Information Highway, John Lynch, CP Apr. 96, p91-92.

Injection wells

Injection wells
Control of Seawater Intrusion through Injection-Extraction Well System, A. Mahesha, IR Sept./Oct. 96, p314-317.
Steady-State Effect of Freshwater Injection on Seawater Intrusion, A. Mahesha, IR May/June 96, p149-154.
Transient Effect of Battery of Injection Wells on Seawater Intrusion, A. Mahesha, HY May 96, p266-271.

Analysis of Fatalities and Injuries Due to Powerline Con-tacts, Jimmie Hinze and David Bren, CO June 96, p177-

The Car as a Wind Shelter for Mobile Home Residents, Thomas W. Schmidlin and Paul S. King, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p137-138.

Costs of Accidents and Injuries to the Construction Indus-try, John G. Everett and Peter B. Frank, Jr., CO June 96,

p158-164. Dangerous Digging Requires New Excavation Methods, CE May 96, p22-23.

Designs for Blast Protection (Available only in Structures special issue), Martin J. Fertal, P.E., CE Sept. 96, p3A-5A.

Detroit Cushion Wall Has a Positive Impact, CE May 96, p84.

Development of Flood Hazard Boundary Information, R. Cris Hughes and Gregory W. Lowe, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p365-366.

Larew, Richard E. Ashraf S. Barsoum and Fabian C. Hadipriono, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p906-912.

Mortality and Morbidity Patterns Associated with the Octo-ber 12, 1992 Egypt Earthquake, Josephine Malilay, Ibrahim Fayez Elias, David Olson, Thomas Sinks and Eric Noji, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p266-268. No Subcontractor Indemnity for Contractor's Negligence,

CE Sept. 96, p28.

OSHA May Use Administrative Subpoena, CE Dec. 96,

OSHA Safety Regulations, CE Nov. 96, p28.

Probabilistic Cervical Spine Injury Analysis Methods, Ben H. Thacker, Y.-T. (Justin) Wu, Daniel P. Nicolella and Ronald C. Anderson, (*Probabilistic Mechanics & Struc-ural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p270-273.

Risk Factors for Physical Injury During Earthquakes: Lessons from Previous Studies, Robin M. Wagner, Nicholas P. Jones, Gordon S. Smith and Kirsten O. Waller, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p78-79.

Subcontractor Indemnifies Contractor, CE Feb. 96, p24. Subcontractor's Employee Is Subcontractor's Problem, CE

Feb. 96, p24. Subcontractor's Employee Not Contractor's Problem, CE

Apr. 96, p28. Apr. 90, p.28.
Using Virtual Reality to Avoid Construction Falls, Diah R. Soedarmono, Fabian C. Hadipriono and Richard E. Larew, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p899-905.
Watch Your Step, CE May 96, p24.

Inland waterways
Barge Collision Design of Highway Bridges, M. W. Whitney, I. E. Harik, J. J. Griffin and D. L. Allen, BE May 96, p47-58.

Inlets, waterways

 Inlets, waterways
 Flushing and Recharge of Inlet Channel for an Ephemeral Coastal River, Howard H. Chang and Daniel Pearson, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p659-668.
 Mathematical Modelling of Coastal Morphodynamics Near a Tidal Inlet System, Jan S. Ribberink, Eeleo H. Negen and Gerrit Hartsuiker, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p915-026. 926

920.
Prediction of Storm Induced Flows in Great Lakes Estuarine Inlets, James H. Riley and William L. Wood, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p583-595.
Sedimentation Dynamics of Tidal Inlets, Clifford R. Merz and Panagiotis D. Scarlatos, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4377-4382.
Signatures of Coastal Change at Mesoscales, Timothy W.

Signatures of Coastal Change at Mesoscales, Timothy W. Kana, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p987-997.

Innovation

Innovation
21st Century Leadership and Technology, Malcolm J. Todd, ME July/Aug. 96, p40-49.
Accelerating Innovation: New Style of Leadership Needed, Les McCraw, ME Sept./Oct. 96, p3-5.
Action Plans: An Enhanced Building Technology Evaluation Process, CERF Report #96-5021-02, Civil Engineering Pageageth Enumerical 1906. 67244.4(19):5. 42 pp. 1906. 1906. ing Research Foundation, 1996, 0-7844-0198-5, 42pp.

ing Research Foundation, 1996, 0-7844-0198-5, 42pp.
Applications of Advanced Technologies in Transportation
Engineering, Yorgos J. Stephanedes, ed. and Francesco
Filippi, ed., 1996, 0-7844-0146-2, 730pp.
ASCE's Strategic Plan in Action: The Civil Engineering
Research Foundation, NE Oct. 96, p7.

Bridges of the 21st Century with High Performance Steel, Wagdy G. Wassef, John M. Kulicki and Philip A. Ritchie, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), pl 16-124.

Cable-Stayed Bridge Concept for Longer Spans, Uwe Starossek, BE Aug. 96, p99-103.

Calling All Civil Engineer Inventors, CE Feb. 96, p68. CERF Aids NSF in Revising Program That Reflects Needs of Construction Industry, NE July 96, p15. CERF Receives Award, CE Nov. 96, p8.

CERF, U.K. Agree to Broaden Ties, CE May 96, p73.

Competition Spurs High-Rise Innovation, CE Aug. 96, p10. Composite Materials Sweep CERF Innovation Awards, CE Apr. 96, p14,16.

Construction Automation: Demands and Satisfiers in the United States and Japan, John G. Everett and Hiroshi Saito, CO June 96, p147-151.

Construction Industry Research Prospectuses for the 21st Century, CERF Report # 96-5016.T, Civil Engineering Research Foundation, 1996, 0-7844-0186-1, 130pp.

Creating the 21st Century through Innovation, CERF Report # 96-5016.E, Civil Engineering Research Foundation, 1996, 0-7844-0185-3, 60pp.

Engineering and Construction for Sustainable Development ngineering and Construction for Sustainable Development in the 21st Century: Assessing Global Research Needs, CERF Report #96-5016A, Civil Engineering Research Foundation, 1995, 0-7844-0142-X, 145pp. Engineering Innovations Highlighted at Research Symposi-um, ET Mar./Apr. 96, p1,5.

Levaluating Earth Retaining Systems, CE Aug. 96, p10.
Evaluating Innovative Concrete Technologies through the HITEC Process: the JMI Channel Bridge, Kathleen H. Almand, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p161-166.

Field Performance of Stress-Laminated T and Box Beam Bridges, Barry Dickson and Hota GangaRao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p253-259.

How Strategies Happen: A Decision-Making Framework, Karen Lee Hansen and C. B. Tatum, ME Jan./Feb. 96,

p40-48.

The Idea of Building: Thought and Action in the Design and Protection of Buildings by Steven Groak, Jeffrey S. Russell, ME July/Aug. 96, p15-17.

Innovation Award Named for Charles Pankow, NE Feb. 96, p15.

Innovative Design/Build Approach: Ambassador Bridge Project, Jay B. Shah, ME July/Aug. 96, p58-61. Innovative N.Y. Bridges Add Highway Clearance, CE July

96, p19-20.

An Innovative Plastic Housing System, E. Burnett, A. Arenja and L. Holroyd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p545-554.

Integrated Civil Engineering Curriculum: Implementation and Management Issues, Neil S. Grigg, Marvin E. Criswell and Thomas J. Siller, El Oct. 96, p151-155.

Materials for the New Millennium, 2 vols., Ken P. Chong, ed., 1996, 0-7844-0210-8, 1776pp.

Materials for Tomorrow's Infrastructure: A Ten Year Plan for Deploying High Performance Construction Materials and Systems, CERF Report #94-5011E, Civil Engineering Research Foundation, 1994, 0-7844-0066-0, 55

Materials for Tomorrow's Infrastructure: A Ten Year Plan for Deploying High Performance Construction Materials and Systems, CERF Report #94-5011E, Civil Engineer-ing Research Foundation, 1994, 0-7844-0059-8, 150pp.

New Sunshine Program: Comprehensive Approach to the 21st Century, Mitsugi Chiba, EY Dec. 96, p93-101.

Product Champions in Government Agencies, Steve G. Winistorfer, ME Nov./Dec. 96, p54-58.

Rebound of the Bascule Bridge, Patrick A. Cassity, P.E., Vinod C. Patel, P.E. and R. Shankar Nair, P.E., CE Aug. 96, p48-50.

Recent Innovation for Concrete Highway Bridges, S. H. Rizkalla and A. A. Mufti, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p1063-1071.

Recent Innovations in Undergraduate Civil Engineering Curriculums, Joy M. Pauschke and Anthony R. In-graffea, El July 96, p123-133.

Singapore Showcase, T. Y. Lin and Tan See Chee, P.E., CE Nov. 96, p61-63.

Small Businesses Fuel Economic Growth, Innovation, and Job Creation, Garold D. Oberlender, SC Aug. 96, p76-

Solving the Innovation Puzzle, Harvey M. Bernstein and Andrew C. Lemer, 1996, 0-7844-0023-7, 130pp.

Validation of Rutting in the CAL/APT Program, J. Harvey, S. Shatnawi and S. Weissman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p701-710.

Viewpoint, George Seaden, IS Sept. 96, p103-107. Who Springs for Water? Eric Rasmussen, CE Sept. 96, p65-67.

Windsor Bridge Pier Repairs, Phillip Pierce and Joseph Mieczkowski, SC May 96, p79-81.

Winners Named in CERF Awards for Innovation, CE Mar. 96, p72.

Inorganic contaminants

Recover Inorganic Solids from Obsolete Propellants, Frank J. Y. Shiu, Iris C. Y. Yang and T. F. Yen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1373-1378.

Maximum Structural Response Using Convex Models, Yakov Ben-Haim, Genda Chen and T. T. Soong, EM Apr. 96, p325-333.

Inspection

Acoustic Monitoring to Enhance Pipeline Safety at Crossings, Will Worthington and William J. DiMarco, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996),

Augmented Reality in Architectural Construction, Inspection, and Renovation, Anthony Webster, Steven Feiner, Blair MacIntyre, William Massie and Theodore Krueger, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p913-919.

Automated Code Compliance Checking for Building In-spection, Tang Hung Nguyen, Claude Bédard and Kinh Huy Ha, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p1020-1026.

Biological Serendipity from an Ocean Outfall Maintenance Inspection, Tom Gerlinger, George Robertson and Don Maurer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2050-2055.

13700, p.2030-2035.
A California Handbook for Developing an Industrial/ Commercial Storm Water Inspection Program, Jill C. Bicknell, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2625-2630.

Case of Residential Foundation Failure and Preservation by Grouting, A. Khalilian and F. Amini, CF Nov. 96, p159-163

Computation of Structural Flexibility for Bridge Health Monitoring Using Ambient Modal Data, Scott W. Doe-bling and Charles R. Farrar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1114-1117.

Computerized I&M Programs for Oil-Fired Space Heating Boilers, Alexander P. Economopoulos, EY Aug. 96,

p61-74.

Condition Assessment of Marine Timber Piles Using Stress Wave Method, Shunyi Chen and Y. Richard Kim, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p853-860.

Detecting Damage in Highway Bridges from Vehicle Induced Girder Strains, Leon L-Y Lai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1122-1125.

Effects of Testing, Inspection and Repair on the Reliability of Offshore Structures, Guoyang Jiao and Oddvar I. Eide, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p154-157.

External Inspection of an Ocean Outfall, Mike Heinz, Don Siverts and Bob Ooten, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p2056-2059.

Field Evaluation of a Wireless Global Bridge Evaluation and Monitoring System (WGBEMS), Kenneth Maser, Robert Egri, Abba Lichtenstein and Steven Chase, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

Field Inspection Data Collection using Personal Digital Assistants and Digital Cameras, Anthony D. Songer and Eddy M. Rojas, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1047-

Including Inspection Imperfection in Optimizing Structural Management Policies, Mingxiang Jiang, Ross B. Corotis and J. Hugh Ellis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p368-371.

telligent Bridge Monitoring System, Pei-Ling Liu, Yun-Fu Luo and Shyh-Jang Sun, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p608-611.

Intelligent On-Line Monitoring of Machine Health for Ro-bots in Critical Environments, John P. H. Steele, Michelle Archuleta, Galen D. Brown, Tom Drouillard, Dirk Schlief and Tim D. Seifert, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p262-275.

Project, Eddy M. Rojas and Anthony D. Songer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1027-1033.

Marine Borers are Back, Vahan Tanal and Alex Matlin, CE

Oct. 96, p71-73.

Measurement of Applied Stress in Steel Bridges, E. A. Mandracchia, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1118-1121.

Mobile Field Data Acquisition for Construction Quality Control and ISO 9000 Certification, Robert F. Cox and Raja R. A. Issa, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1041-

No-Dig Gains Ground, Luis Aguiar, Thomas G. Scheller, P.E., James T. Cowgill, P.E. and Iqbal Noor, CE Aug.

96, p54-57.

y6, p34-57.
 y6n-Federal Flood Control Works Inspection Program, Jim Crum, Ruh-Ming Li and Henry M. Fehlman, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1796-1800.
 Pipeline Crossing Accidents and Leak Detection Opportunities, Diane J. Hovey and Edward J. Farmer, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p22-36.

Proof Loads, Construction Error and the Reliability of Service Proven Structures, Mark G. Stewart, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p226-229.

poi, et. and Mircea D. Origoriu, ett., 1996), p.226-229.
Reliability Framework for Managing Risk of Aging Structures, Bruce Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p590-597.
Reliability-Based Maintenance Strategy Using NDI, Achintya Haldar and Zhengwei Zhao, (Probabilistic Mechan-

ics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p364-367.

Reliability-Based Optimum Bridge Repair Strategy, Allen C. Estes, Dan M. Frangopol and George Hearn, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p372-375.

Representing the City, CE Dec. 96, p24.

A Robotic Inspector for Low-Level Radioactive Waste, Joseph S. Byrd and Robert O. Pettus, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p276-282.

parto-262.
Safety Assessment of a Robotic System Handling Nuclear Material, Christopher B. Atcitty and David G. Robinson, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p255-261.

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94, p2437-2450.

Suspicious Inspection Begs ASCE Intervention, Marshall D. Collins, CE Dec. 96, p28.

Reasonable Care Must Be Taken, CE Dec. 96, p24.

Suspicious Inspection Begs ASCE Intervention, Marshall D. Collins, CE Dec. 96, p28.

1500 mm Corrugated HDPE Pipe Installation and Performance, David J. Mailhot, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p69-76.

Challenges of an Advance Utility Contract for a Major Highway Widening Project in Norfolk, Virginia, Gary M. Hart, Peter S. Fortin and Gary L. Heisler, (*Pipeline* Crossings 1996, Lawrence F. Catalano, ed., 1996),

Design of a 610-mm Water Pipeline Across Providence Harbor, David E. Hairston, Pasquale DeLise and William Skerpan, Jr., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p387-394. Development of Caltrans Guidelines for Natural Gas Pipelines on Highway Bridges, Anthony Gugino, Chih-Hung Lee, Richard Gailing, Philip Constantine and David Reisetter, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p245-253.

Greenville Installs 1st 1.5m Annular CPE Pipe in the USA, Douglas Hinken and Stephen Matheny, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p88-96.

High Density Polyethylene Pipe under High Fill: A Continuing Study, John J. Meyer and J. L. (Jack) Hilfiker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p77-87.

If I Had Not Seen It, I Would Not Have Believed It! John E. Meeks, P.E., SC Nov. 96, p119-121.

Investigation of Pipeline Buckle Failure in a Horizontally Directionally Drilled Installation, Hugh W. O'Donnell, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p163-172.

Microtunneling Database for the USA and Canada From 1984 to 1995, Alan Atalah and Paul Hadala, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996),

"Ductile Iron Microtunneling Pipe, Non-Traditional Instal-lation Applications", Ralph R. Carpenter and Randall C. Conner, (*Pipeline Crossings 1996*, Lawrence F. Ca-talano, ed., 1996), p312-321.

Institutional constraints

Better Management in the Water Supply Sector Through Indigenous Institutions, Paula Donnelly-Roark, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2970-2975.

Earthquakes, Bombs and Mines, CE July 96, p8.

Postoccupancy Indoor Environmental Quality Evaluation of an Institutional Building, Brian A. Rock, P.E. and Craig A. Hillman, AE Sept. 96, p88-94.

Designing Instream Flows to Satisfy Fish and Human Water Needs, Hal Cardwell, Henriette I. Jager and Michael J. Sale, WR Sept./Oct. 96, p356-363.

Third Party Impacts of Proposed Water Banking in the Colorado River Basin, James F. Booker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4042-4045

Computer-Based Undergraduate Integrated Civil Engineering Curricula at WPI, Guillermo F. Salazar, Leonard D. Albano, Roberto Pietroforte and P. Jayachandran, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p140-146.

Harnessing the Internet for Civil Engineering Course Deliv-ery, Rafael G. Quimpo, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p355-361.

Multi-Site Cross-Disciplinary A/E/C Project Based Learning, Renate Fruchter, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p126-132.

Trial Applications of Multimedia Instructional Aids in a Building Construction Curriculum, David R. Riley and Clark Pace, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p362-368.

WWW and Multimedia in Undergraduate Civil Engineer-ing, Randy Dymond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p341-347.

Instructions

The Importance of Dissemination and Instruction in Hurricane Warnings, Earl J. Baker, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p391-392.

Instrumentation

Building a Landfill on Mud(Available only in Geo/ Environmental Special Issue), Michael J. Byle and Anne M. Germain, CE July 96, p12A-16A.

Cold Weather Testing of Outdoor Gas-Fired Heaters, De-bendra K. Das, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p410-423

Concrete Penetration by Eroding Projectiles: Experiments and Analysis, Vladimir M. Gold, George C. Vradis and James C. Pearson, EM Feb. 96, p145-152.

Development of a Mobile Instrument Deployment Device evenopment of a motive instantiant bepoment Deve (MIDD), Lutz Richter, Klaus Schilling, Marco C. Ber-nasconi, Christoph Jungius and César Garcia-Maritrodriga, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p283-289.

Evaluation of Selected Instruments for Monitoring Scour at Bridges in New York, Gerard K. Butch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4164-4171.

Facilities for the Earth-Moon Test Range, Robert C. Wigand, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p956-962.

Field Evaluation of GEOSYNTHETICALLY STABI-LIZED PAVEMENTS, Imad L. Al-Qadi, Thomas L. Brandon and Salman A. Bhutta, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p328-337.

Field Instrumentation to Study the Time-Dependent Behavior in Sunshine Skyway Bridge. I, Mohsen A. Shahawy and M. Arockiasamy, BE May 96, p76-86.

Field Observations of Instrumented Highway Sections with Different Frost Protections, J.-M. Konrad, G. Dore and M. Roy, (Cold Regions Engineering: The Cold Region Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p652-663.

Geotechnical Instrumentation for Boston's Central Artery/ Tunnel Project: An Overview, John Dunnicliff, Charles Daugherty and Thom Neff, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p727-733.

A Hybrid Data Model for Structural Health Monitoring, Sungkon Kim and Stuart S. Chen, (Analysis and Compu-tation, Franklin Y. Cheng, ed., 1996), p286-297.

Impact-Generated Atmospheric Plumes: The Threat to Sat-ellites in Low-Earth Orbit, M. B. Boslough and D. A. Crawford, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p88-94.

Instrumentation for Field Measurement of Abutment Scour, J. D. Schall, G. R. Price and G. A. Fisher, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p931-939.

Interactive Lessons for Instrumentation and Control, E. J. Mastascusa and Maurice F. Aburdene, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p303-309.

Investigation of Bridge Floor-Truss Behavior in Tied-Arch Span, Thomas E. Cousins, J. Michael Stallings and Bradley P. Christopher, CF May 96, p79-86.

Issues Related to Intelligent Bridge Monitoring, A. Emin Aktan, Arthur J. Helmicki and Victor J. Hunt, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996).

Measuring and Modeling Dynamic Loads Imposed by Moving Crowds, A. Ebrahimpour, A. Hamam, R. L. Sack and W. N. Patten, ST Dec. 96, p1468-1474.

Nanotechnology and Orbital Debris, Hans-Joachim Blome and Thomas L. Wilson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p328-333.

PC-Based Remote Monitoring of an Instrumented Struc-ture: Case Study and Lessons Learned, R. J. Helgeson, S. Chen and K. Kuhl, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p310-321.

REGA (Regolith Evolved Gas Analyzer), David S. McKay and Carlton C. Allen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996).

Scour Monitoring at Johns Pass and Nassau Sound, Florida, J. D. Schall, G. A. Fisher and G. R. Price, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Buthala, ed., 1996), p1990-1998.

Technique for Precise Measurement of Large-Scale Silos and Tanks, Xiaoli Ding, Richard Coleman and J. Michael Rotter, SU Feb. 96, p14-25.

Using NDT to Fasttrack Pavements, James K. Cable, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p475-481.

Waste of Water is Costly. Why Not Use an Accurate Flow Monitoring System? Hans-Peter Vaterlaus, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3617-3622.

Westbay/MOSDAX Instrumentation of UE-25 ONC #1 and USW NRG-4 at Yucca Mountain, Nevada, Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p163-165.

368

Cold-Related Electric Power System Considerations, John Aspnes and James Cote, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Impera-tive for the 21st Century, Robert F. Carlson, ed., 1996), p436-446.

Fast Track Basics, James D. Grove and Kevin B. Jones, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p466-474.

Probability Distributions Used in 100-Year Return Period of Air-Freezing Index, Peter M. Steurer, CR Mar. 96, p25-35

Waterproofing An Expanded Convention Center, CE Dec.

Winter Effects on Hydraulic Conductivity of Compacted Clay, C. H. Benson, T. H. Abichou, M. A. Olson and P. J. Bosscher, GT Jan. 95, p69-79.

Bad Vibrations, Lawrence W. Gubbe, P.E., CE Aug. 96, p58-60.

Clause in Contract Does Not Preclude Other Damages, CE Aug. 96, p24.

Contract Waived Rights to Recovery of Loss, CE Aug. 96,

Correlation of Component Damage, Insurance Losses and Wind Storm Severity, Timothy A. Reinhold, Gregory L. F. Chiu and Robert Akins, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p191-192.

Editor's Note, Kenneth L. Carper, CF Aug. 96, p89.

Hurricanes Erin, Marilyn and Opal, Kishor C. Mehta, James R. McDonald and Douglas A. Smith, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p46-47.

Insurance and Damage Mitigation - Incentive or Disincentive, George R. Walker, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p195-196.

Occupational Hazards Scheme of Social Insurance in Saudi Arabia: Overview, M. Osama Jannadi, ME Mar/Apr. 96, p55-57.

A Predicting Method of Typhoon Wind Damages, Yasushi Mitsuta, Takeshi Fujii and Ichiro Nagashima, (Probabi-listic Mechanics & Structural Reliability, Dan M. Fran-gopol, ed. and Mircea D. Grigoriu, ed., 1996), p970-973.

Residential Vulnerability Functions and Their Variability Based on Claims Data, Ben Lashkari and Ronald War-drop, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p307-308.

Use of GIS Mapping to Illustrate the Sensitivity of Wind Hazard Insurance Loss Estimation to Modeling Parameters, Andrew Steckley, Lawrence A. Twisdale and Peter J. Vickery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p201-202.

Vulnerability Curves for Buildings in Tropical-Cyclone Regions, John Holmes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p78-81.

A Windstorm Damage Model for the Identification of Inwindsom Daniel Weisser and Reinsurance Risk, Brian E. Lee and David R. Whiting, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p197-198.

Intake structures

Canal Road Water Treatment Plant Intake Tunnels, Joel Moskowitz, Robert T. Wisniewski, II, Vincent Tirolo and Peter Evensen, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p322-331.

Los Angeles River as a Water Source for a Freshwater Reservoir, Philip O. Lowe and Novin Rashedi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3987-3992. Preliminary Validation of the MAC3D Numerical Flow

Model, Robert S. Bernard, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3434-3439.

Berkeley Fights Fire with Salt Water, CE Dec. 96, p18.

Comparison of Water Backwash and Brush Cleaning Sys-tems for Vertical Panel Fish Screens, Morton D. McMillen and Clint W. Smith, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1129-1134.

Design Modification of Water Supply Intakes in Mountain-ous Regions, Adnan Alsaffar, Yifan Zheng and Karim Khalifa, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4046-4051.

Developments in the Use of Infrasound for Protecting Fish at Water Intakes, E. P. Taft, N. A. Brown, T. C. Cook, J. P. Ronafalvy and M. W. Haberland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p171-176.

Filling and Emptying System Model Study for the Innova-tive Lock Design, Richard L. Stockstill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3141-3146.

Flow through Vertical Barrier Screens - A Numerical Model, M. E. Allen, M. P. Cherian and L. J. Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

How Did a California Dam Get a Section 404 Permit? Gary W. Darling and Joel B. Butterworth, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p976-981.

McAlpine Intake Model Study for Innovative Lock Design, John E. Hite, Jr. and Larry Dalton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3135-3140.

Nearshore Hydrodynamic and Water Quality Modeling for Water Intake Evaluation and Design, Kwang K. Lee, Bing Shen and Chung Shyan Wu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2456-2461.

Sediment Control at Water Intakes, Yalin Wang, A. Jacob Odgaard, Bruce W. Melville and Subhash C. Jain, HY

June 96, p353-356.

Sediment Transport Modeling for the Glen-Colusa Irriga-tion District Fish Screen Modifications, Cassie Klumpp, Mark Sailer, Arthur Glickman and Brent Mefford, (North American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996), p1027-1032. Selective Withdrawal through Intake Fitted with a Collar, James J. Sharp, T. M. Parchure and Z. R. Guo, HY Dec.

General Integral Formulation of Turbulent Buoyant Jets in Cross-Flow, Vincent H. Chu and Joseph H. W. Lee, HY Jan. 96, p27-34.

Higher Moments of Weighted Integrals of Non-Gaussian Fields, Gunnar Mohr, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p254-257.

Stochastic Integral/Calculus for Non-Gaussian Delta-Correlated Processes, Sau-Lon James Hu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p246-249.

Integrated systems

Systems Engineering Firms Merge, CE Dec. 96, p22.

Intelligent transportation systems

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Artificial Intelligence and Intelligent Transportation Systems, Brian L. Smith, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p978-984

Coils Could Put ITS on Right Track, ET Apr./May 96, p1,7. Evaluation of Vehicle-Specific Information in Traffic Control Systems, Alireza Kamyab, T. H. Maze and Reginald R. Souleyrette, TE Nov./Dec. 96, p421-429.

Every Road That Rises Must Converge on GIS, Eric Rasmussen, ET Oct/Nov. 96, p8.

Houston Transtar: Total Traffic Control, CE July 96, p12. Intelligent Transportation Education, Steven P. Scalici, CE Apr. 96, p52-54.

Researchers Plan First Test of Automatic Highways, CE Nov. 96, p24.

A Strategy for Solving Static Multiple-Optimal-Path Transit Network Problems, Nicholas Koncz, Joshua Green feld and Kyriacos Mouskos, TE May/June 96, p218-225.

Intelligent vehicle highway systems

Autonomous Intelligent Cruise Control Using the Fuzzy Logic, Kwang Soo Chang and Jae Sung Choi, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p644-655.

A Flexible Machine-Vision System for Traffic Monitoring Applications, James F. Alves, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p171-175.

Government Looks to Automated Future on Highways, CE Feb. 96, p16-17.

High-Capacity Bus Systems Based on Transit Centres and Convoying, P. Delle Site and F. Filippi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p1-5.

Improvement of Road Network Reliability under Different Route Choice Principles, Shinji Nakagawa, Hiroshi Wakabayashi and Yasunori Iida, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Intelligent Transportation Education, Steven P. Scalici, CE Apr. 96, p52-54.

Millimetre Radar System for the On-Board Lateral Distance Acquisition: Performances Evaluation and Infrastructure Constraints, Corrado Cugiani and Luigi Giub-bolini, Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p656-660.

Minnesota Intelligent Transportation Systems' Laboratory, Lowell A. Benson, Dennis L. Foderberg and Yorgos Stephanedes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p525-534.

Researchers Plan First Test of Automatic Highways, CE Nov. 96, p24.

SOCRATES - From Research Towards Commercial Implementation, lan Catling and Richard Harris, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p588-593.

Traffic Dynamics: Method for Estimating Freeway Travel Times in Real Time from Flow Measurements, Do H. Nam and Donald R. Drew, TE May/June 96, p185-191.

Use of Traffic Information System in Congested Area, A. Pauzié, A. Sarpedon and G. Saulnier, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p305-309.

Vision Technique for Platoon Driving, Michel Parent, Pas-cal Daviet and Sofiane Abdou, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p666-675.

"Marriage" of Fiber Optic and Wireless Communications Supporting Intelligent Transportation Systems, Bruce C. Abernethy, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996, p248-255.

Interaction models

Combined Refraction-Diffraction - Wave-Current Interaction Over a Complex Nearshore Bathymetry, B. A. O'Connor, P. B. Sayers and N. J. MacDonald, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p173-184.

Examples and Characteristics of Shared Project Models, Martin Fischer and Thomas Froese, CP July 96, p174-

182

Object-Oriented Model for Integrating Construction Prod-uct and Process Information, Annette L. Stumpf, Ra-jaram Ganeshan, Sangyoon Chin and Liang Y. Liu, CP July 96, p204-212.

Stream-Aquifer Interaction Model with Diffusive Wave Routing, Samuel P. Perkins and Antonis D. Koussis. HY

Apr. 96, p210-218.

Interactions

Dam-Foundation Rock Interaction Effects in Earthquake Response of Arch Dams, Hanchen Tan and Anil K. Chopra, ST May 96, p528-538.

Dynamic Analysis of Resilient Crosstie Track for Transit System, M. J. Fatemi, M. F. Green, T. I. Campbell and A. Moucessian, TE Mar./Apr. 96, p173-180.

Effect of Surface Water and Ground Water Interaction on Atrazine Transport to Pumping Wells, Chittaranjan Ray, David Soong, Deva K. Borah and George R. Roadcap, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Equilibrium-Range Spectrum of Waves Propagating on Currents, Kyung Duck Suh, Yoo-Yin Kim and Dong Young Lee, WW Sept./Oct. 94, p434-450.

The Influence of Trust on Risk-Based Decision Making, David L. McLain and B. Katarina Hackman, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p169-179.

Measuring Mutual Confidence in UK Construction Projects, A. K. Munns, ME Jan./Feb. 96, p26-33.

Modified Janssen Theory for Flexible Circular Bins, Y. T. Feng and Y. L. Hua, ST Apr. 96, p454-456.

Relationship Between Project Interaction and Performance Indicators, James B. Pocock, Chang T. Hyun, Liang Y. Liu and Michael K. Kim, CO June 96, p165-176.

Simulation of Interaction between Canal Regulation and Groundwater, Hsin-Chi J. Lin and Hwai-Ping Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Telerobotic Servicing with Virtual Reality Calibration and Semi-Automatic Intermittent Model Updates, Won S. Kim and Robert Brown, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p43-49.

Yield-Interaction Relationships for Curved I-Girders, Charles G. Schilling, BE Feb. 96, p26-33.

Interactive graphics

Finite-Element Graphic Objects in C++, Jianing Ju and M. U. Hosain, CP July 96, p258-260.

Telerobotic Servicing with Virtual Reality Calibration and Semi-Automatic Intermittent Model Updates, Won S. Kim and Robert Brown, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p43-49.

Interactive systems

Computer-Aided Design of Braced Excavations, Chandra S. Brahma and Howard C. Biddlecome, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p838-844.

Development of a Knowledge-Driven Interactive Contractual Agreement Preparation Program using Multimedia, Thomas F. Harrington, Cheryl L. Ruf and Guillermo F. Salazar, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p649-655. Development of an Interactive Multimedia and Database Model, Michael H. Woo, (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p767-773.

Earthquake Response of Structures by Structural Mixture Theory, Mohammed S. Al-Ansari, O. M. Kirkely and Gregory Gillette, ST Oct. 96, p1198-1207.

Environmental Standards Digitized, CE Dec. 96, p20. Exact Solutions to A Class of Structure-Equipment Sys-tems, Genda Chen and T. T. Soong, EM Nov. 96, p1093-1100.

Hydrologic Modeling System, John Peters and Arlen Feld-man, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p3776-3781.

Interactive 4D-CAD, Kathleen McKinney, Jennifer Kim, Martin Fischer and Craig Howard, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p383-389.

An Interactive Operator Interface for Task-Level Direction of a Robot in Uncertain Environments, Eric S. Miles and Robert H. Cannon, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p50-56.

A Knowledge Based System for the Design of Open Chan-nels, James M. Crum and Michael E. Mulvihill, (North

nets, James M. Crum and Michael E. Mulvihill, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4125-4130. Quicktime VR and Interactive CD-ROM Applications for Communicating Project Alternatives, Douglas D. Eber-hard, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p806-811. Sequence Control for Integrated Structural Design Models, Chang-Ho Lee and Richard Sause, CP July 96, p213-225

Steel Girder Bridge Cost Optimization Using AASHTO Specifications, T. E. Fenske, M. Yener, D. Liu and S. M.

ed., 1996), p472-481.
Storm-Water Management Implementation through Modeling and GIS, Uzair M. Shamsi, WR Mar/Apr. 96, p114-127.

Use of Geographic Information Systems in Ground-Water Flow Modeling, D. W. Watkins, D. C. McKinney, D. R. Maidment and Min-Der Lin, WR Mar./Apr. 96, p88-96.

Interagency cooperation
Better Management in the Water Supply Sector Through
Indigenous Institutions, Paula Donnelly-Roark, (North

Indigenous Institutions, Paula Donnelly-Roark, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2970-2975, nvironmental Justice: The Department of Energy's Response to Executive Order 12898, Alvaro Nieves, Devermette and Georgia Johnson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p483-485. Environmental Justice:

1996, pas3-sp36, pa

Bathata, ed., 1990), p. 3000-3162.

Intercepting sewers
Construction Through Crude Oil, Kyle R. Ott, Richard J. Switalski and Dale J. Sadowski, CE Feb. 96, p56-59.

Design Alternatives for Protection of the Santa Ana River Interceptor Sewer, Thomas Dawes, Chenchayya T. Bathala and Carl Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2378-2383.

An Interception by Boston, Dennis J. Doherty, P.E. and Irene McSweeney Woodfall, P.E., CE Oct. 96, p45-47.

Computer Model Aids Seismic Improvements, CE Mar. 96, p12.

Connection of a Steel Cap Girder to a Concrete Pier, Joseph M. Ales, Jr. and Joseph A. Yura, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p475-482. Major Brooklyn Interchange Being Upgraded, CE July 96,

Traffic Congestion Leads to Innovative Funding, CE Sept. 96, p14.

Traffic Engineers Get Loopy with Colorado Interchange, CE June 96, p12,14.

Interconnected systems

Crossing the Cape Cod Canal; A Natural Gas Pipeline Interconnection, Charles A. Pickering, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p48-55.
Hydrodynamic Flow Modeling at Confluence of Two Streams, K.-H. Wang, T. G. Cleveland, S. Fitzgerald and X. Ren, EM Oct. 96, p994-1002.

Interface shear

Pullout Simulation of Postinstalled Chemically Bonded An-chors, Michael McVay, Ronald A. Cook and Kailash Krishnamurthy, ST Sept. 96, p1016-1024.

Intertaces
Analysis and Design of Liner System for a Large Ash Residual Landfill, Yun Zhou, Luis E. Vallejo and Daniel C. Hsu, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p114-129.

Clay Liner Crack Propagation, Joseph F. Boward and Luis E. Vallejo, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p97-113.

Constitutive Modeling and Analysis of Creeping Slopes, Chandra S. Desai, Naresh C. Samtani and Laurent Vul-

liet, GT Jan. 95, p43-56.

Constitutive Relationships of Mortar-Aggregate Interfaces in High Performance Concrete, Oral Büyüköztürk and Brian Hearing, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p452-461.

The Effect of the Interfacial Transition Zone on Concrete Properties: The Dilute Limit, E. J. Garboczi and D. P. Bentz, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1228-1237.

Chong, ed., 1996), p1228-1237.
Engineered Contaminated Soils and Interaction of Soil
Geomembranes, Geotechnical Special Publication No.
59, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N.
Reddi, ed., 1996, 0-7844-0213-2, 144pp.
Formulation and Implementation of Improved ZeroThickness Interface Elements, V. N. Kaliakin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),
p285-288

p285-288.

Fundamental Solutions for Bimaterials with Inextensible Interface, Z. Q. Yue and Y. H. Yin, EM Nov. 96, p1052-

HDPE Geomembrane/Geotextile Interface Shear Strength, Timothy D. Stark, Thomas A. Williamson and Hisham T.

Timothy D. Stark, Thomas A. Williamson and Hisnaul I. Eid, GT Mar. 96, p197-203.

Improving the Ductility of High Performance Concrete Through Mortar-Aggregate Interfaces, Oral Büyüköztürk and Brian Hearing, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1337-1346.

Incipient Instability Criterion of Two Confined Superposed Fluids, Chin-Hwa Kong and I-Chung Liu, EM Feb. 95,

Inhomogeneous Interfacial Transition Zone Model for the Elastic Moduli of Concrete, Melanie P. Lutz, Paulo J. M. Monteiro and Robert W. Zimmerman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1246-1255.

Interaction Between Geomembranes and Granular Materials, Luis E. Vallejo and Yun Zhou, (Engineered Contam inated Soils and Interaction of Soil Geomembranes, Jay N. Mecgoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p82-96.

Interface Design for Pen-Based Computers in the FIRS Interface Design for Pen-Based Computers in the First Project, Eddy M. Rojas and Anthony D. Songer, (Com-puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996, p1027-1033.
Interfacial Shrinkage in Mortars, K. Sujata, Yunping Xi and Hamlin M. Jennings, (Materials for the New Millennium, Van D. Changel, 1960, 1960, 1969, 1969.

Ken P. Chong, ed., 1996), p1669-1676. Mode-I Fracture Toughness of Composite/Wood Interface Bond, Julio F. Davalos, Prabhu Madabhusi-Raman and Pizhong Qiao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1469-1478.

Multidisciplinary Product Modeling of Buildings, W. P. S. Dias, CP Jan. 96, p78-86.

Plane Solutions of Interface Cracks in Anisotropic Dissimilar Media, Chien-Ching Ma and Jyi-Jiin Luo, EM Jan. 96, p30-38.

Pseudo Three-Dimensional Finite Element, Michael H. Triche and James A. Richardson, ST July 96, p832-835.

Shear Strength of Reinforced Geosynthetic Clay Liner, Robert B. Gilbert, Federico Fernandez and David W. Horsfield, GT Apr. 96, p259-266.

Stochastic Finite-Element Analysis of Soil Layers with Random Interface, R. Ghanem and W. Brzakala, EM Apr. 96, p361-369.

Interfacial tensio

Mechanisms of Removal of Residual Dodecane Using Sur-factant Foam, HsienShen S. Chu, Amir Salehzadeh, Avery H. Demond and Richard D. Woods, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p269-280.

Ed., 1990), p.209-200.
Upscaling of Pore-Scale Concepts to Develop Models of NAPL Ganglion Dynamics, Rao S. Govindaraju and Lakshmi N. Reddi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p454-465.

Interferometry

Applications of Space Technology to Aid in Identification of Seismic Hazards, Ronald Blom, Robert Crippen, Andrea Donnellan, Gilles Peltzer and Paul Rosen, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p305-306.

Astrophysical Cosmology Using a Lunar Ligo, Thomas L. Wilson, Hans-Joachim Blome and Norman LaFave, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p861-863.

Interferometric Imaging for Deep Space Asset Monitoring, Gary C. Loos, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p214-223

Unified Formulation for Analysis of Slopes with General Slip Surface, R. D. Espinoza, P. L. Bourdeau and B. Muhunthan, GT July 94, p1185-1204.

Determination of Drained Friction Angle of Sands from CPT, J. W. Chen and C. H. Juang, GT May 96, p374-

Internal pressure

Glazed Opening Designs for Windborne Debris Impact, Joseph E. Minor, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p117-118. Ground Response of Circular Tunnel in Poorly Consolidated Rock, Yarlong Wang, GT Sept. 96, p703-708.

Semianalytical Solutions to Griffith Fracture Under Varia-ble Pressure, Albert T. Yeung, EM June 96, p580-584.

Internal waves

Numerical Simulation of Internal Kelvin Waves with Zlevel and Sigma Level Models, David J. Schwab, Dmitry

Beletsky, William P. O'Connor and David E. Dietrich, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p298-312.

Three-Dimensional Modeling of Wind-Driven Upwelling of Anoxic Bottom Water 'A-oshio' in Tokyo Bay, Keiji Nakatsuji, Jong Sung Yoon and Koji Muraoka, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Babb T. Chang. 1906-519-631.

Ralph T. Cheng, 1996), p618-631.

International commissions

An Approach to International High Level Radioactive
Waste Management, Pieter J. Bredell and Helmut D.
Fuchs, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p486-488.

Border Environment Cooperation Commission: 1995 Year End Status Report, Peter Silva, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1819-1821.

Deep Geological Disposal Programs in Preparation and Under Development, D. P. Khrushchov, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p19-21.

The Great Great Lakes, Murray Clamen, (North American

me Great Great Lakes, Mutray Claimen, (vorin American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2300-2305. Impacts of NAFTA on Environmental Engineering, Mark W. Killgore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2306-2311. International High-Level Radioactive Water Repositories, Water Monage.

Wunan Lin, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p492-493.

International Technology Transfer of Hydrologic Components, Eugene A. Stallings, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p325-326.

The Management and Policies of the BECC, April Lander, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Managing Great Lakes Water Levels: An International Partnership, Anthony J. Eberhardt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1317-1322.

Wastewater Reuse: An Alternative for Potable Water, S. A. Mohsin, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p2976-2981.

"California Border Environment Activities Since Passage of NAFTA", James M. Stubchaer, Bart Christensen and Susan Phillips, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1807-1812.

International compacts CERF, U.K. Agree to Broaden Ties, CE May 96, p73.

CERF, U.K. Agree to Broaden Tres, CE May 96, p73.
Connecting Random Acts of Quality: Global System Standard, William M. Hayden, Jr., ME May/June 96, p34-44.
Flight Crew Equipment Development and Integration with the International Partners, Rod Jones, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p467-472.

An Integrated Approach to Maintaining a Program Baseline on the International Space Station, Roy Patrick Norris and Larry D. Toups, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p450-457.

International Space Station Payload Accommodations, Daniel W. Hartman, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p480-489.

International Space Station Traffic Model Development, Clare T. Kingsford and Neil W. Lemmons, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p443-449. Mexican Border Ground Water Agreement, Conrad G. Keyes, Jr., (North American Water and Environment

Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2330-2334.

The NEA International FEP Database: Outcome of the Working Group, Trevor J. Sumerling, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p317-319.

Overview of International Space Station Extra Vehicular Robotics, Amin Rezapour, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p490-496.

Overview of International Space Station Extravehicular Ac-tivity System, Jeff Dutton, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p473-479.

Overview of the International Space Station Extra Vehicular Robotics Verification, Corrie Hunt, (Engineering, Construction, and Operations in Space, Stewart W. Construction, and Operations in Space, Stewart Johnson, ed., 1996), p502-508.

World-Wide Command and Control: Operating the Interna-tional Space Station, Michael J. See, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p458-466.

International development Advice to Environmental Execs: Get Tougher, CE Dec. 96,

ASCE Starts Up Its Own Home Page on the World Wide Web, NE Feb. 96, pl.

Building an International Community of Structural Engineers, 2 vols., S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, 0-7844-0158-6, 1320pp.

Changing Times for Engineers Is Focus of Triennial Con-clave between U.S., Britain, Virginia Fairweather, NE Dec. 96, p1,10.

Global Expansion: A Growing Dilemma, Howard Schirm-er, Jr., ME Sept. JOct. 96, p28-31.

Grants Aid South American Development, CE Dec. 96,

p13. Hydroelectric Pumped Storage Technology: International Experience, Task Committee on Pumped Storage of the Committee on Hydropower of the Energy Division of the American Society of Civil Engineers, (A. Hassan Makarechian, chmn.), 1996, 0-7844-0144-6, 390pp.

International Space Station (ISS) Assembly Sequence Plan-ning, R. E. Gates, (Engineering, Construction, and Oper-ations in Space, Stewart W. Johnson, ed., 1996), p435-442

On the Process and Products of Project Space Vision, Pär Edin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p155-161. Research Conclave Takes Aim at Global Sustainable De-

velopment, CE Apr. 96, p76.
Students Aid Bolivian Village, CE Sept. 96, p14,19.
A System to Improve Water-Related Sustainability Characteristics of International Development Programs/Projects, Larry Quinn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3259-3264.

TDA Profiles Opportunities in European Market, CE July 96, p8.

Trends in Engineering: Education and Practice, Thomas T. Theis, CE Nov. 96, p6. U.S. Looks to Mexico for New Infrastructure Projects, CE

Oct. 96, p28.

Use of the Metric System in Water Resources, Jan van Schilfgaarde, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3690-3695.

International factors

Bechtel Adopts New Network, CE Nov. 96, p27. Getting Wet with Metric, Frederick A. Locher, (North neuric metaler, released to Localet, (vor) American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3685-3689, oling Global: A CEO's Perspective, Vincent A. Rocco, ME Mar/Apr. 96, p21-24.

International Collaboration in the Design of Three Boundary Layer Wind Tunnels, César Farell, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p1061-1068.

Research Relevance: Communication is Key, John B. Scalzi, CE Aug. 96, p6.

Should Conversion to SI System Continue to be Debated? Autar K. Kaw and Melissa Daniels, El Apr. 96, p69-72. US/Mexico Border Drinking Water Study, Blake L. Atkins, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2120-2125.

International treaties

NAFTA Pact May Change as U.S. Engineers Mull Licens-ing Details, NE May 96, p16. Quantitative Monitoring of Plata River Basin Waters, V. F. de sa e Benevides and R. M. Coimbra, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1719.

California Border Environment Activities Since Passage of NAFTA", James M. Stubchaer, Bart Christensen and Susan Phillips, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1807-1812.

International waters

Problems with Metrication in Transboundary Water Projects, Conrad G. Keyes, Jr., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3680-3684. 373 IRON

U.S.-Canadian Water Sharing, Kris G. Kauffman, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3423-3428.

Internships

Advice for Mentors, ME July/Aug. 96, p12-13.

Interpolation

Simple and Effective Equilibrium Models for Vibration Analysis of Curved Rods, A. Benedetti, L. Deseri and A. Tralli, EM Apr. 96, p291-299.

Static Analyses of Beams and Plates by Spline Collocation Method, Charles W. Bert and Youngkwang Sheu, EM Apr. 96, p375-378.

Channel Junction Effects in Channel Network Flow Simu-lation, Gye-Woon Choi, Keun-Heung Kim and Sang-Jin Ahn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Computational Experiments with a Combined Traffic As-signment and Control Model with Asymmetric Cost Functions, Claudio Meneguzzer, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p609-614.

Concrete Cures Runway Woes by Morning. CE May 96, p16,19.

Effects of Bed Discordance on Flow Dynamics at Open Channel Confluences, Pascale Biron, James L. Best and André G. Roy, HY Dec. 96, p676-682

Estimation of Turning Movement Proportions from Partial Sets of Traffic Counts at Intersections, Gary A. Davis and Chang-Jen Lan, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p628-632.

Intersection of Spiral Curve with Circle, Olcay Öztan and Orhan Baykal, SU Feb. 95, p3-12.

Negative Binomial Analysis of Intersection-Accident Frequencies, Mark Poch and Fred Mannering, TE Mar/Apr. 96, p105-113.

Practitioners' Forum, Georges Jacquemart, P.E., TE Nov./ Dec. 96, p411-413.

Strength of Struts and Nodes in Strut-Tie Model, Young Mook Yun and Julio A. Ramirez, ST Jan. 96, p20-29.

An User Behaviour Analysis in Signalized Urban Intersec-tions by Artificial Neural Network, Lorenzo Mussone, Giuseppe Reitani and Savino Rinelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p208-212.

Interstate commissions

Managing Transboundary Water Sharing, Stephen E. Drap-er, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3230-3235.

interstate highways

Multimode Before Green Line, Robert J. Camillone, CE Sept. 96, p38.

Air Force Planetary Defense Technology, J. Darrah, S. Worden and G. H. Stokes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p32-45.

Development of Integrated Inventory Databases and Earth-quake Damage and Loss Estimation Methodologies for Structures in Utah, Christopher Rojahn, Stephanie A. King, Roger E. Scholl, Anne S. Kiremidjian, Lawrence D. Reaveley and Robert F. Wilson, (Natural Disaster Re-duction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p7-8.

The Federal Government's Existing Building Inventory, Ann Bieniawski, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p161-162.

Maryland SHA's Procedure for Assessing Existing Bridges for Scour Vulnerability and for Rating Unknown Foundations, Leonard N. Podell, Stanley R. Davis and Dan Sajedi, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2766-2774.

Vermont to Inventory Historic Bridges Prior to Project Initiation, CE Jan. 96, p12.

Analysis of Alternative Governance Models for Space Business Parks, Charles J. Lauer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p177-185.

Commercial Wetland Hits Milestones, CE Apr. 96, p12,14.

New Approach for Optimization of Overall Construction Schedule, Shirong Li, CO Mar. 96, p7-13.

Probabilistic Slope Stability in Theory and Practice, Thomas F. Wolff, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p419-433.

Evaluation of Dormant Season Evapotranspiration, Jerry L. Hatfield, John H. Prueger and Thomas J. Sauer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p418-423.

Potential-Scour Assessments at 130 Bridges in Iowa, Edward E. Fischer, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1149-1155.

Alternative Urban Flood Control, Parviz Monadjemi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Earthquake Hazard Assessment of Iran, Behrooz Tavakoli and Mohsen Ghafory Ashtiany, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p301-302.

Earthquake Hazard Mitigation in Iran (Its Progress and Prospect), Mohsen Ghafory-Ashtiany, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p27-28.

Screening Hospitals and Fire Stations for Seismic Potentials in City of Tehran, F. Nateghi-A, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p349-350.

Aeration of Reservoirs and Releases TVA Porous Hose Line Diffuser, Mark H. Mobley and W. Gary Brock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1311-1316.

pi31-1316.
Crossing Bridges with Ductile Iron Pipe—Update 1995,
Michael S. Tucker, (Pipeline Crossings 1996, Lawrence
F. Catalano, ed., 1996), p120-129.
Design of Pressure Class Ductile Iron Pipe on Supports, L.
Gregg Horn, (Pipeline Crossings 1996, Lawrence F. Ca-

talano, ed., 1996), p222-229.

Enhancement of In Situ Zero-Valent Metal Treatment of Contaminated Groundwater, D. R. Reinhart, C. Clausen, C. Geiger, N. Ruiz and G. Afiourny, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p323-332.

In Situ Groundwater Treatment by Granular Zero-Valent Iron Design, Construction and Operation of an In Situ Iron Design, Construction and Operation of an In Situ Treatment Wall, Frank S. Szerdy, John D. Gallinatti, Scott D. Warner, Carol L. Yamane, Deborah A. Hankins and John L. Vogan, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p245-256.
Iron Filing Installation Cleans Contaminants, CE Nov. 96,

Tron(II) Amine Complex Soil Stabilization, David A. Hem-street and Ted S. Vinson, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p447-458.

Iron compounds
Carbon Reduction of Iron Oxides in Lunar Simulants, Scott Hayes, Heather Hamlett and Roberta Bustin, (Engineer-Johnson, ed., 1996), p734-740.

Removal of Arsenic from Ground Water by Iron Oxide-Coated Sand, Arun Joshi and Malay Chaudhuri, EE Aug.

96, p769-771.

Carbon Reduction of Iron Oxides in Lunar Simulants, Scott Hayes, Heather Hamlett and Roberta Bustin, (Engineer ing. Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p734-740.

Agroforestry as a Method of Salt and Selenium Mana ment on Irrigated Land in the San Joaquin Valley, Re-becca F. Muñoz and Vashek Cervinka, (North American

becca F. Munoz and Vashek Cervinka, (North American Waier and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p400-405.

Analysis and Design of Microirrigation Laterals, Yaohu Kang and Soichi Nishiyama, IR Mar/Apr. 96, p75-82.

Artificial Recharge in the Oakes Test Area, Arden W. Freitag and Dale R. Esser, (North American Water and

Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2335-2340.

Canal Control and Automation for the Central District System, Michael A. Drain and Eric R. Hixson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2384-2389. Canal Design by Dynamic Programming, Goran Radovic, IR Jan./Feb. 96, p59-63.

IR Jan./reb. 90, poy-63.
Challenges and Opportunities in Egypt's Integrated Water Resources Strategy, Mona El-Kady, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1051-1056.
Climate Variability Impact on the Water Resources of Ancient Andean Civilizations, Kenneth R. Wright, John A. Dracup and Jonathan M. Kelly. (North American Water

and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1840-1845.

CO2 and Temperature Effects on Evapotranspiration and Irrigated Agriculture, Jorge A. Ramírez and Bryce Finner-ty, IR May/June 96, p155-163.

Deriving a General Operating Policy for Reservoirs Using Neural Network, H. Raman and V. Chandramouli, WR Sept./Oct. 96, p342-347

Design of Microirrigation Submain Units, Yaohu Kang and Soichi Nishiyama, IR Mar./Apr. 96, p83-89.

Dormant Season Alfalfa Water Balance on the NIIP, Brian Boman, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p231-236.

Drainage Ponds and Demonstration Wetlands, Joseph Skorupa, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p394-399.

Dynamic Analysis of Multi-Pool Irrigation Canal, V. M. Ruiz-C., Jorge Castillo and B. de León-M., (North American Water and Environment Congress & Destructive

Water And Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p818-823.
Effects of Sewage Effluent Irrigation on Paddy, S. Krishnamoorthi, K. Shyamala and P. Govindan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2372-2377.
Efficiencies of Drainage Systems and Improved Water Management, I. C. Tod and M. E. Grismer, (North American Water, and Environment Congress & Pettuctive

Management, 1. C. 10s and 1. C. Strangers & Destructive Water, Chenchayya Bathala, ed., 1996), p2136-2144.

Emerging Concepts for Management of Salinity and Drainage in Irrigated Regions, M. E. Grismer, (North American Wester and Environment Concress & Destructive can Water and Environment Congress & Destructive
Water, Chenchayya Bathala, ed., 1996), p2126-2129.
Full-Scale Test Studies on Prevention of Frost Damage for

Retaining Wall Reinforced with Geotextile, Lun Chen, Guangxin Li and Wenfeng Huang, (Cold Regions Engi-neering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p724-735. Impact of Agricultural Water Conservation on Water Quality in Arid Irrigated Areas, James E. Ayars, Kenneth K. Tanji and Thomas J. Trout, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p905-910.

Irrigation of Grain Sorghum on the Delmarva Peninsula, W. F. Ritter and R. W. Scarborough, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3904-3909.

374

Modeling and Solving Water Resources Engineering Design Problems as Stochastic Programs to Account for an Uncertain Future, D. S. Yakowitz, W. Elshorbagy and K. Lansey, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p106-117.

Modeling Microtopography in Basin Irrigation, E. Playán, J. M. Faci and A. Serreta, IR Nov./Dec. 96, p339-347.

Multiobjective Optimization of Multireservoir System, S. Mohan, K. Elango and M. G. Devarnane, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1968-1975.

Nonlinear Root-Water Uptake Model, Chandra Shekhar P. Ojha and Amaresh K. Rai, IR July/Aug. 96, p198-202.

North American Water and Environment Congress & Destructive Water, CD-ROM (Windows version only), Chenchayya Bathala, ed., 1996, 0-7844-0166-7, 1340pp.

Optimal Land Grading Based on Genetic Algorithms, Srinivasa L. Reddy, IR July/Aug. 96, p183-188.

Optimizing Municipal Wastewater Treatment in Cold Cli-mates: Scale, Process and Benefits, Isobel W. Heathcote and William J. Jewell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1419-1424.

Performance of Electric Irrigation Pumping Plants Using Variable Frequency Drives, B. Hanson, C. Weigand and S. Orloff, IR May/June 96, p179-182.

Precast Concrete Low-Head Pressure Pipe Significant in Historic Irrigation Canal Rehab, John J. Meyer and Steven K. Wagner, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p265-274.

A Regional Management Plan to Improve Water Quality in the Grassland Basin, Dennis Wichelns, Laurie Houston, Dan Nelson and Joseph McGahan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p655-660.

Salinity and Hydraulic Issues at a Constructed Wetlands W. G. Hines, J. E. Burkstaller and A. F. Gove, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1178-1183.

Sediment Transport Modeling for the Glen-Colusa Irriga-tion District Fish Screen Modifications, Cassie Klumpp, Mark Sailer, Arthur Glickman and Brent Mefford, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1027-1032.

Sensitivity Analysis of Furrow-Irrigation Performance Pa rameters, Dawit Zerihun, Jan Feyen and J. Mohan Red-dy, IR Jan./Feb. 96, p49-57.

Shallow and Surfacing Ground Water in an Arid Urban En-vironment, D. L. Smith and J. C. Guitjens, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1495-1500.

Soil Water Chemistry of Irrigation with Drainwater, B. R. Faulkner and J. C. Guitjens, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1483-1488.

Southern San Joaquin Drainage Water Management, Doug-las E. Davis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p382-387.

System Downstream Control for On-Demand Irrigation Canals, Zihui Lin and David H. Manz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p824-829.

Urban Water Conservation Efforts of the Irrigation Associ-ation, Tim Wilson, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p911-916.

Use of Geophysics to Aid in Mapping Basalts Relevant to Ground Water Flow and a Landslide Hazard at Hager-man Fossil Beds National Monument, P. Michaels, L. Growney and P. Donaldson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p14-26.

Water Wisdom of the Ancients, L. Michael Trapasso, CE Jan. 96, p64-65.

Irrigation districts

Current Status of the Demonstration Management Improve-ment Program, G. J. Butler and R. E. Ware, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3476-3479.

The Management Improvement Program: A Model to Improve the Performance of Irrigated Agriculture, A. R. Dedrick, E. Bautista and S. A. Rish, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3470-3475. The Management Improvement Program: An Irrigation

District's Perspective of the Demonstration Program, Brian M. Betcher and Gary Sloan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3480-3485.

Regional Economic Impacts of a Land Fallowing Program

- The Palo Verde Test Land Fallowing Program Case Study, Fadi Z. Kamand, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4030-4035. United States Bureau of Reclamation (USBR) Perspectives

on the Management Improvement Program As a Vehicle for Integrated Resource Planning, Thomas G. Burbey and Stephen M. Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3490-3495.

Irrigation efficiency

Irrigation efficiency
Design of Global Control Algorithm for Irrigation Canals,
J. Mohan Reddy, HY Sept. 96, p503-511.
Optimum On-Farm Irrigation Efficiency for Sustainable
Agriculture, B. Davidoff, E. Craddock, M. Roos and F.
Karajeh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p189-194.

Water Crisis in Developing World: Misconceptions about Solutions, Harald D. Frederiksen, WR Mar./Apr. 96,

Irrigation engineering Methodology for Optimizing Design of Integrated Tank Ir-rigation System, R. C. Srivastava, WR Nov/Dec. 96,

Irrigation practices
Economic Incentives Encourage Improvements In Farm-Level Water Management Practices, David Cone, Laurie Houston and Dennis Wichelns. (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p406-411.

Irrigation Methods Used in California: Grower Survey, R.

. Snyder, M. A. Plas and J. I. Grieshop, IR July/Aug. 96, p259-262.

Irrigation Policy for Realization of High Agropotential of Bihar State in India, I. N. Sinha, IR Jan./Feb. 96, p31-39.

Alternatives for Managing Shallow Ground Water in Arid Irrigated Areas, James E. Ayars, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p183-188.

Effect of Reservoir Hedging on Crop Yield Under Deficit Irrigation Conditions, Arathi T. Seshan and K. Sriniva-san, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4226-4232.

Evapotranspiration Estimates under Deficient Water Supplies, J. L. Hatfield and R. G. Allen, IR Sept./Oct. 96, p301-308.

p301-308. Modeling Seasonal Furrow Irrigation, N. S. Raghuwanshi and W. W. Wallender, IR July/Aug. 96, p235-242. Nonlinear Root-Water Uptake Model, Chandra Shekhar P. Ojha and Amaresh K. Rai, IR July/Aug. 96, p198-202. Simple Irrigation Scheduling Calendars, Robert W. Hill and Richard G. Allen, IR Mar/Apr. 96, p107-111.

Irrigation systems

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Control of an Irrigation Canal, Leslie Skertchly Molina and J. P. Miles, HY July 96, p403-410.

Design of Global Control Algorithm for Irrigation Canals, J. Mohan Reddy, HY Sept. 96, p503-511.

Design of Runoff Recycling Irrigation System for Rice Cultivation, R. C. Srivastava, IR Nov./Dec. 96, p331-335.

Engineering Vietnam's Waterways, CE July 96, p8.

Genetic Algorithm Design of Piped Irrigation Systems, Graeme Dandy, Angus Simpson and Laurie Murphy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Getting Wet with Metric, Frederick A. Locher, (North American Water and Environment Congress & Destruc tive Water, Chenchayya Bathala, ed., 1996), p3685-3689.

Interseasonal Irrigation System Planning for Waterlogged Sodic Soils, S. N. Panda, S. D. Khepar and M. P. Kaushal, IR May/June 96, p135-144.

Methodology for Optimizing Design of Integrated Tank Irrigation System, R. C. Srivastava, WR Nov./Dec. 96,

Optimum Design and Operation of Multiple Subunit Drip Irrigation Systems, G. C. Dandy and A. M. Hassanli, IR Sept./Oct. 96, p265-275.

Performance of Baffle-Sluice Modules with Changed Mod-ule Dimensions, B. Maheswara Babu, P. K. Mishra and T. Satyanarayana, IR Sept./Oct. 96, p310-313

Research Agenda on Sustainability of Irrigated Agriculture, Luis S. Pereira, James R. Gilley and Marvin E. Jensen, IR May/June 96, p172-177.

Wisconsin Engineer Designs Irrigation System in the Phil-ippines, NE June 96, p9.

Irrigation water

Current Status of the Demonstration Management Improve-ment Program, G. J. Butler and R. E. Ware, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3476-3479.

Developing a Rating Table for the Central Diversion Dam Radial Gates, Michael A. Drain, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3598-3603.

Genetic Algorithm Design of Piped Irrigation Systems, Graeme Dandy, Angus Simpson and Laurie Murphy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p364-369.

Integrated Resources Management for Irrigated Agriculture: Practical Lessons in Water Management and Conservation from the Arizona Management Improvement Program, Thomas Carr, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3486-3489.

Interruptible Option Contracts, John F. Scott, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3569-3573.

Long-term Consequences of Recycling Drainage Water for Irrigation, S. R. Grattan and J. D. Rhoades, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1942-1947.

The Management Improvement Program: A Model to Improve the Performance of Irrigated Agriculture, A. R. Dedrick, E. Bautista and S. A. Rish, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3470-3475.

The Management Improvement Program: An Irrigation District's Perspective of the Demonstration Program, Brian M. Betcher and Gary Sloan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3480-3485.

Portable Flumes with Adjustable Throats, John Replogle and Brian Wahlin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2409-2414.

Precipitation and Water-Table Effects on Agricultural Production and Economics, Jorge A. Ramírez and Bryce Finnerty, IR May/June 96, p164-171. Regional Economic Impacts of a Land Fallowing Program

- The Palo Verde Test Land Fallowing Program Case
Study, Fadi Z. Kamand, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4030-4035.

Salinity Management for the Upper Gila River, G. T. Orlob and E. W. Wessman, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), P4257-4262.

The Caribbean Disaster Mitigation Project: Introducing Disaster Mitigation in Highly Vulnerable Small Islands, Keith B. Ford and Jan C. Vermeiren, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p29-30.

Employment of Electronic Sand Level Gauges for Measurement of Beach Slope Deformation on Norderney Island, Kos'yan R., H. Kunz and I. Podymov, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p651-663.

Field Validation and Application of a Coastal Profile Model, J. A. Roelvink, Th. J. G. P. Meijer, K. Houwman, R. Bakker and R. Spanhoff, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996).

Innovative Drilling Brings Potable Water to Islanders, CE June 96, p87.

Modelling Eddy Formation in Coastal Waters: A Comparison between Model Capabilities, Duncan Galloway, Eric Wolanski and Brian King, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p13-25.

Performance Assessment Modeling of the Proposed Gent-ing Island Repository Facility, Yudi U. Imardjoko, Dan-iel B. Bullen and Sofyan Yaitm. (High Level Radioactive Waste Management, Technical Program Committee, 1996), p172-175.

Simulating the Transport of an Algae Bloom off the West Coast of Vancouver Island, M. G. G. Foreman, J. F. R. Gower, R. E. Thomson and J. Y. Cherniawsky, Estua-rine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p180-191.

Two-Dimensional Modeling of River Dynamics for the Ex-pansion of Clover Island, Kennewick, Washington, Thomas S. Wang, David P. Simpson and Raymond Walton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Wetland Mitigation Evaluation Ten Years After Florida Keys Bridge Replacement, Roy R. Lewis, III, Curtis R. Kruer, Sally F. Treat and Stephanie M. Morris, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p759-763.

Control of Sliding-Isolated Buildings Using Sliding-Mode Control, J. N. Yang, J. C. Wu, A. M. Reinhorn and M. Riley, ST Feb. 96, p179-186.

Energy-Based Modeling of High Damping Rubber Seismic Isolators for Dynamic Analysis, Peter W. Clark and James M. Kelly, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p200-211.

Investigation on Active Isolation of Machine Foundations by Open Trenches, S. Ahmad, T. M. Al-Hussaini and K. L. Fishman, GT June 96, p454-461.

Launch Vibration Isolation System, Eugene R. Fosness, Rory R. Ninneman, Paul S. Wilke and Conor D. Johnson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p228-231.

Passive Isolation Systems for Launch Vehicles, Eugene R. Fosness, Paul S. Wilke and Conor D. Johnson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1176-1182.

Seismic Base Isolation Study for a Kentucky Building, John P. Miller and Nathan C. Gould, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p389-

Seismic Isolation of Bridges in New York City, Jagtar S. Khinda and Feng-Bao Lin. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p24-32.

Seismic Isolation of Bridges in the Midwest, Mark R. Capron, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Moham-

madi, ed., 1996), p48-55.

Seismic Isolation of Bridges Using Elastomeric Isolation Systems, Ronald L. Mayes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p33-40.

Seismic Isolation of Bridges Using Sliding Isolation Sys-tems, Paul F. Bradford and Ronald J. Watson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi. ed., 1996).

p41-47.

Seismic Isolation of Industrial Tanks, Victor A. Zayas and Stanley S. Low, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1205-1212.

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unioh, ST

Sept. 94, p2583-2601.

Theory and Application of Restoring Force Sliding Isola-tion Systems in Low Seismicity Regions, Paul Bradford and Ching Shi Liu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1102-1105.

Vibration Isolation for Space Station Micro-Gravity Using High Temperature Superconductors, W. K. Chu, K. Ma, H. Xia and T. L. Wilson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p540-544.

Isotopic Systematics of Saline Waters at Aspö and Laxemar, Sweden, Bill Wallin and Zell Peterman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p41-42.

Naturally-Occurring Chemical Analogues for Repository-Derived Radionuclides, Bill Miller, (High Level Radio-active Waste Management, Technical Program Committee, 1996), p50-52.

Isotropic material

Fundamental Solutions for Bimaterials with Inextensible Interface, Z. Q. Yue and Y. H. Yin, EM Nov. 96, p1052-

Isotropy

Simplified Analysis of Thin-Walled Composite Members, A. Ghorbanpoor and B. Omidvar, ST Nov. 96, p1379-

Analysis of Data Collected from Two Italian Freeways, E. Volta, T. Vernazza, C. Ardemagni and S. Grosso, (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p243-247.

An Evaluation of TLC Systems Benefits and Potential Market in Italy, Ennio Cascetta and Bruno Montella, (Appli-cations of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p59-65.

History of Coastal Engineering in Italy, Leopoldo Franco, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p275-335.

A Model for the Design and Control of Urban Electric Traction Systems, O. Bottauscio and G. Farina, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p39-43.

Monitoring Systems on Historic Buildings: The Brunelle-schi Dome, Gianni Bartoli, Andrea Chiarugi and Vittorio Gusella, ST June 96, p663-673.

Multiscale Shore Variability at Two Coasts, Pierluigi Am-inti, Zbigniew Pruszak and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p617-628.

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REGIT Project: An Advanced Transportation Management System for the City of Terni, C. Galli, A. Mattucci and G. Righetti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p676-679.

Urban Control Services Integration the Innovative Compo-nents of THERMIE-JUPITER Architecture in Florence, G. Ambrosino, M. Boero, L. Niccolai, M. Romanazzo and M. Turrini, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p515-519.

Venice, Italy: an Integrated Approach to Solve the Environ-mental Problems of Its Unique Collection System, Federico G. A. Vagliasindi, Vincenzo Belgiorno, Rodolfo M. A. Napoli and Giorgio Conti, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1801-1806.

Intersection of Spiral Curve with Circle, Olcay Öztan and Orhan Baykal, SU Feb. 95, p3-12.

Multigrid Methods in GIS Grid-Cell-Based Modeling Environment, Daene C. McKinney and Han-Lin Tsai, CP Jan. 96, p25-30.

Anticyclonic Upper Layer Residual Circulation and Estuarine Circulation in Osaka Bay, Keiji Nakatsuji and Tateki Fujiwara, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p128-142.

Canal Crossing of High-Pressure Pipelines, Hiroya Kishi-no, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p434-440.

Construction Automation: Demands and Satisfiers in the United States and Japan, John G. Everett and Hiroshi Saito, CO June 96, p147-151.

Creating of a Data Base of Small Earth Dam for Natural Disaster Reduction, Shigeru Tani, Kenichi Ushikubo and Souji Harima, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p72-73.

Current U.S. - Japan Collaborative Activities in Wind Engineering, B. Bienkiewicz, T. Ohkuma and K. Fujii, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1075-1082.

Damage Evaluation in Steel Box Columns by Cyclic Load-ing Tests, Satish Kumar and Tsutomu Usami, ST June

96, p626-634.

The Development of New Structural Systems in the After-math of the Kobe Earthquake, Mark P. Sarkisian, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996).

Evaluation of the Nitrogen Cycle in a Tidal Flat, Kyoko Hata, Iwao Oshima. Takcaki Kuramoto and Kisaburo Nakata, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p542-554.

Furthering Local Knowledge of Earthquake Related Disasters, Experiences Learned from the Kobe Earthquake of January 17, 1995, David B. Swanson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p90-91.

History of Coastal Engineering in Japan, Kiyoshi Hori-kawa, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p336-374.

Hyogo-Ken Nanbu Earthquake of January 17, 1995: A Post-Earthquake Reconnaissance of Port Facilities, Stephen E. Dickenson, Vice-Chairman, Committee on Ports and Harbors Lifelines of the Technical Council on Lifeline Earthquake Engineering of ASCE, (Stuart D. Werner, chmn.), 1996, 0-7844-0161-6, 111pp.

Japanese Rocket Society's Space Tourism Study Program, Patrick Collins, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p399-

The Kobe Earthquake: Ground Shaking, Damage and Loss, Charles A. Kircher, (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p908-916.

The Kobe Earthquake: Performance of Engineered Buildings, David R. Bonneville, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p917-925.

Liquefaction of Reclaimed Island in Kobe, Japan, Ahmed-W. Elgamal, Mourad Zeghal and Ender Parra, GT Jan.

96, p39-49.

New Sunshine Program: Comprehensive Approach to the 21st Century, Mitsugi Chiba, EY Dec. 96, p93-101.

On Reliability Assessment of Infrastructure Systems under Strong Earthquake, Hitoshi Furuta and Naruhito Shiraishi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p632-635.

Overview of the ISS Large Manipulator Operations, Catherine D. Bole, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p497-

Performance of Bridges during the Hanshin-Awaji Earth-quake, Eiichi Watanabe and Kunitomo Sugiura, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p926-933.

A Predicting Method of Typhoon Wind Damages, Yasushi Mitsuta, Takeshi Fujii and Ichiro Nagashima, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p970-973.

Start-Ups, CE May 96, p8.

Statistical Aspects of Damages Due to the Great Hanshin Earthquake, Hitoshi Seya and Michio Sugimoto, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p186-189.

Strong Ground Motion Characteristics and Damage Distribution of Housings by an Epicentral Region Earthquake of Mag.7.2 in KOBE, Japan of 1995, Yoshinori Iwasaki,

of Mag. 7.2 in KOBE, Japan of 1995, Yoshinori Iwasaki, (Naural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p147-148.

Three-Dimensional Modeling of Wind-Driven Upwelling of Anoxic Bottom Water 'A-oshio' in Tokyo Bay, Keiji Nakatsuji, Jong Sung Yoon and Koji Muraoka, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p618-631.

Three-Dimensional Tidal Currents and Water Quality in Stratified Ornova Bay. Todashi Edwards Adviside Toda.

Stratified Omura Bay, Tadashi Fukumoto, Akihide Tada, Takehiro Nakamura and Hiroyoshi Togashi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p707-721.

Train/Vehicles Wind-Induced Hazard and Its Mitigation, Masaru Matsumoto and Tatsuo Maeda, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p131-132.

U.S. Firm Builds Shake Table for Japan, John Casey, ET Aug./Sept. 96, p1,8. Vulnerability of Pacific Northwest Port-Related Lifeline

Structures Based on Observations from the Kobe Earth-quake of January 17, 1995, David B. Swanson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p9-10.

Wind-Induced Failure of Buildings and Structures Caused by Typhoons in Japan, Yukio Tamura, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p62-65.

Direct Measurement of Turbulence Structures in a Standard Jar Test Tank Using PIV System, Chen-Yu Cheng, Joseph F. Atkinson and Marcus I. Bursik, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3746-3751.

Predicting the Mode, Susceptibility, and Rate of Weather-ing of Shales, Paul M. Santi and Engin C. Koncagül, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p12-26.

Buoyant Plumes from Multiport Diffuser Discharge in Deep Coflowing Water, María M. Méndez-Díaz and Gerhard H. Jirka, HY Aug. 96, p428-435.

Characteristics of Radial Jets and Mixing under Buoyant Conditions, Zhen-Ren Guo and James J. Sharp, HY Sept.

popposition of Particles from a Vertical Jet, M. J. Neves, H. J. S. Fernando and A. A. Neves, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p442-445.
 Effect of Finite Source on Vertical Round Dense Jets, Hua Zhang and Raouf E. Baddour, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p919-922.
 Jet Scour around Vertical Pile, C. O. Chin, Y. M. Chiew, S. Y. Lim and F. H. Lim, WW Mar/Apr. 96, p59-67.
 Local Scour, B. A. Deeply, Submerged Horizontal Circular Local Scour.

Local Scour: By A Deeply Submerged Horizontal Circular Jet, Yee-Meng Chiew and Siow-Yong Lim, HY Sept. 96, p529-532

Mixing of a Bent-over Jet in Crossflow, Paul C. K. Chu and Joseph H. W. Lee, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p910-913.

and T.C. Su, 1950, 19710-97.

Modeling Two-Dimensional Turbulent Offset Jets, Ruo-chuan Gu, HY Nov. 96, p617-624.

Resuspension of Particle Bed by Round Vertical Jet, Jordi Colomer and Harindra J. S. Fernando, EE Sept. 96,

p864-869.
Stably-Stratified Surface Thermal Jet in a Current: Cold Climate Condition, A. M. Zaghloul, R. Martinuzzi and R. E. Baddour, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1062-1065.
Turbulent Line Momentum Puffs, Joseph H. W. Lee, Wolfgang Rodi and C. F. Wong, EM Jan. 96, p19-29.
Wave Field in the Efflux of River Water, Akira Mano and Subandono Diposapiono, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p185-196

p185-196.

Jetties

Marine Geophysical Investigation to Determine the Cause for Failure of the Yaquina Bay Jetty, Newport, Or-egon, Richard E. Sylwester, Jon L. Dasler and Terry C. Sullivan, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p42-55.

The Great Technology Transfer, Tim Cassidy, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1265-1269.

Job satisfaction Working Hard, But Happily, ME July/Aug. 96, p12.

hnson, Paul

Wisconsin Engineer Designs Irrigation System in the Phil-ippines, NE June 96, p9.

Johnson, Robert B. (Member, ASCE) Johnson Sparkplugs Chicago's Engineers Week Events, CE May 96, p70.

Johnston, J. Bennett, Barton, Joe Two Federal Legislators Named ASCE Honorary Fellows during Society's National Policy Week, NE Apr. 96, p2.

Extension and Compression of Elastomeric Butt Joint Seals, Stephen A. Ketcham, Jan M. Niemiec and Grego-ry B. McKenna, EM July 96, p669-677.

Joint ventures

A 21st Century Dam, CE Nov. 96, p22-23.

Application of BOT System for Infrastructure Projects in China, Liyin Shen, Rowson K. H. Lee and Zhihui Zhang, CO Dec. 96, p319-323.

Cast-in-Place Factory Largest for Industry, CE Nov. 96,

p13.

Design-Build Joint Venture Liability, Michael C. Loulakis and William L. Cregger, CE May 96, p32. An Elevated Train Rises Again, CE Nov. 96, p10.

The Importance of Contract Clarity Clarified, Michael C. Loulakis and William L. Cregger, CE Mar. 96, p32. An Irresistible Offer, Max D. Crumit, P.E., Wafic M. Ar-

noush, P.E. and Scott L. Montgomery, P.E., CE Aug. 96, p40-43.

ointed rock

Modelling of Thermal-Hydrological-Mechanical Processes in a Discrete Joint, T. S. Nguyen, A. P. S. Selvadurai and P. Flavelle, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p60-63.

Analysis Requirements for Performance-Based Design of halysis Requirements for Performance Dates Design of Beam-Column Joints, John F. Bonacci, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p257-265.

Schulz, ed. and S. L. McCabe, ed., 1990, p.257-203.

Behavior of High-Strength Concrete Beam-Column Joints, Michael E. Kreger and Elias I. Saqan, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p420-430.

Effective Length Factor for Columns in Unbraced Frames, Lian Duan and Wai-Fah Chen, ST Jan. 89, p149-165.

The Effects of Construction Joint in Mass Concrete, Donald D. Liou, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p193-202.

Experimental Study of Behavior of New Space Truss System, A. I. El-Sheikh and H. El-Bakry, ST Aug. 96, p845-853.

Hot-Spot Fatigue Design of Aluminum Joints, Maurice L. Sharp, Glenn E. Nordmark and Craig C. Menzemer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1027-1036.

Load Capacity of Nested, Laterally Braced, Cold-Formed Steel Z-Section Beams, Ahmad A. Ghosn and Ralph R. Sinno, ST Aug. 96, p968-971.

Multidisciplinary Product Modeling of Buildings, W. P. S. Dias, CP Jan. 96, p78-86.

Prefabricated Concrete Walls. Influence of Prestressload on Vertical Joints, J. P. Straman, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p147-153.

Simple Formula for Eccentric Bolted Connection Design, Thomas W. Hartmann and Janelle K. Rohrbaugh, SC Feb. 96, p40-46.

Joints, bolted

Evaluation of FRP Composites Bolted and Adhesive Joints, Sotiris Sotiropoulos, Hota V. S. GangaRao and Roberto Lopez-Anido, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p233-242.

Hydrothermal Effects on the Bearing Strength of GFRP Composite Joint, Stephanie Hurd and Robert Yuan, (Ma-terials for the New Millennium, Ken P. Chong, ed.,

1996), p243-250.

oints, bonded Rehabilitation of Steel Beams Using Composite Materials, William Edberg, Dennis Mertz and John Gillespie, Jr., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p502-508.

Shear Properties of Components Used in Stressed-Skin Panels, I. Robert Kliger and Patrick J. Pellicane, MT

May 96, p77-82.

Probabilistic Evaluation of Wood-Joist Floor Vibrations, Omar A. Jaradat, Arshad A. Al-Foqaha'a and Kenneth Fridley, (Probabilistic Mechanics & Structural Reliabili-ty, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1006), 327, 345 1996), p342-345.

Proposed Specification and Commentary for Composite Joists and Composite Trusses, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Apr. 96, p350-358.

Serviceability System Factor for Design of Wood Floors, K. J. Fridley, D. V. Rosowsky and P. Hong, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p792-

Structural Forum, SC Nov. 96, p95-98.

Inundation Studies in Case of Failure of King Talal Dam, Ahmed Kassem, M. Hanif Chaudhry and Muhammad K. Shatanawi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1924-1929.

Jurisdiction

Pipeline Crossings and the Corps Regulatory Process in New England, Karen Kirk Adams and David H. Killoy, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p409-417.

Kalman filter

Kalman Iller
Advances in System Identification Using Output Measurements, N. P. Jones, J. H. Ellis and K. Pan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p160-163.

Mechanics, Y. K. Lin and T. C. Su, 1996), p160-163.
Application of Kalman Filter to Short-Term Tide Level Prediction, Pei-Hwa Yen, Chyan-Deng Jan, Youe-Ping Lee and Hsiu-Fang Lee, WW Sept./Oct. 96, p226-231.
Design of Global Control Algorithm for Irrigation Canals, J. Mohan Reddy, HY Sept. 96, p503-511.
An Enhanced Kalman Filtering Algorithm for Dynamic Freeway OD Matrix Estimation and Prediction, Samer Madanat, James Krogmeier and Shou-Ren Hu, (Applications of Advanced Technologies in Transportation Engineering sadanat, James Rogitelet and Shou-Reit Hu, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p423-428. Identification of Conditional Stochastic Gaussian Field, Masaru Hoshiya and Ikumasa Yoshida, EM Feb. 96,

p101-108.

p101-108.
Operational Strategy for Metal Bioleaching Based on pH Measurements, Y. G. Du, R. D. Tyagi and T. R. Sreekrishnan, EE July 95, p527-535.
Streamflow Forecasting for Han River Basin, Korea, Haitham M. Awwad, Juan B. Valdés and Pedro J. Restrepo, WR Sept/Oct. 94, p651-673.
Updating of SFEM by Observation, M. Hoshiya and I. Yoshida, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p828-831.

Infiltration Properties at Two Sites in the Konza Prairie, R. S. Govindaraju, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1267-1272.

Modeling Impact of Small Kansas Landfills on Underlying Aquifers, Marios Sophocleous, Nicholas G. Stadnyk and Miles Stotts, EE Dec. 96, p1067-1077.

Coefficient of Permeability from AC Electroosmosis Ex-periments. I: Theory, J. Yin, R. J. Finno, J. R. Feldkamp and K. Chung, GT May 96, p346-354.

Coefficient of Permeability from AC Electroosmosis Experiments. II: Results, R. J. Finno, K. Chung, J. Yin and J. R. Feldkamp, GT May 96, p355-364.

EDTA-Enhanced Electrokinetic Extraction of Lead, Albert T. Yeung, Cheng-non Hsu and Rajendra M. Menon, GT

Aug. 96, p666-673.

Impact of System Chemistry on Electroosmosis in Contam-inated Soil, Gerald R. Eykholk and David E. Daniel, GT

May 94, p797-815.

Soil Type Effect on NAPL Removal by Surfactant, Olubunmi M. Ogunsola and Mark A. Tumeo, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p281-291.

Solute Breakthrough Curves for Processed Kaolin at Low Flow Rates, Charles D. Shackelford and Patrick L. Red-

mond, GT Jan. 95, p17-32.

Variation of Fabric Anisotropy of Kaolinite in Triaxial Loading, A. Anandarajah, N. Kuganenthira and D. Zhao, GT Aug. 96, p633-640.

Building on Sinkholes: Design and Construction of Founda-tions in Karst Terrain, George Sowers, 1996, 0-7844-

0176-4, 208pp.

Geophysical Investigation of Karst Collapse Features for a Proposed Waste Rock Stockpile Irian Jaya, Indonesia, Philip H. Duoos and Rowland B. Cromwell, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p86-100.

Hysteresis Effect of Karst Vadose Zone in Spring Kr5, Mt. Kräuterin, Austria, Dachang Zhang, Rudolf Pavuza, Karl Mais and Hans Fischer, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1754-1759.

Karst Water Inventories Using Thermography, C. Warren Campbell, Joseph W. Foster and Mohamed Abd El Latif, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3910-3914.

Modeling of Sinkholes in Weakly Cemented Sand, Waleed A. Abdulla and Deborah J. Goodings, GT Dec. 96, p998-1005.

Periodic Variation in Karst Stream Losses, C. Warren Campbell, Mohamed Abd El Latif and Larry Foster, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1261-1266.

Pollution Transport in Karst, C. Warren Campbell and Mohamed Abd El Latif, (North American Water and En-vironment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p4269-4274.

Preliminary Studies of a Karst Warm Spring in Mt. Kräuterin, Austria, Dachang Zhang, Rudolf Pavuza, Hans Fischer and Karl Mais, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1279-1284.

Probabilistic Risk Assessment for Tailings Impoundment Founded on Paleokarst, Dirk Van Zyl, Ian Miller, Victor Milligan and W. James Tilson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p563-585.

Ceclerations and Time Histories for Earthquakes Affecting Kentucky's Bridges, I. E. Harik, R. Street, Z. Wang and D. L. Allen, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p464-471. Accelerations

A Continuing Education Program Involving A Partnership Among Building Designers, Constructors, and Code Enforcers, Michael A. Cassaro, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p92-96.

Kinematic wave theory

Assessment of Kinematic Wave Time of Concentration, Richard H. McCuen and Jill M. Spiess, HY Mar. 95,

Development of a Hydrologic Model with Both Spatially Distributed and Physically Based Capabilities, Dennis L. Johnson and Arthur C. Miller, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3200-3205.

Assessments of Lateral and Torsional Structural Responses Induced by Incoherent Ground Motions, G. D. Hahn and X. Liu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p188-191.

Breaking Waves in Surfzones, Ke Yu and Ib A. Svendsen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p329-340.

Buckling of Laminated Composite Beams, Carol Shield and Tim Morey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1010-1013.

Dynamics of Highly Deformable Sandwich Frame Structures, H. Deng and L. Vu-Quoc, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1147-1150.

Estimating Wave-Induced Kinematics at Sloping Struc-tures, Steven A. Hughes and Jimmy E. Fowler, WW July/Aug. 95, p209-215.

Formulation and Implementation of Improved Zero-Thickness Interface Elements, V. N. Kaliakin, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), p285-288.

A Study on the Link between Damage Mechanics and Fracture Mechanics, Zhen Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p739-742.

Time of Concentration and Peak Discharge Formulas for Planes in Series, Tommy S. W. Wong, IR July/Aug. 96,

p256-258. Vector Analysis of Keyblock Rotations, Matthew Mauldon and Richard E. Goodman, GT Dec. 96, p976-987.

Asymptotic Analysis of Intraparticle Diffusion in GAC Batch Reactors, D. A. Lyn, EE Nov. 96, p1013-1022.

Concentration Effects on Chlorinated Aliphatic Transfor-mation Kinetics, J. B. Hughes and G. F. Parkin, EE Feb. 96, p92-98.

Electrokinetic Remediation. I: Pilot-Scale Tests with Lead-

Spiked Kaolinite, Yalçın B. Acar and Akram N. Alshawabkeh, GT Mar. 96, p173-185. Electrokinetic Remediation: II: Theoretical Model, Akram N. Alshawabkeh and Yalçın B. Acar, GT Mar. 96, p186-196

Modeling Kinetics of Illuminated and Dark Advanced Oxidation Processes, Andrew Hong, Mark E. Zappi, Chiang Hai Kuo and Donald Hill, EE Jan. 96, p58-62. Nuclear Explosion Near Surface of Asteroids and Comets

II. General Description of the Phenomenon, O. N. Shu-bin, V. Z. Nechai, V. N. Nogin, D. V. Petrov and V. A.

bin, V. Z. Nechai, V. N. Nogin, D. V. Petrov and V. A. Simonenko, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p74-80.
On-Board Neural Network Control of Kinetic Energy Projectiles for NEO Exploration, R. E. Vance, M. V. Spangler, Z. Qian, C. Cho and K. A. Prisbrey, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1183-1189.
Pyrolysis Kinetics of Uncoated Printing and Writing Paper of MSW, Ching-Yuan Chang, Chao-Hsiung Wu, Jiann-Yuan Hwang, Jyh-Ping Lin, Wan-Fa Yang, Shin-Min Shih, Leo-Wang Chen and Feng-Wen Chang, EE Apr. 96, p299-305. 96, p299-305.

zaroff, EE Mar. 96, p169-175.

Transport and Sorption of Water Vapor in Activated Car-bon, Tsair-Fuh Lin and William W. Nazaroff, EE Mar. 96, p176-182.

Vector Analysis of Keyblock Rotations, Matthew Mauldon and Richard E. Goodman, GT Dec. 96, p976-987.

Knowledge acquisition

Furthering Local Knowledge of Earthquake Related Disas ters, Experiences Learned from the Kobe Earthquake of January 17, 1995, David B. Swanson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p90-91.

Knowledge Acquisition and Engineering for Steel Bridge Fabrication, Hani G. Melhem, W. M. Kim Roddis, Sri-nath Nagaraja and Michael R. Hess, CP July 96, p248-

256

Making Effective Use of Construction Lessons Learned in Project Life Cycle, Nabil A. Kartam, CO Mar. 96, p14-

Model-Centered World Wide Web Coach, Renate Fruchter and Kurt Reiner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1-7.

Modeling and Debugging Engineering Decision Procedures with Machine Learning. Yoram Reich, Miguel Medina, Tung-Ying Shieh and Timothy Jacobs, CP Apr. 96, p157-166.

p137-100.
Toward a Unified Nomenclature for Reinforced-Concrete Theory, Thomas T. C. Hsu, ST Mar. 96, p275-283.
Understanding Current Standards Usage and Its Implication for Computer-Based Support Tools, Bongjin Choi and James H. Garrett, Jr., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996). p1006-1012.

Knowledge-based systems
Automated Knowledge-Based System for Stereo Video
Metrology, Mohammed Taleb Obaidat and Kam W.
Wong, SU May 96, p47-64.
Wong, SU May 96, p47-64.

Construction Planning through Multi-Agent Constraint Sat-isfaction, Milorad Sucur and François Grobler, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p240-246.

Construction Project Control through Risk Management, E. N. Wirba, J. H. M. Tah and R. Howes, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p28-34.

Damaging Earthquakes: A Scientific Laboratory, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p151-152.

Decision Support Environment for Structural Steel, Gregory P. Pasley and W. M. Kim Roddis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p371-382.

A Decision Support Tool for the Steel Building Industry, Gregory P. Pasley and W. M. Kim Roddis, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p725-731.

Decision-Support System for Infrastructure Preservation, Yung-Ching Shen and Dimitri A. Grivas, CP Jan. 96,

Developmental Approach for the Use of Expert Systems in Preparing Bidding Documents, Michael Bowen and Guillermo F. Salazar, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p656-662.

An Expert System Application for Robot Assisted Urban Search and Rescue, John G. Blitch, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p199-205.

p.199-200.
An Expert System for Wind-Resistant Residential Construction, James R. McDonald, Douglas A. Smith and Kishor C. Mehta, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p315-

Fuzzy Controlled Genetic Algorithm Search for Shape Op-timization, Chee Kiong Soh and Jiaping Yang, CP Apr.

96, p143-150.

A Hybrid Data Model for Structural Health Monitoring, Sungkon Kim and Stuart S. Chen, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p286-297.

IAC Network for Composition of Waste-Incineration Facility, Jehng-Jung Kao and Yu-Ying Liao, CP Apr. 96, p168-171.

Implementing the Knowledge Worker System (KWS) in an Engineering Environment, Bruce C. Goettel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p288-293.

nowsky, ed., 1996), p288-293.
Integration of a Design Concept Learning Scheme Within a Knowledge-Based Design Support System, Ming Xi Tang, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p852-858.
Integration of Generic Knowledge and Cases in DOM, Wolfgang Oertel and Shirin Bakhtari, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p301-307.

Knowledge Acquisition and Engineering for Steel Bridge Fabrication, Hani G. Melhem, W. M. Kim Roddis, Sri-nath Nagaraja and Michael R. Hess, CP July 96, p248-

A Knowledge Based Construction Contractor Proposal Evaluation System, John A. Kuprenas and Farzin Madjidi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p247-253.
A Knowledge Based Information Model for Components in

the Process Industry, James Andrew Arnold and Paul Teicholz, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p586-592. A Knowledge Based System for the Design of Open Chan-nels, James M. Crum and Michael E. Mulvihill, (North

American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4125-4130. A Knowledge Based System for the Evaluation of Earth-

quake Damaged Structures, John A. Kuprenas and John Manios, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-

madi, ed., 1996), p742-749.

Knowledge-Based Parametric Design using JSpace, Parmanand V. Dharwadkar and Alton B. Cleveland, Jr., mananu V. Dharwaukar and Anon B. Cleveland, Jr., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p70-76.

A Knowledge-Based System For International Hurricane

Rnowledge-Based System For International Hurricane Risk Management, Surya K. Gunturi, Chris Austin, Aida RiveraMarzan, Ping Zhang, John Lieberman, Paul VanderMarck, Mark Broido and Auguste C. Boissonnade, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p15-16.

Making Effective Use of Construction Lessons Learned in Project Life Cycle, Nabil A. Kartam, CO Mar. 96, p14-

Parametric Estimating: An Object-Oriented Approach, Ir-tishad U. Ahmad and Praveen K. Ommi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p254-260.

Requirements for Industry Applicability of Knowledge-Based Schedulers, Florian Aalami and Martin A. Fischer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p774-780.

Semantic Comparison of Selective and Constructive Induc-Semantic Comparison of selective and Constructive Induction, Witold Szczepanik, Tomasz Arciszewski and Janusz Wnek, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p845-851.
Systematizing Construction Project Evaluations, Mohan M. Kumaraswamy and Antony Thorpe, ME Jan./Feb. 96,

p34-39.

Three Dimensional Design and Construction at the Auburn VPS Recycle Fiber Mill, Ronald J. Zabilski, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p482-

Traffic Engineering Recurrent Spatial Knowledge Base: Design and Implementation, Pawan Lingras, CP Jan. 96, p50-59.

Validating Expert Systems in Transportation Practice, Gary S. Spring, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p985-991.

Calibration of a Water Quality Model Using the Influence Coefficient Algorithm, Kyung Soo Jun and Kil Seong Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Comparison of ASD and LRFD Design of an Office Build-ing Supported by Arches, King-le Chang and Shuang Chen, (Building an International Community of Structur-al Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p550-557.

Conceptual Design of Enertopia in Korea, Kiryun Choi, EY Dec. 96, p102-113.

Korean Gas Company Digitizes Maps, Records, CE Dec. 96, p20.

Meter Helps Rescuers Keep Level Heads After Roof Col-lapse, CE Aug. 96, p78.

Radwaste Management in Reracking of Korean Nuclear Power Plants, Seung Ick Yoo, Young Ho Shin, Chan Do Kim and Do Soon Jun, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p379-381.

South Korea Stabilizes Commuter Bridge, CE Apr. 96. p16,18.

Streamflow Forecasting for Han River Basin, Korea, Hait-ham M. Awwad, Juan B. Valdés and Pedro J. Restrepo, WR Sept./Oct. 94, p651-673.

Characteristics of the Craft Workforce, James E. Rowings, Mark O. Federle and Sara A. Birkland, CO Mar. 96,

Overtime Overhaul Overdue, ME May/June 96, p11-12.

Characteristics of the Craft Workforce, James E. Rowings, Mark O. Federle and Sara A. Birkland, CO Mar. 96, p83-90.

Damaging Earthquakes: A Scientific Laboratory, Walter W. Havs. (Natural Disaster Reduction, George W. Housner,

ed. and Riley M. Chung, ed., 1997), p151-152.

Design of a Laboratory Facility for Longshore Sediment Transport Research, Julie D. Rosati, David G. Hamilton, Jimmy E. Fowler and Jane M. Smith, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p771-782.

Interactive Lessons for Instrumentation and Control, E. J. Mastascusa and Maurice F. Aburdene, (Robotics for Challenging Environments, Laura A. Demsetz, ed.,

1996), p303-309.

Minnesota Intelligent Transportation Systems' Laboratory, Lowell A. Benson, Dennis L. Foderberg and Yorgos Stephanedes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p525-534.
Richard Elstner, 72, Was Failures Expert, CE Nov. 96, 275-26.

Undersea Engineering Feat, CE Oct. 96, p12.

Laboratory tests

The 'Dynamics of Beaches' Project, P. Prinos, A. S. Arcilla, N. Christiansen, J. van de Graaf, M. Hogedal, A. Lewis, B. O'Connor, F. Rivero and J. de Rouck, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582.

2-D Experimental Investigation of Surfactant Mobilization of Light Nonaqueous Phase Liquid, Lizette R. Chevalier, Roger B. Wallace, David C. Wiggert and Mohsen D. Shabana, (Non-Aqueous Phase Liquids (NAPLs) in Sub surface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p357-368.

3D Flow Structures - From Laboratory to Field Applica-tions, P. Mewis and K.-P. Holz, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3446-3451.

Aging Effects on Temperature Susceptibility of Polymer Modified Asphalts, Shin-Che Huang, Jung-Do Huh, Raymond E. Robertson and Mang Tia, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1367-1378.

Air Sparging Experiments on a Two Dimensional Sand Box with DNAPLs: Multiphase Investigation with Electrical Impedance Tomography, Jong Soo Cho, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Asand Remediation, Lakshmi N. Reddi, ed., 1996), p369-380.

Alachlor Transport in Laboratory Soil Columns, Mutasem El-Fadel, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p1999-2004.

Bearing Capacity of Rectangular Footings on Geogrid-Reinforced Sand, Temel Yetimoglu, Jonathan T. H. Wu and Ahmet Saglamer, GT Dec. 94, p2083-2099. Biodegradation of Dichloromethane in Leachate, R. Kerry

Rowe, Leila Hrapovic, Naim Kosaric and D. Roy Cullimore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2021-2026.

Coastal Engineering Laboratory and Field Measurements: Some Uncertainties in Measurement, Frederic Raichlen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1139-1143.

p1139-1143.
Coefficient of Permeability from AC Electroosmosis Experiments. E Theory, J. Vin, R. J. Finno, J. R. Feldkamp and K. Chung, GT May 96, p346-354.
Collapse of Saturated Soil Due to Reduction in Confinement, Scott A. Anderson and Michael F. Riemer, GT Eab. 95, e216-220.

GT Feb. 95, p216-220.

Compression Failure in Reinforced Concrete Columns and Size Effect, Zdeněk P. Bažant and Yuyin Xiang, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p443-451.

Control of Stacking Loads in Final Waste Disposal According to the Borehole Technique, Walter Feuser, Eike Barnert and Hendrik Vijgen, (High Level Radioactive Waste Management, Technical Program Committee, 1996). p477-479

Cyclic Axial Loading of Drilled Shafts in Cohesive Soil, Kevin J. McManus and Fred H. Kulhawy, GT Sept. 94, p1481-1497.

Deformation Characteristics of Piedmont Residual Soils, Chainchye E. Wang and Roy H. Borden, GT Oct. 96, p822-830.

The Dielectric Constant of Soil-NAPL Mixtures at Low Frequencies (100 Hz—10 kHz), Victor A. Rinaldi and Emilio R. Redolfi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p163-174.

Dissolution of Toluene Residuals: 3-D Laboratory Experiments, David A. Reynolds, Philippe Lamarche Michel Tétreault, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remedia-tion, Lakshmi N. Reddi, ed., 1996), p607-618.

EDTA-Enhanced Electrokinetic Extraction of Lead, Albert T. Yeung, Cheng-non Hsu and Rajendra M. Menon, GT Aug. 96, p666-673.

Effect of Degree of Weathering on Dynamic Properties of Residual Soils, Emir José Macari and Laureano Hoyos, Jr., GT Dec. 96, p988-997.

Effect of Welding on a High-Density Polyethylene Liner, Reda M. Bakeer and Michael E. Barber, MT May 96, p94-100.

The Effects of Water Surface Profiles on Mar Roughness Coefficient, P. Michael DePue, II and Ta Wei Soong, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3639-3644.

Enhanced Trichloroethene Desorption from Long-Term Contaminated Soil Using Triton X-100 and pH Increases, Dipak Sahoo, James A. Smith, Thomas E. Imbrigiotta and Heather M. McLellan, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1215-1220.

Equilibrium-Range Spectrum of Waves Propagating on Currents, Kyung Duck Suh, Yoo-Yin Kim and Dong Young Lee, WW Sept/Oct. 94, p434-450.

Estimation of Leakage Quantity for Long Auxiliary Venti-lation Systems, Felipe Calizaya and Pierre Mousset-Jones, (High Level Radioactive Waste Management,

Jones, (High Level Radioactive waste management, Technical Program Committee, 1996), p429-431. Evaluation of Engineering Properties of Problematic Soils Evaluation of Engineering Properties of Problematic Soils in Highway Construction, W. Virgil Ping, Sean McDonald and Robert K. H. Ho, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p721-730.
Evaluation of Soil Liquefaction by Energy Principles, J. Ludwig Figueroa, Adel S. Sauda, Liqun Liang and Nitin M. Dahisaria, GT Sept. 94, p1554-1569.
Flushing Criteria in Estuarine and Laboratory Experiments, Walter Debler and Jorg Imberger, HY Dec. 96, p728-734

Fly Ash and Tire Chips for Highway Embankments, M. Basheer, C. Vipulanandan and M. W. O'Neill, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p593-602.

Frost Resistance of Roller-Compacted High-Volume Fly Ash Concrete, Michael Pigeon and V. Mohan Malhotra, MT Nov. 95, p208-211.

A Hybrid Data Model for Structural Health Monitoring, Sungkon Kim and Stuart S. Chen, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p286-297.

Hydraulic Effects of Habitat Structures in Flood Control Channels, Rebecca Seal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1519-1524.

Bathala, ed., 1996), p1519-1524.
Investigation of Intervell Tracer Tests Used with Cosolvent Flooding, Charles Wright, Cindy M. Lee, John T. Coates and Ronald W. Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p151-162.
Laboratory Aging Methods for Simulation of Field Aging of Asphalts, Shin-Che Huang, Mang Tia and Byron E. Ruth, MT Aug. 96, p147-152.
Laboratory and Field Electrochemical Monitoring Techniques of Reinforcement Corrosion. C. Andrede and C.

niques of Reinforcement Corrosion, C. Andrade and C Alonso, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1501.

Laboratory Evaluation of a Conductivity Probe for Scour Monitoring, David S. Mueller and Mark N. Landers. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4154-4163.

Laboratory Experiments with Heterogeneous Reactions in Mixed Porous Media, David R. Burris, Kirk Hatfield and

N. L. Wolfe, EE Aug. 96, p685-691.

Laboratory Study of Large Stone Asphalt Paving Mixtures, Joe W. Button, W. W. Crockford and E. G. Fernando, (Materials for the New Millennium, Ken P. Chong, ed.,

1996), p603-611. Liquefaction Behavior of Sand-Gravel Composites,

D. Evans and Shengping Zhou, GT Mar. 95, p287-298.
Mechanical Properties of Reinforcing and Prestressing Steels after Heating, I. Cabrita Neves, João Paulo C. Rodrigues and António de Pádua Loureiro, MT Nov. 96, p189-194

Mechanisms of Removal of Residual Dodecane Using Surfactant Foam, HsienShen S. Chu, Amir Salehzadeh, Avery H. Demond and Richard D. Woods, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p269-280. Microbiological Sorption and Transport: Field and Laboratory Experiments, Larry E. Hersman, (High Level Radio-active Waste Management, Technical Program Committee, 1996), p27-29.

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Modeling Time- and Depth-Varying Currents at Supertank, Jane McKee Smith and Ib A. Svendsen, (Coastal Dy-namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p245-256.

On Conductivity of Soils with Preferential Flow Paths, R. S. Govindaraju and J. Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1730-1735.

A One-Dimensional Cross-Shore Transport Model, J. Nicholson and B. A. O'Connor. (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p795-805.

Performance of a Virtual Runoff Hydrograph System, Patrick Carriere, Shahab Mohaghegh and Razi Gaskari, WR Nov/Dec. 96, p421-427.

Preliminary Overview of Radiological Data Validation: Problems Found in Laboratory Data, LeRoy F. Wenrick (High Level Radioactive Waste Management, Technical Program Committee, 1996), p312-314.

Rate-Controlled Micellar Solubilization of an LNAPL in Aquifer Materials, Dianne J. Luning Prak, Kurt D. Pennell, Linda M. Abriola and Walter J. Weber, Jr., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p639-648.

Removal of Arsenic from Ground Water by Iron Oxide-Coated Sand, Arun Joshi and Malay Chaudhuri, EE Aug. 96, p769-771.

Removal of DNAPL Pools Using Upward Gradient Ethanol Floods, Stuart Lunn and Bernard Kueper, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Asand Remediation, Lakshmi N. Reddi, ed., 1996), p345-356.

Response of Lime Mortar Joint Arches to Moving Loads, Barry T. Rosson, Thomas E. Boothby and Ketil Søyland, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p223-232

Safety Analysis of Suspension-Bridge Cables: Williams-burg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

Scour Around Exposed Pile Foundations, Mohammad Salim and J. Sterling Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2202-2211.

Scour in Erodible Rock II: Erosive Power at Bridge Piers, Steven P. Smith and George W. Annandale, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1349-1357.

Sediment Transport in the Yellow River, Chih Ted Yang, Albert Molinas and Baosheng Wu, HY May 96, p237-

Soil Creep and Creep Testing of Highly Weathered Tropi-cal Soils, Peter G. Nicholson, Philip W. Russell and Clint F. Fujii, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p195-213.

Structural Behaviour of High Strength Concrete Columns, Robert Park, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p365-374.

Studies on Herbal Desalination, Godavarthy Ramprasad and Varanasi Kaliprasad, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1015-1020.

Surface Water Pretreatment Using Floating Media Filter, C. Visvanathan, D. R. I. B. Werellagama and R. Ben Aim, EE Jan. 96, p25-33.

Surfactant Enhanced Gravity Drainage (SEGD) of Dense Nonaqueous Phase Liquids: A New Concept in the In-situ DNAPL Remediation, Milind D. Deo and Ju-Woung Yoon, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p393-404.

Techniques to Obtain Orbital Debris Encounter Speeds in the Laboratory, Lalit C. Chhabildas, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p8-12

Three-Dimensional Organized Vortices Above Flexible Water Plants, Syunsuke Ikeda and Minoru Kanazawa, HY Nov. 96, p634-640.

HY NOV. 90, po34-040.
Threshold Accelerations for Rotation or Sliding of Bridge Abutments, Rowland Richards, Jr., Kenneth L. Fishman and Randall C. Divito, GT Sept. 96, p752-759.

Transport of Fine Sands by Currents and Waves. II, Leo C. Van Rijn and Fred J. Havinga, WW Mar./Apr. 95, p123-

Unsaturated Hydraulic Conductivity of Two Compacted Barrier Soils, J. S. Meerdink, C. H. Benson and M. V. Khire, GT July 96, p565-576.

Vegetative Roughness in Flood Control Channels, Gary E. Freeman, David R. Derrick and William J. Rahmeyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1513-1518.

Verification of a 3D Flow Model Using Laboratory Data, Yafei Jia and Sam S. Y. Wang, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3458-3463.

chayya Bathala, ed., 1996), p3438-3463.
Waves on a 1:100 Slope: Experiments and Numerical Models, G. Liberatore, M. Petti, M. Drago and M. Sclavo, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p355-365.
Weathering Rates of Marble in Laboratory and Outdoor Conditions, Srinivas S. Yerrapragada, Surendra R. Chirra, John H. Jaynes, S. Li, Jayanta K. Bandyopadhyay and K. L. Gauri, EE Sept. 96, p856-863.

'Suspicious' Implications Allayed, William F. Powers, III, Kerry B. Allen and Michael P. Bruen, CE Sept. 96, p31-

Lagoons
Application of the Model SPECIES to Kaneohe Bay, Oahu, Hawaii, Clifford J. Hearn, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p355-366.

Case History of a Lined Wastewater Treatment Lagoon Failure, Kelly S. Merrill and Matt Stephl, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p518-532.

Modification of Design Approach to Aerated Lagoons, Lin-vil G. Rich, EE Feb. 96, p149-153.

Numerical Morphodynamic Modelling of Keta Lagoon, Tim J. Chesher, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p927-938.

Daniy, cu. anu nyskatu B. Zeitler, ed., 1990), pyz./-938.
Venice, Italy: an Integrated Approach to Solve the Environmental Problems of Its Unique Collection System, Federico G. A. Vagliasindi, Vincenzo Belgiorno, Rodolfo M. A. Napoli and Giorgio Conti, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl 801-1806.

Wastewater Treatment Facility Aeration Project, Gary L. Eddy, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p506-517.

agrangian functions

Effect of Divergent Flow on Mass Conservation in Euleri-an-Lagrangian Transport Schemes, Ling Tang and E. Eric Adams, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p106-115.

Linked Lists for Transport Simulations Using Lagrangian Parcels, Poojitha D. Yapa, Li Zheng and Tomonao Koba-yashi, CP Jan. 96, p88-90.

Bacterial and Chemical Pollution of Littoral Waters of Lake Ohrid at Pogradec - Town Area, Valer Angjeli, Vasilika Petro and Ramazan Bukli, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2536.

Dependence of Water Quality and Fish Habitat on Lake Morphometry and Meteorology, Midhat Hondzo and Heinz G. Stefan, WR Sept./Oct. 96, p364-373.

Determination of Reaeration Coefficients: Whole-Lake Approach, Rakesh K. Gelda, Martin T. Auer, Steven W. Effler, Steven C. Chapra and Michelle L. Storey, EE Apr. 96, p269-275.

Dune Drain Field, CE Dec. 96, p15-16.

Extraordinary Flood Disaster in Tai Lake Basin of China in 1991, Ruiju Liang, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p48-

High-Resolution, Short-Term Lake Forecasts for Lake Erie, John G. W. Kelley, David J. S. Welsh, Keith W. Bed-ford, David J. Schwab, Jay S. Hobgood and Brendon Hoch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p367-378.

Hurricane-Induced Storm Surge Analysis for the City of New Orleans, LA, David J. Mark and Norman W. Scheffner, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p343-344.

Hydraulic and Engineering Considerations in Designing Constructed Treatment Wetlands for a Lake Restoration, C. Charles Tai, Donthamsetti V. Rao and Jonathan Polinkas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p257-262

Lake Number: A Long-Term Lake Water Quality Predictor, Midhat Hondzo, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3176-3187.

Lake/Reservoir Restoration Activities in Taiwan, Shaw I Yu, Jan-Tai Kuo, Ching-Gung Wen, Shang-Lien Lo and Jen-Yang Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4208-4213.

Modeling the Lake Decatur Watershed in Illinois to Evalu-ate Effects of Best Management Practices on Nitrate Loading, Deva Borah, Misganaw Demissie and Laura Keefer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1681-1686.

Operational Aspects of Warning, D. D. Nurbaev and N. S. Gavrilova, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1552.

Risk Reduction of Lead and Mercury in Michigan, Jona-than W. Bulkley, Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p315-325.

Sediment and Contaminant Transport in Green Bay, Zeni-tha Chroneer, Mary Cardenas, James Lick and Wilbert Lick, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p313-324.

The Standley Lake Protection Project, Joseph Green-Heffern and David J. Kaunisto, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2820-2825.

Using Spaceborne Imaging Radar to Identify Lake Water Resources on the Alaskan North Slope, M. O. Jeffries, K. Morris and G. E. Liston, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p855-865.

Watershed Riparian Management and Its Benefits to a Eutrophic Lake, R. Bruce Williamson, Christine M. Smith and A. Bryce Cooper, WR Jan./Feb. 96, p24-32.

California Probable Maximum Precipitation, John L. Vogel, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p55-56.

Newtonian Fluid Mechanics Treatment of Debris Flows and Avalanches, Bruce Hunt, HY Dec. 94, p1350-1363.

Dynamic Behavior of Glued Laminated Timber Girder Bridges, Terry J. Wipf, Michael A. Ritter and Douglas L. Wood, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p260-267.

Field Performance of Stress-Laminated T and Box Beam Bridges, Barry Dickson and Hota GangaRao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

New Compression Based Design Principals for Reinforced Glulams, Daniel A. Tingley and Stephen Cegelka, (Mate-rials for the New Millennium, Ken P. Chong, ed., 1996),

p1479-1491.

Performance Monitoring of Three Stress-Laminated Timber Bridges in Leon County, Nur Yazdani and Joy Orlando Kadnar, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p268-275.

Reinforced Glued Laminated Timber, Bruce D. Pooley, P.E., CE Sept. 96, p50-53.

Swimming in Style, Gary Steficek, P.E., CE Aug. 96, p36-39

Three Year Evaluation of a Metal-Plate Connected Wood Truss Bridge, Michael H. Triche and Michael A. Ritter, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p276-281.

3-D Elastodynamic Green's Functions of Laminated Plates, J. Zhu and A. H. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1159-1162.

An Alternate Method for Prediction of the Macromechanical Properties of Laminated Composites, Joel G. Bennett, Mark A. Kenamond and Keith S. Haberman, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p1014-

Buckling and Vibration of Thick Laminates on Pasternak Foundations, Y. Xiang, S. Kitipornchai and K. M. Liew,

EM Jan. 96, p54-63.

Buckling of Laminated Composite Beams, Carol Shield and Tim Morey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1010-1013.

A Computer Controlled Filament Winding Technique for Manufacturing Cement Based Cross-Ply Laminates, B. Mobasher and A. Pivacek, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1347-1356.

Concrete Beams and Slabs Retrofitted with CFRP Lam-inates, M. Arockiasamy, Ahmed Amer and M. Shahawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p776-779

An Experimental Investigation of Sandwich Flat Panels Under Low Velocity Impact, Anthony N. Palazotto, Eric J. Herup and Timberlyn Harrington, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p402-407.

Fatigue Strength of Externally Reinforced Concrete Beams, L. C. Muszynski and R. L. Sierakowski, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p648-

Finite-Displacement Analysis of Laminated Composite Strips with Extension-Twist Coupling, Erian A. Ar-manios, Andrew Makeev and David Hooke, AS July 96, p80-91.

Free Vibration of Stiffened Composite Laminates, Meiwen Guo and Issam E. Harik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1163-1166.

Improving Design in Composite Thin-Walled Columns, Luis A. Godoy and Leonel I. Almánzar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1155-1158.

Laminate Bonding for Concrete Repair and Retrofit, D. V. Reddy, G. B. Gervois and L. A. Carlsson, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1579-1591.

A Layer-Wise Formulation for Progressive Failure Analysis of Laminated Composite Beams, Julio F. Davalos and Youngchan Kim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1150-1159.

Nonlinear FE Solution for Thin-Walled Open-Section Composite Beams, B. Omidvar and A. Ghorbanpoor, ST Nov. 96, p1369-1378.

Performance of Laminated Glass Units under Simulated Windborne Debris Impacts, Richard A. Behr and Paul A. Kremer, AE Sept. 96, p95-99.

Renabilitation of a Concrete Bridge Using FRP Laminates, Joseph W. Tedesco, J. Michael Stallings, Mahmoud El-Mihilmy and Michael W. McCauley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p631-637. Reliability Design of Laminated Plate for Buckling, Nozomu Kogiso, Shaowen Shao and Yoshisada Murotsu, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p627-634. Reliability-Based Ortimization of Community of Structural Englishility-Based Ortimization of Community Rehabilitation of a Concrete Bridge Using FRP Laminates,

Reliability-Based Optimization of Composite Structures, Xiaoping Liu and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol,

ed. and Mircea D. Grigoriu, ed., 1996), p122-125. Rigidities of One-Dimensional Laminates of Composite

National Street Composite Materials, Shuguang Li, EM Apr. 96, p371-374.

Strengthening Steel Composite Beams with CFRP Laminates, Rajan Sen, Larry Liby, Gray Mullins and Ken Spillett, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1601-1607.

Stress-Lampined Timber Decks Histor Class FRD 78.

Stress-Laminated Timber Decks Using Glass FRP Ten-dons, H. J. Dagher, B. Abdel-Magid, S. Iyer and W. Lu, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1458-1468.

Three-Dimensional Analysis of Doubly Curved Laminated Shells, Chih-Ping Wu, Jiann-Quo Tarn and Shu-Man Chi, EM May 96, p391-401.

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Laminating
Vibration of Laminated Shallow Shells on Quadrangular
Boundary, A. V. Singh and V. Kumar, AS Apr. 96, p52-

Land application Planning Biosolids Land Application Rates for Agricultural Systems, David M. Crohn, EE Dec. 96, p1058-1066.

Land development

Analyzing Water Balances and Ranking Maryland's Watersheds Related to Growth, Development and Loss of Habitat, Marcia Smith, David Bleil and James Ahl, (North

hat, Marcia Smint, David Biel and Janies Ani, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4365-4370. Controlling the Impacts of Development on Storm Water Quality through Proper Site Planning and Design, Jill C. Bicknell and Lisa Horowitz McCann, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3097-3102.
Engineers Outfox Nature to Bury Sewer Line, CE Dec. 96,

Firms Form Brownfield Alliance, CE Dec. 96, p22. Liability of Engineers When Wetlands Laws Change, Peter J. Coote, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p970-975.

Reduction of Downstream Impacts Through Use of Variable Detention Basin Volume Requirements, Conor C. Shea, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1858-1863

This Is Not Good News, Percival A. Miller, CE May 96, p29.

Land information systems

Systems Engineering Firms Merge, CE Dec. 96, p22.

Firms Form Brownfield Alliance, CE Dec. 96, p22. Sustainable Watershed Management in Developing Water-sheds, Thomas H. Cahill, Joel McGuire and Wesley R. Horner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3969-3974.

Uncertainty in Comparative Analysis with Continuous Nonpoint Source Pollution Models, Dipmani Kumar and Conrad D. Heatwole, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1705-1710.

Water in the International Decade for Natural Disaster Reduction, A. J. Askew, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1.

Land reclamation

Brownfields Boom, Monica Maldonado, CE May 96, p36-

and subsidence

Coupled and Uncoupled Poroelastic Solutions to Land Sub-sidence due to Groundwater Withdrawal, Giuseppe Gam-bolati, Mario Putti and Pietro Teatini, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p483-486.

Early Surveys in the Nation's Capital, Steven M. Pennington, (Civil Engineering History: Engineers Make History, Lerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p86-95.

Survey Distance Units: A Better Way, Larry E. Stanfel, SU

Aug. 94, p130-132.

A Surveying Trip Report from George Washington's Diary, Michael P. Johnson and William P. Johnson, Jr., (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p1-12.

I and treatment

Optimizing Municipal Wastewater Treatment in Cold Cli-mates: Scale, Process and Benefits, Isobel W. Heathcote and William J. Jewell, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1419-1424.

Appalachian Piedmont Regolith: Relations of Saprolite and Residual Soils to Rock-Type, Milan J. Pavich, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p1-11.

Balancing Aviation, Highway, and Development Needs: Multimodal Planning at Indianapolis International Air-port, John W. Myers, (Meeting the Challenge: Rebuild-ing Inner City Airports, Prianka Seneviratne, ed., 1996),

p24-33.

BASINS—a GIS-linked Watershed Analysis and Modeling Tool, Gerald D. LaVeck, Marjorie C. Coombs and Marilyn Fonseca, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3629-3632.

Changes in Ground Water-Surface Water Interaction in the Santa Ana River Caused by Independent Water Resourc-es Management Activities, Mark J. Wildermuth, Timothy F. Moore and Traci Stewart, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3300-3313.

Development of Islandwide Groundwater Pollution Potential for Taiwan, Wen-Sen Chu, Chin-Hwa Chiang, Mei-Hui Chang and Cheh-Ming Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3164-3169.

Land-Use Policy Decisions Based on a Probabilistic As-sessment of Landslide and Debris Flow Risks after the 1991 Oakland Hills Firestorm, Scott R. Huntsman and Ram B. Kulkarni, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p535-549.

Modeling of Rattlesnake Creek Watershed Using "Swat" Model, S. R. Ramireddygari, J. K. Koelliker and R. S. Govindaraju, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3241-3246.

Standardizing Environmental Assessments: A Practical Perspective, J. R. Marsh, K. W. Green and T. Dong, EE Mar. 96, p222-226.

Land usage planning

Integrated Planning Decision Support System (IPDS) Application: Gleawood Springs, Colorado, Mario Mejfa-Navarro and Luis A. García, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p386-387.

New on the Web, CE June 96, p8.

A Rapid Barrier Island Hazard Mapping Technique as a Basis for Property Damage Risk Assessment and Mitigation, David M. Bush, William J. Neal and Orrin H. Pilkey, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p185-186.

Sustainable Watershed Management in Developing Water-sheds, Thomas H. Cahill, Joel McGuire and Wesley R. Horner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3969-3974.

Land usage regulations
Water Based Land Use Regulations Using GIS Water
Budgeting Model, H. William Sellers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3962-3968.

Acceleration of Landfill Stabilization Using Leachate Recycle, T. G. Townsend, W. L. Miller, Hyung-Jib Lee and J. F. K. Earle, EE Apr. 96, p263-268.

Advanced Site Design Software for Landfill Closure and Remedial Design, Douglas Cervenak, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p818-824.

Analysis and Design of Liner System for a Large Ash Re-sidual Landfill, Yun Zhou, Luis E. Vallejo and Daniel C. Hsu, (Engineered Contaminated Soils and Interaction of

Hsu, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Valle-jo, ed. and L. N. Reddi, ed., 1996), p114-129.
Anchoring a Landfill Expansion, Max Kroschel, Michael S. Snow and Thomas A. Williamson, CE May 96, p64-66.
Biodegradation Modeling of a Closed Landfill Site, Sai K. R. Edavally, Lawrence H. Woodbury and G. Pad-manabhan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed. 1996 & 25510-2515. ed., 1996), p2510-2515.

Biodegradation of Dichloromethane in Leachate, R. Kerry Rowe, Leila Hrapovic, Naim Kosaric and D. Roy Culli-more, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2021-2026.

Building a Landfill on Mud(Available only in Geo/ Environmental Special Issue), Michael J. Byle and Anne M. Germain, CE July 96, p12A-16A.

Coping with EPA's Storm Water Permit for Hazardous Waste Facilities, Industrial Landfills, Wastewater Treatment Plants, and Recyclers, James P. Amick, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2631-2635.

Detecting Leaks Electronically (Available only in Geo/ Environmental Engineering Special Issue), Rita Robison,

Environmental Engineering Special Issuer, Nata N CE Nov. 96, p16A. Editor's Note, Thomas L. Theis, EE Apr. 96, p247. Editor's Note, Thomas L. Theis, EE Oct. 96, p888. Editor's Note, Thomas L. Theis, EE Dec. 96, p1049.

Engineered Contaminated Soils and Interaction of Soil Geomembranes, Geotechnical Special Publication No. 59, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996, 0-7844-0213-2, 144pp. Flow Investigation for Landfill Leachate (FILL), Reza M.

Khanbilvardi, Shabbir Ahmed and Phillip J. Gleason, EE

Jan. 95, p45-57.

Geotechnical Properties of Paper Mill Sludges for Use in Landfill Covers, Horace K. Moo-Young and Thomas F. Zimmie, GT Sept. 96, p768-775.

Hazard Ranking of Landfills Using Fuzzy Composite Pro-gramming, Michael E. Hagemeister, David D. Jones and Wayne E. Woldt, EE Apr. 96, p248-258.

Landfill Leachate Treatment by Evaporation, Deborah R. Birchler, Mark W. Milke, A. Leigh Marks and Richard G. Luthy, EE Sept./Oct. 94, p1109-1131.

Landfill Siting Using Geographic Information Systems: A Demonstration, Muhammad Z. Siddiqui, Jess W. Everett and Baxter E. Vieux, EE June 96, p515-523.

Lanfill Site Evaluation and Application of MODFLOW to simulate Hydraulically Conductive Zones in Bedrock Associated with Diabase Dikes in North Carolina, M. A. Ponti, Jr., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p988-1002.

Leachate Chemistry: Its Implications for Clogging, Bruce E. Rittmann, Ian R. Fleming and R. Kerry Rowe, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p28-33. Modeling Impact of Small Kansas Landfills on Underlying Aquifers, Marios Sophocleous, Nicholas G. Stadnyk and Miles Stotts, EE Dec. 96, p1067-1077.

Multifactor Spatial Analysis for Landfill Siting, Jehng-Jung Kao and Hung-Yue Lin, EE Oct. 96, p902-908.

Network Expert Geographic Information System for Landfill Siting, Jehng-Jung Kao, Wei-Yea Chen, Hung-Yue Lin and Show-Jyi Guo, CP Oct. 96, p307-317.

A Neural Network Approach for Sie Characterization and Uncertainty Prediction, Yacoub M. Najjar and Imad A. Basheer, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p134-148.

A New Kind of Rubber Drive, CE Nov. 96, p94-95.

Optimal Waste Decomposition—Landfill as Treatment Process, Robert P. Anex, EE Nov. 96, p964-974.

Predicting the Level of Frost Penetration into Landfill Cov-ers, Horace K. Moo-Young, Jr., Thomas F. Zimmie and Morris H. Morgan, III, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p745-756.

Protective Film Helps Landfills Make Energy, CE Nov. 96,

p95.

Retention of Multiple Heavy Metal Ions by Fly Ash, A. Sridharan, N. S. Pandian and C. Rajasekhar, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1608-1613.

Seismic Stability Procedures for Solid-Waste Landfills, Jonathan D. Bray, Anthony J. Augello, Gerald A. Leo-nards, Pedro C. Repetto and R. John Byrne, GT Feb. 95, p139-151.

Significance of Geologic Features on the Contaminant Mi-gration from Landfill Sites, Rao Nivargikar and Thomas Voss, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p988-993.

Transport of Aqueous Organic Compounds in Thermoplas-tic Geomembranes. II: Mass Flux Estimates and Practi-cal Implications, Jae K. Park, Joni P. Sakti and John A.

Hoopes, EE Sept. 96, p807-813. Transport of Organic Compounds in Thermoplastic Geomembranes. I: Mathematical Model, Jae K. Park, Joni P. Sakti and John A. Hoopes, EE Sept. 96, p800-

Uncertainty in Back Analysis of Slopes, Robert B. Gilbert, Stephen G. Wright and Eric Liedtke, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p494-517.

Unsaturated Hydraulic Conductivity of Two Compacted Barrier Soils, J. S. Meerdink, C. H. Benson and M. V. Khire, GT July 96, p565-576.

Waste Not in Wisconsin, David A. Rudig, CE June 96.

p68-70. Yield Acceleration of Lined Landfills, Scott E. Shewbridge, GT Feb. 96, p156-158.

Landforms

Landform Grading and Slope Evolution, Horst J. Schor and Donald H. Gray, GT Oct. 95, p729-734.

Weighted Factors in Computer-Aided Land Leveling, Thomas S. Zissis, Aristotelis H. Papadopoulos and Ilias S. Teloglou, IR Nov/Dec. 96, p336-338.

Operational Satellite Remote Sensing for Mineral Exploration, Charles Sabine, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Landform Grading and Slope Evolution, Horst J. Schor and Donald H. Gray, GT Oct. 95, p729-734.

Damage due to Northridge Earthquake Induced Movement of Landslide Debris, Robert W. Day and Dennis M. Po-land, CF Aug. 96, p96-108.

Earthquake-Induced Landsliding Analyzed and Predicted With a Geographic Information System, James P. McCalpin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p3-4.

Geo-data System for Landslide Hazard Assessment, Cassandra T. Rogers, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p70-

Land-Use Policy Decisions Based on a Probabilistic As-sessment of Landslide and Debris Flow Risks after the 1991 Oakland Hills Firestorm, Scott R. Huntsman and Ram B. Kulkarni, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p535-549.

A Landslide of Litigation, Walter F. Crampton, P.E., CE

Oct. 96, p61-63.

Mechanism Study of Landslides, Dagang Zhang and Mostafa A. Foda, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p258-261.

Nailing A Landslide (Available only in the Geo/ Environmental Special Issue), Al Colarusso, CE Nov. 96.

p13A-15A.

Rapid Slope Monitoring, William F. Kane and Timothy J. Beck, CE June 96, p56-58.

Risk Assessment of Rockfall Hazard at Horse Mesa Dam: A Case History, Peter M. Kandaris and Kenneth M. Euge, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1402-

1416.

Use of Geophysics to Aid in Mapping Basalts Relevant to Ground Water Flow and a Landslide Hazard at Hager-man Fossil Beds National Monument, P. Michaels, L. Growney and P. Donaldson, (Case Histories of Geophys-ics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p14-26.

Load Capacity of Nested, Laterally Braced, Cold-Formed Steel Z-Section Beams, Ahmad A. Ghosn and Ralph R. Sinno, ST Aug. 96, p968-971.

Large structures

Approach to Failure Mode Analysis of Large Structures, Shaowen Shao and Yoshisada Murotsu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p704-707.

Damage Estimation Using Substructural Identification in Time Domain, Chung-Bang Yun and Hyeong-Jin Lee, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p846-849

Distributed Control for Serial Assembly in Space, Frank McQuade and Colin R. McInnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1169-1175.

System and Input Identification with Partially Correlated Load Processes, K. Pan, N. P. Jones and J. H. Ellis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p138-141.

Lasers

Laser Induced Fluorescence and Cone Penetrometer Testing for Delineation of Hydrocarbons, Benjamin J. Timerson and Donald M. Moran, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p115-126.

New on the Web, CE Mar. 96, p8.

On the Web, CE Oct. 96, p11.

An Approximate Method for Assessment of Seismic Damage on Buildings, Mario Paz and Jeffrey S. Janover, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p428-434.

Bridge-Column Footings: An Improved Design Procedure, Lian Duan, SC Feb. 96, p20-24.

LATWAK: Impact Test to Obtain Pile Lateral Static Stiffness, Jean-Louis Briaud and Marc Ballouz, GT June 96, p437-444.

A Monitoring System for High-Clearance Scaffold Systems during Construction, Y. L. Huang, T. Yen and W. F. Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p719-726.

G. (d., 1996), 197-720.
Seismic Resistance of Partially-Grouted Masonry Shear Walls, Arturo E. Schultz, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p211-222.

Lateral loads

Behavior of Pile-Supported Dolphins in Marine Clay Under Lateral Loading, S. Narasimha Rao, V. G. S. T. Ramakrishna and G. Balarama Raju, GT Aug. 96, p607-612.

Computer Application of CLM Lateral Load Analysis to Piles and Drilled Shafts, Tracy Brettmann and J. Michael Duncan, GT June 96, p496-498.

Difference between Load-Transfer Relationships for Laterally Loaded Pile Groups: Active P-Y or Passive P-δ, M. F. Bransby, GT Dec. 96, p1015-1018.

Experimental Evaluation of Masonry-Infilled RC Frames, Armin B. Mehrabi, P. Benson Shing, Michael P. Schuller and James L. Noland, ST Mar. 96, p228-237.

Experiments for Ultimate Strength of Reinforced Concrete Cylindrical Panels under Lateral Loading and Comparison with FEM Analysis, Makoto Takayama, Kazuhiko Mashita, Shiro Kato, Yasuhiko Hangai and Haruo Kunieda, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p310-321.

High Over Shanghai, Stan Korista, P.E., Mark Sarkisian, P.E. and Ahmad Abdelrazaq, CE Dec. 96, p58-61.

Lateral Capacity of Helical Piles in Clays, Yenumula V. S. N. Prasad and S. Narasimha Rao, GT Nov. 96, p938-941.

Lateral Load Behavior of High Strength Fiber Reinforced Concrete Columns, Ramesh Nagarajah and David H. Sanders, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p396-407.

Nonlinear Finite Element Analysis of Masonry-Infilled Re-inforced Concrete Frames, Medhat A. Haroun and Essam H. Ghoneam, (Engineering Mechanics, Y. K. Lin and T.

C. Su, 1996), p1022-1025.

Nonlinear Lateral Pile Deflection Prediction in Sands, Shamsher Prakash and Sanjeev Kumar, GT Feb. 96,

p130-138.

Performance of Precast Parking Garages in the Northridg Earthquake: Lessons Learned, Sharon L. Wood, John F Stanton and Neil M. Hawkins, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1221-1227.

Refined Second-Order Analysis of Frames with Members under Lateral and Axial Loads, Z. H. Zhou and S. L.

Chan, ST May 96, p548-554.

Seismic Retrofitting of Bridge Pier Columns, William L. Gamble and Neil M. Hawkins, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p16-23.

Seismic Strengthening of Low Rise Buildings, Theodore A. Pruess and John C. Theiss, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p397-404.

Shear Properties of Components Used in Stressed-Skin Panels, I. Robert Kliger and Patrick J. Pellicane, MT

May 96, p77-82.

VSL's Experience with Post-Tensioned Masonry, Hans Rudolf Ganz, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p25-36.

Wind Protection Tie-Downs for Manufactured Homes, John E. Pearson, Anatol Longinow and Donald F. Meinheit, SC Nov. 96, p126-140.

Lateral Earth Pressures on Deep Braced Walls, Daniel O. Wong, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p746Testing of Prestressed Clay-Brick Walls, Gary L. Krause, Ravi Devalapura and Maher K. Tadros, (Worldwide Ad-vances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p37-48.

Lateral stability

Application of Structural Optimization to Practical Tall Steel Building Design, Chun-Man Chan and Joohyuk Park, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p123-134.

Assessments of Lateral and Torsional Structural Responses Induced by Incoherent Ground Motions, G. D. Hahn and X. Liu, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p188-191.

Lateral-Torsional Buckling of Nonprismatic I-Beams, Pra-tyoosh Gupta, S. T. Wang and G. E. Blandford, ST July 96, p748-755.

Analysis and Design of Microirrigation Laterals, Yaohu Kang and Soichi Nishiyama, IR Mar/Apr. 96, p75-82.

Design of Microirrigation Submain Units, Yaohu Kang and Soichi Nishiyama, IR Mar./Apr. 96, p83-89. Mammoth Well Gurgles to Life, CE July 96, p11-12.

Latin America

Latin American Infrastructure Database Formed, CE Dec. 96, p22

Quantitative Monitoring of Plata River Basin Waters, V. F. de sa e Benevides and R. M. Coimbra, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1719.

Constitutive Behavior of Granular Media Using a Lattice Type Model, S. Ramakrishnan, Muniram Budhu and George Frantziskonis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p713-716.

Evaluation of Dynamic Analysis Results using Full-Scale Lattice Tower Tests, Markus Ostendorp, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p518-

Terrestrial Applications of a Composite Lattice Space Structure, Arup K. Maji, Keith Donnelly and Michelle Salas, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1122-1126.

Dynamic Stiffness Analysis of Lattice Structure, Eldad Levy and Moshe Eisenberger, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p526-533.

Numerical Analysis of Damage in Lattices and Consequences on Continuum Modelling, Gilles Pijaudier-Cabot, A. Delaplace and S. Roux, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1034-1037.

Design of Large Space Systems for Packaging and Launch on Multiple, Heterogeneous Vehicles, Steven D. Jolly, AS Apr. 96, p45-51.

Launch Vibration Isolation System, Eugene R. Fosness, Rory R. Ninneman, Paul S. Wilke and Conor D. Johnson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p228-231.

A New Hydrogen Microsensor for Space Applications, Jessica Knoll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1285-1289.

Passive Isolation Systems for Launch Vehicles, Eugene R. Fosness, Paul S. Wilke and Conor D. Johnson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1176-1182.

Utilization of 3-D CADD in Analysis, Design and Con-struction of Mobile Service Tower for Atlas Launch Vehicles, Norm Bobczynski, Matthew Wrona, David Hansen and Harold Howell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pi 197-1204.

Launching pads
Dynamic Effects from the Space Shuttle Liftoff, Fady F. Barsoum and William F. Carroll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1190-1196. Law, jurisprudence

Analysis of Alternative Governance Models for Space Business Parks, Charles J. Lauer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p177-185.

Coal Pipelines Crossing Railroads: Legal Issues, Peter N. Davis and Henry Liu, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p254-264.

History of Coastal Engineering in Spain, M. A. Losada, R. Medina, C. Vidal and I. J. Losada, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p465-499.

Occupational Hazards Scheme of Social Insurance in Saudi Arabia: Overview, M. Osama Jannadi, ME Mar./Apr. 96,

p55-57

Statute of Limitations for Civil Engineering Liability, Robert W. Day and Michael M. Angello, El Apr. 96, p86-88.

Layered soils

Advective-Diffusive Contaminant Migration in Unsaturated Sand and Gravel, R. Kerry Rowe and K. Badv, GT Dec.

Bearing Capacity of Footings over Two-Layer Foundation Soils, Radoslaw L. Michalowski and Lei Shi, GT May 95, p421-428.

Chloride Migration through Clayey Silt Underlain by Fine Sand or Silt, R. Kerry Rowe and Kazem Badv, GT Jan. 96, p60-68.

Negative Skin Friction on Piles in Layered Soil Deposits, K. S. Wong and C. I. Teh, GT June 95, p457-465.

Theories of Ditch Drainage in Layered Anisotropic Soil, G. Barua and K. N. Tiwari, IR Nov./Dec. 96, p321-330.

Layered systems

Energy Transfer Rates in Unsteady Plane Mixing Layers, M. R. Hajj and I. M. Janajreh, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1066-1069.

Experimental Investigation of the Temporal Intermittency in the Transition to Turbulence of a Plane Mixing Layer, A. L. W. Bokde, D. A. Jordan, Jr., and R. W. Miksad, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996). p1070-1073

Sensitivity Analysis of Flow in Multilayered Leaky Aquifer Systems, Peter Indelman, Gedeon Dagan, Alexander H.-D. Cheng and Driss Ouazar, HY Jan. 96, p41-45.

Adaptation of a Layout Design System to a New Domain: Construction Site Layouts, Bongjin Choi and Ulrich Flemming, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p711-717.

ArcSite: Enhanced GIS for Construction Site Layout, M. Y. Cheng and J. T. O'Connor, CO Dec. 96, p329-336.

Canal Control and Automation for the Central District System, Michael A. Drain and Eric R. Hixson, (North Amer ican Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2384-2389.

Space Planning Tools for Multi-Story Construction, David R. Riley and Iris D. Tommelein, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p718-724.

Leachate collection

Clay Liner Crack Propagation, Joseph F. Boward and Luis E. Vallejo, (Engineered Contaminated Soils and Interac-tion of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p97-113.

Leachate collection systems

Leachate Chemistry: Its Implications for Clogging, Bruce E. Rittmann, Ian R. Fleming and R. Kerry Rowe, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p28-33.

Modeling Impact of Small Kansas Landfills on Underlying Aquifers, Marios Sophocleous, Nicholas G. Stadnyk and Miles Stotts, EE Dec. 96, p1067-1077.

Acceleration of Landfill Stabilization Using Leachate Recy-cle, T. G. Townsend, W. L. Miller, Hyung-Jib Lee and J. F. K. Earle, EE Apr. 96, p263-268.

Biodegradation of Dichloromethane in Leachate, R. Kerry Rowe, Leila Hrapovic, Naim Kosaric and D. Roy Cullimore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2021-2026.

Desorption of Soil Contaminants Due to Rainwater Infiltration, Anand Prakash, HY Sept. 96, p523-525.

Environmental Impacts of Autoclaved Cellular Concrete, M. C. Latona, R. D. Neufeld, L. E. Vallejo, W. Hu and C. Kelly, (Engineered Contaminated Soils and Interac-tion of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p57-69.

Flow Investigation for Landfill Leachate (FILL), Reza M. Khanbilvardi, Shabbir Ahmed and Phillip J. Gleason, EE

Jan. 95, p45-57.

Landfill Leachate Treatment by Evaporation, Deborah R. Birchler, Mark W. Milke, A. Leigh Marks and Richard G. Luthy, EE Sept/Oct. 94, p1109-1131.

Long-Term Corrosion Behavior of Environmental Assess-ment Glass, W. L. Ebert and J. K. Bates, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p399-401.

Optimal Waste Decomposition—Landfill as Treatment Process, Robert P. Anex, EE Nov. 96, p964-974.

Retention of Multiple Heavy Metal Ions by Fly Ash, A. Sridharan, N. S. Pandian and C. Rajasekhar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1608-1613.

Significance of Geologic Features on the Contaminant Mi-gration from Landfill Sites, Rao Nivargikar and Thomas Voss, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p988-993.

Leaching

Cropping Systems on the Delmarva Peninsula to Reduce Ground Water Contamination, W. F. Ritter and R. W. Scarborough, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2341-2346.

Dissolution of Lead Paint in Aqueous Solutions, Gregory L. Barnes and Allen P. Davis, EE July 96, p663-666.

Editor's Note, Thomas L. Theis, EE Aug. 96, p675. Evaluation of a Bedrock DNAPL Pool Site, Dackyoo Hwang, Christopher Reitman and William Richardson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface En-vironment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p731-742.

Leaching Characteristics of Solidification System of C3A/ CuO, Cheng-Fang Lin and Hwa-Wey Huang, EE Apr.

96, p323-326.

Long-Term Leaching of Metals from Concrete Products, Matthew T. Webster and Raymond C. Loehr, EE Aug. 96, p714-721.

Modeling Bacterial Decay Coefficient During SSDML Process, T. R. Sreekrishnan, R. D. Tyagi, J. F. Blais, N. Meunier and P. G. C. Cambell, EE Nov. 96, p995-1002.

Neural Networks Predict Pesticide Leaching, Steven K. Starrett, Shelli K. Starrett, Yacoub M. Najjar and Judy C. Hill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1693-1698.

Operational Strategy for Metal Bioleaching Based on pH Measurements, Y. G. Du, R. D. Tyagi and T. R. Sreekrishnan, EE July 95, p527-535.

Probabilistic Approach for Cancer Risk Assessment, Paul S. Watkins, Timothy L. Jacobs, Rory B. Conolly and Warren T. Piver, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2366-2371. Recycling of Spent Abrasive Media in Nonstructural Con-crete, Matthew T. Webster and Raymond C. Loehr, EE

Sept. 96, p840-849.

A Screening Level Model for Estimation of Vadose Zone Leaching and Saturated Zone Mixing: VLEACHSM, Sang B. Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1736-1741.

Shallow and Surfacing Ground Water in an Arid Urban Environment, D. L. Smith and J. C. Guitjens, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1495-1500.

Air Quality at a Zinc/Lead Mine in Arctic Alaska, Charlotte MacCay and Jack Coutts, (Cold Regions Engineering: The Cold Regions Infrastructure-An International In erative for the 21st Century, Robert F. Carlson, ed., 1996), p804-815.

J. McDonald, Janice J. Trautner, Alan G. Seelos and Richard K. Glamman, (*Incertainty in the Geologic Environment: from Theory to Practice*, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p287-296.

Developing the Infrastructure for Lead Assessment and Abatement, Joseph S. Carra, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p70-76.

Dissolution of Lead Paint in Aqueous Solutions, Gregory L. Barnes and Allen P. Davis, EE July 96, p663-666. Dust-Free Chemical Stripper Puts Old Paint Out to Pasture,

CE May 96, p84. EDTA-Enhanced Electrokinetic Extraction of Lead, Albert

T. Yeung, Cheng-non Hsu and Rajendra M. Menon, GT Aug. 96, p666-673.

Electrokinetic Remediation. I: Pilot-Scale Tests with Lead-Spiked Kaolinite, Yalçın B. Acar and Akram N. Alshawabkeh, GT Mar. 96, p173-185.

Electrokinetic Remediation: II: Theoretical Model, Akram N. Alshawabkeh and Yalçın B. Acar, GT Mar. 96, p186-

Environmental Engineers Take Aim at Firing Range, CE Aug. 96, p18.

Aug. 96, p16.
Evaluation of Lead-Bearing Phases in Municipal Waste Combustor Fly Ash, J. F. Sandell, G. R. Dewey, L. L. Sutter and J. A. Willemin, EE Jan. 96, p34-40.
Flushing of a Pb(II) Contaminated Soil Using HCl, EDTA, and CaCl., Brian E. Reed, Patrick C. Carriere and Roderic Moore, EE Jan. 96, p48-50.

Geochemical Modeling of Lead in Vadose Zone, K. V. Nedunuri, R. S. Govindaraju, A. P. Schwab and L. E. Erickson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1221-1226.

Hazardous Soil Remediation: A Cooperative Effort Between Industry and Government, Wendy L. Cohen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1203-1208.

A Plastic Tomb for DOE's Mixed Waste, CE May 96, p19. Risk Reduction of Lead and Mercury in Michigan, Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p315-325.

Specification of Cu, Pb and Cr in Contaminated Sediment Effected by pH, Chin-Yuan Chen, Jih-Gaw Lin and Cheng-Nan Chang, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1453-1458.

21st Century Leadership and Technology, Malcolm J. Todd, ME July/Aug. 96, p40-49.

Accelerating Innovation: New Style of Leadership Needed, Les McCraw, ME Sept./Oct. 96, p3-5.

ACEC Launches Executives Institute, ME Jan./Feb. 96, p7. ASCE Convention Set for Nation's Capital This Fall, CE May 96, p72.

ASCE Mourns Loss of Industry Leaders in Plane Crash, CE May 96, p71.

ASCE Mourns Loss of Industry Leaders in Plane Crash, NE May 96, p15.

Civil Engineers Need to Stay Together, C. Gary Kellogg, CE Feb. 96, p6.

Construction Engineers Driving into the 21st Century, Vir K. Handa, CO Mar. 96, p.1-6. Construction Safety: A Vision for the Future, Stewart Young, ME July/Aug. 96, p.33-36. Forum, El Oct. 96, p.139-146.

The Importance of Civil Engineering Leadership in the Government Sector, Marvin H. Hilton, El Apr. 96, p53.

Leadership Development, Jim Krug, ME Nov./Dec. 96,

Leading "Unmanageable" Systems, Mel Hensey, ME July/ Aug. 96, p9-10.

Little Common Sense for the New Boss, David Purdy, SC Aug. 96, p91-92.

Los Angeles Section Pledges \$25,000 to ASCE's Building Campaign, NE Aug. 96, p1,4.

The Management of Engineering, Mel Hensey, ME July/ Aug. 96, p10.

Preparing for Project Management, David J. Williams, 1996, 0-7844-0175-6, 94pp.

Product Champions in Government Agencies, Steve G. Winistorfer, ME Nov./Dec. 96, p54-58.

Retaining Generation X Employees, Joan Lloyd, ME Nov./ Dec. 96, p5-6.

Section Lauds Utah Governor, CE Oct. 96, p74,76.

Slow Starter, Strong Finisher, Mel Hensey, ME July/Aug.

Stronger Leadership Needed, ME Nov./Dec. 96, p13. To Be Successful, Joan Lloyd, ME Nov./Dec. 96, p7-8.

Women Engineers Get Leadership Training, CE Dec. 96,

Younger-Member Group Eyes Five ASCE Awards for 1997, CE Dec. 96, p68,70.

Behavior of Pressure Tunnels and Guidelines for Liner Design, Gabriel Fernández, GT Oct. 94, p1768-1791.

Case History of Swimming Pool Foundation Failure, Ber-nard H. Hertlein, CF Feb. 96, p33-34.

Computerized Decision Support System Applied to NAPL Cleanup, Dale W. Lough and Wade E. Hathhorn, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Reddi, ed., 1996), p693-704. and Remediation, Lakshmi N.

Detecting Leaks Electronically (Available only in Geo/ Environmental Engineering Special Issue), Rita Robison,

CE Nov. 96, p16A.

Electrophoresis Solves Impoundment Leaks, CE Mar. 96, Estimation of Leakage Quantity for Long Auxiliary Venti-lation Systems, Felipe Calizaya and Pierre Mousset-Jones, (High Level Radioactive Waste Management,

Technical Program Committee, 1996), p429-431. Ground-Water Remediation with Granular Collection Sys tem, Richard W. Frieseke and Erik R. Christensen, EE

June 96, p546-549.

Inverse Transient Analysis in Pipe Networks, James A. Liggett and Li-Chung Chen, HY Aug. 94, p934-955.

A New Hydrogen Microsensor for Space Applications, Jessica Knoll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1285-1289.

On the Web, CE Nov. 96, p8.

Pipeline Crossing Accidents and Leak Detection Opportunities, Diane J. Hovey and Edward J. Farmer, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p22-

Safety Assessment of a Robotic System Handling Nuclear Material, Christopher B. Atcitty and David G. Robinson, (Robotics for Challenging Environments, Laura A. Dem-setz, ed., 1996), p255-261.

Sealing Leaks in Geomembrane Liners Using Electrophore-sis, Glenn T. Darilek, M. Yavuz Corapcioglu and Albert T. Yeung, EE June 96, p540-544.

Seepage Stoppers, V. J. Hebert, P.E., Juan Lelito, P.E. and A. Naudts, CE Oct. 96, p68-70.

Sensitivity Analysis of Flow in Multilayered Leaky Aquifer Systems, Peter Indelman, Gedeon Dagan, Alexander H.-D. Cheng and Driss Ouazar, HY Jan. 96, p41-45.

D. Lifeng and Driss Odazar, H. Jan. 90, p41-45.
Transport of Aqueous Organic Compounds in Thermoplastic Geomembranes. Il: Mass Flux Estimates and Practical Implications, Jac K. Park, Joni P. Sakti and John A. Hoopes, EE Sept. 96, p807-813.
Volumetric Leaky-Aquifer Theory and Type Straight Lines, Zekai Şen, HY May 96, p272-280.

Learning curve

Learning and Shaping in Emergent Hierarchical Control Systems, Bruce L. Digney, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p114-121.

Semantic Comparison of Selective and Constructive Induction, Witold Szczepanik, Tomasz Arciszewski and Janusz Wnek, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p845-851.

Least squares method

Oblique Reflection Characteristics of Rubble-Mound Structures, Michael Isaacson, David Papps and Etienne Man-

sard, W.P. Jan./Feb. 96, pl-7.

Optimal Fitting of a Model to Observations of Sediment Concentration in the Irish Sea, J. N. Aldridge, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p416-428.

Rainfall Depth—Duration Relationship for South Italy, Vito Ferro and Vincenzo Bagarello, HE Oct. 96, p178-

Surface Profiling System for Measurement of Engineering Structures, Xiaoli Ding, Richard Coleman and J. Michael Rotter, SU Feb. 96, p3-13.

WLS Method for Parameter Estimation in Water Distribu-tion Networks, P. V. Niranjan Reddy, K. Sridharan and P. V. Rao, WR May/June 96, p157-164.

Appropriate Sanitation Technology Advisor: A Planner's Tool in Less Developed Countries, Larry Quinn, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2993-2998.

Building Code Requirements for Structural Concrete (ACI 318-95) and Commentary (ACI 318R-95) by ACI Committee 318, AE Sept. 96, p120.

Coal Pipelines Crossing Railroads: Legal Issues, Peter N. Davis and Henry Liu, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p254-264. Guarding Against Litigation, Andrew Frano, ME July/Aug. 96, p28-32.

Investigation of Design Profession Closes, CE May 96, p8. Legal Principles Applicable to Sharing Transboundary Wa-ters, William E. Cox, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3218-3223.

The Management of Engineering, Mel Hensey, ME July/ Aug. 96, p10.

Software Piracy is Theft, Abbas Aminmansour, CE June 96, p6.

Legislatio

Analysis of Alternative Governance Models for Space Business Parks, Charles J. Lauer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p177-185.

ASCE Joins Ranks of Congressional Fellows, Martin

Hight, CE Dec. 96, pl 14.

ASCE Regulated Riparian Code and Florida's Regulated Riparian Experience: The Role for Voluntary Reallocation, Phyllis Park Saarinen and Mark D. Farrell, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2927-2932.

Best Management Practices and Community Education, Richard Boon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2648-2653.

The Budget-Blame Battle at Superfund Conference, CE Jan. 96, p18,20.

(COFPAES Supports House Bill on Design-Build Fee Reimbursement, CE June 96, p73.
Comparison of General vs. Multi Sector NPDES Storm Water Permits, William H. Espey, John Whitescarver and Michael Ports, (North American Water and Environment) ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2810-2814.

A Constructive Act, CE Dec. 96, p13.

Design-Build Continues to Grow in U.S., CE Dec. 96, p18-19.

Design-Build Origins in Question, Dean E. Stephan, Jeffrey L. Beard and Michael Charles, CE Aug. 96, p26,28. Editorial, EE Jan. 96, p1-2.

Environmental Policy Making in Today's Political Environ-ment, Warren M. Lee, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2805-2809

Firms Form Brownfield Alliance, CE Dec. 96, p22. Fiscal '97 Budget Likes Infrastructure, Martin Hight, CE

Nov. 96, pl 16.

Flood Management Strategies for the Rhine and Maas Riv-ers in the Netherlands, Jos Dijkman and Rob Klomp, (North American Water and Environment Congress Destructive Water, Chenchayya Bathala, ed., 1996), p3021-3022.

Valley, M. Zoghi and K. A. Rinehart, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p384-385.

Minority Set-Aside Unconstitutional, CE Oct. 96, p30.

NAS Recommendations and Current Legislative Proposals: Implications for U.S. NRC's Regulatory Program, J. P. Kotra, M. V. Federline, T. J. McCartin, N. A. Eisenberg and J. H. Austin, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p269-271.

New Public/Private Highway, CE Aug. 96, p10.

Potential Changes to Technical Issues in HLW Performance Assessment, N. A. Eisenberg and R. G. Wescott, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p288-290.

Protection Against Flooding: A New Delta Plan in the Netherlands, Frank P. Hallie and Richard E. Jorissen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3019-3020. Protective Film Helps Landfills Make Energy, CE Nov. 96,

p95. Reader Says Feds Overspend on Highways, Kirk R. Barrett,

P.E., CE Oct. 96, p32,37.

The Reclamation Drought Index: Guidelines and Practical Applications, Karen Weghorst, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p637-642.

Slim Environmental Outlook, Casey Dinges, CE Aug. 96,

Social Consequences of Flood Mitigation, Elliott Mittler, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p369-370.

Statute of Limitations on Negligence, CE Nov. 96, p28 Structural Evaluation of Existing Buildings for Seismic and Wind Loads, Charles Lindbergh, Maurice R. Harlan and James L. Lafrenz, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p317-318.

Taxing Matters for Trust Funds, Casey Dinges, CE July 96, p100.

Transportation Update, Casey Dinges, CE Jan. 96, p98. Trust Fund Vote in House, Casey Dinges, CE June 96, p100.

Water Resources Legislation, Martin Hight, CE Sept. 96, p116.

The 1993 Flood: A Vindication of Federal Levees and Reservoirs or A Call for "Back to Nature"? Richard J. Di-Buono and Gary R. Dyhouse, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p163-164.

Hydraulic Performance of Open Channel Breaching, Juan A. González and Ben Chie Yen, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p334-339.

Protecting Dredged Material Containment Levees Along the Houston Ship Channel, Deron N. Austin and Marc S. Theisen, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3121-3128.

Reliability Applied to Levee Seepage Analysis, Douglas A. Crum, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p946-949.

Reliability Assessment of Dike and Levee Embankments, Thomas F. Wolff, Edward C. Demsky, Jeffrey Schauer and Edward Perry, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p636-650.

Reliability of a Box Culvert Structure under a Levee during Project Floods, Robert C. Patev and Mary Ann Leggett. (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene

Z. Stakhiv, ed., 1996), p118-133.

Risk Analysis of Levee Closures Using Range/Confidence Estimates, W. D. Rowe and Michael Burnham. (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p367-387.

Leveling by GPS Relative Positioning with Carrier Phases, Joz Wu and Shiou-Gwo Lin, SU Nov. 96, p145-157.

Liability
ASCE Task Group Lays Foundation for Structural Institute,
Eric Rasmussen, NE June 96, p14.
CERCLA Liability and the Environmental Professional—
An Overview of Judicial Developments, John J. Allen,
(Civil Engineers Influencing Public Policy, Maureen K.
Cotton, ed., 1996), p35-41. Clause in Contract Does Not Preclude Other Damages, CE

Aug. 96, p24.

Design-Build Limitations of Liability Are Successful, Michael C. Loulakis and William L. Cregger, CE Jan. 96,

Engineers Seek Better Way to Market New Building Tech-nology, CE Sept. 96, p26-27. Ethics, Uncertainty and Postaudits, Charles G. Gunnerson, CE Dec. 96, p27.

Firms Form Brownfield Alliance, CE Dec. 96, p22.

Guarding Against Litigation, Andrew Frano, ME July/Aug. 96, p28-32. Hard Cases Make Bad Law, Carol J. Patterson, ME May/ June 96, p25-28.

Liability of Engineers When Wetlands Laws Change, Peter J. Coote, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p970-975.

Pay-When-Paid Risks are Limited, CE Aug. 96, p24.
Risk in Geotechnical Engineering for Embankment Dams,
Gil M. Lawton and Michael P. Forrest, (Uncertainty in

Gil M. Lawton and Michael P. Forrest, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p550-562.
Risky Business, ME Nov./Dec. 96, p12.
Standardizing Environmental Assessments: A Practical Perspective, J. R. Marsh, K. W. Green and T. Dong, EE Mar. 96, p222-226.
Statute of Limitations for Civil Engineering Liability.

Statute of Limitations for Civil Engineering Liability, Robert W. Day and Michael M. Angello, El Apr. 96,

Subcontractor Not Responsible, CE Mar. 96, p24.

Supervise, Inspect, or Observe? The Structural Engineer's Role in Construction, Otto Avvakumovits, SC Aug. 96, p79-80.

Wastewater and Condo Jobs Are Highest Risks, CE Dec.

Watch Your Step, CE May 96, p24.

Claims Analysis from Risk-Retention Professional Liability Group, Jack R. Janney, C. Roy Vince and Jack D. Mad-sen, CF Aug. 96, p115-122. No Subcontractor Indemnity for Contractor's Negligence,

CE Sept. 96, p28.

Professional Liability — An Approach that Works, John G. Tawresey, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1288-1295.

White River Fish Screen Project Planning and Design, Morton D. McMillen and Wayne Porter, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl 123-1128.

Licensing

391

Are There Benefits to Continuing Professional Develop-ment? Russell J. Kehl, CE Oct. 96, p52-53.

Cramming, CE Oct. 96, p11.

Final WIPP Compliance Criteria (40 CFR Part 194), Mary Kruger and Elizabeth Forinash, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p224-225.

Late License Acceptable, CE Sept. 96, p28-29.

Licensed to Practice, CE July 96, p27

NAFTA Pact May Change as U.S. Engineers Mull Licens-ing Details, NE May 96, p16.

Need to Understand Foreign Education in Evaluating for P.E. Licensure, Joe O. Akinmusuru and Bosede O. Akin-

musuru, EI Jan. 96, p26-30. NRC's Refocused Prelicensing High-Level Waste Regula-tory Program, M. V. Federline, R. L. Johnson and J. T. Greeves, (High Level Radioactive Waste Management,

Technical Program Committee, 1996), p196-198.

Probabilistic Evaluation of Postclosure Criticality Events Internal to the Waste Package, Peter Gottlieb and John R. Massari, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p345-347.

Quality Assurance Plays a Key Role in Getting the Waste Isolation Pilot Plant to Operational Status, R. Dennis Brown, (High Level Radioactive Waste Management,

Technical Program Committee, 1996), p214-216.

Recommendations from EPA's Review Committee on WIPP, Chris G. Whipple, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p226-227.

Regulatory Perspective on Future Climates at Yucca Mountain, Neil M. Coleman, Norman A. Eisenberg and David J. Brooks, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p255-257.

Regulatory Perspective on NAS Recommendations for Yucca Mountain Standards, Stephan J. Brocoum, Miguel A. Lugo, Steven P. Nesbit, Paul M. Krishna and James A. Dungit, (High.) A. Duguid, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p272-273.

Review of the Performance Assessment in the WIPP Draft Compliance Application, William W.-L. Lee, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p228-230.

Screening, Combining and Tracking Features, Events and Processes in WIPP Performance Assessments, D. A. Galson, D. G. Bennett, R. D. Wilmot, D. R. Anderson and Peter N. Swift, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p231-

Status of Thermal Loading Evaluations for a Potential Repository, Steven F. Salerlie, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p442-444.

Use of Expert Judgment in the HLW Regulatory Program: U.S. NRC Staff Draft Guidance, Janet P. Kotra, Michael P. Lee, Norman A. Eisenberg and Aaron R. DeWispelare, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p247-249.

Use of Limited Information in a License Application to Construct a Repository, J. Michael McGarry, III and F. Stanley Echols, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p201-204.

Life cycles

Bridge Corrosion Cost Model Implementation and Coating Maintenance Model Using Dynamic Programming, C. K.
Tam and S. F. Stiemer, CF May 96, p57-66.

Development of Bridge Corrosion Cost Model for Coating Maintenance, C. K. Tam and S. F. Stiemer, CF May 96,

Economic Evaluation of Design Codes—Case of Seismic Design, A. Warszawski, J. Gluck and D. Segal, ST Dec. 96, p1400-1408.

The Electronic Highway System for the Building Industry Paul Mark Evans, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p262-272.

Exterior Cladding Methods: A Technoeconomic Analysis, Igal M. Shohet and Alexander Laufer, CO Sept. 96, p242-247.

Framework for PMS Using Mechanistic Distress Submodels, David K. H. Chua, TE Jan./Feb. 96, p29-40.

Infrastructure Obsolescence and Design Service Life, Andrew C. Lemer, IS Dec. 96, p117-118

Integrating Information with 3D Models for Facility Life-Cycle Support, A. B. Cleveland, Jr., (Analysis and Com-putation, Franklin Y. Cheng, ed., 1996), p253-261.

Life-Cycle Cost Analysis with Natural Hazard Risk, Steph-anie E. Chang and Masanobu Shinozuka, IS Sept. 96,

p118-126.

Life-Cycle Costing in Municipal Construction Projects, David A. Arditi and Hany M. Messiha, IS Mar. 96, p5-

Making Effective Use of Construction Lessons Learned in Project Life Cycle, Nabil A. Kartam, CO Mar. 96, p14-

Reducing the Vulnerability of Transmission Lines in Hurri-cane Regions by Choosing Minimum Life Cycle Cost Designs, Peter J. Vickery and Lawrence A. Twisdale, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p245-246.

A Software Architecture for Concurrent Lifecycle Design and Construction, Nosa F. O. Evbuomwan and Chimay J. Anumba, (Computing in Civil Engineering, Joge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p424–430.

Mars Sample Return Using In-Situ Propellant Production, David I. Kaplan, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p717-723

The Solar System Cruiser—Interstellar Precursor, Divya Chander, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p302-310.

The Surface Extreme Environment Dwelling System (SEEDS) for Mars, Kurt Anthony Micheels, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1020-1026.

Life support systems
Control Systems Governing Gravity-Dependent Plant
Growth, C. Duran, D. Flores, J. D. Smith and G. W.
Morgenthaler, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1095-

Design of a Multi-Generational, Interstellar Ship, Divya Chander, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p311-320.

In Integrated Lunar/Martian-Engineered Closed/ Controlled Ecosystem, Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1083-1089.

Plant Growth Experiments in Johnson Space Center's Advanced Life Support System Program, John E. Gruener, Douglas W. Ming, Daniel J. Barta and Donald L. Henninger, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1090-1094.

Lifeline systems

Assessing the Local Geologic Component of the Earth-quake Hazard in the Portland Metropolitan Area, Mat-thew A. Mabey and Ian P. Madin, (Natural Disaster Re-duction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p177-178.

Biopositive City as Means for Natural Disaster Reduction, Alexandr Tetior, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p329-

Common and Variable Characteristics in Spatially Record-ed Seismic Ground Motions, Ouqi Zhang and Aspasia Zerva, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p628-631.

Lifeline Failure and Disaster Preparedness of Businesses, Melvin J. D'Souza, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p105-106

Mitigation of Windstorm Disasters, Kishor C. Mehta and Ernst W. Kiesling, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p205Multi-Hazard Risk Assessment of Lifelines: Methodologies and Research Needs, Erik Vanmarcke and Ricardo Palma, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p359-360.

Railroad Bridge Behavior during Past Earthquakes, William G. Byers, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p175-182.

Vulnerability of Pacific Northwest Port-Related Lifeline

Structures Based on Observations from the Kobe Earthquake of January 17, 1995, David B. Swanson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p9-10.

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Dam Construction in Northern Environment: A Numerical Study, Mu Shen and J.-M. Konrad, (Cold Regions Engi-neering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p736-744.
Tilt of Stationary Capsule in Pipe, Chih-Chiang Cheng and Henry Liu, HY Feb. 96, p90-96.

ALPS: The Automated Lift Planning System, Mike Williams and Craig Bennett, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p812-817.

Multiple Heavy Lifts Optimization, Kuo-Liang Lin and Carl T. Haas, CO Dec. 96, p354-362.

'Cold Fire' Degrades Organic Contaminants, CE Mar. 96, p15.

ight attenuation

Structural Aerodynamics (Available only in Focus on Structures Special Edition), Bob Lang and Hugh Muirhead, CE Jan. 96, p3A-7A.

Light rail transit

Cleveland Extends Light Rail on the Waterfront, CE Nov. 96, p20.

Green Light, John Casey, CE May 96, p56-59.

Metro Green Lie Opens in Los Angeles, CE Feb. 96, p.20.

A Model for the Design and Control of Urban Electric Traction Systems, O. Bottauscio and G. Farina, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filipping of 1000, 2020, 47. pi, ed., 1996), p39-43.

New on the Web, CE May 96, p8. Portland's Light Rail Goes Underground, Philip M. Rice and Joseph P. Gildner, CE Dec. 96, p32-35 San Francisco International Airport Light Rail System, Wil-

liam Leder and Gene Bordegaray, (Meeting the Chal-lenge: Rebuilding Inner City Airports, Prianka lenge: Rebuilding Inner Cit Seneviratne, ed., 1996), p106-114.

A Systematic Review of Busways, David R. Martinelli, TE May/June 96, p192-199.

Lightning Safety: A Risk Management Approach, Richard Kithil, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p17-18.

Dynamic Properties of Cohesive Soils Treated with Lime, K. Fahoum, M. S. Aggour and F. Amini, GT May 96,

Performance of Stabilized Base Course at DFW, William P. Grogan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p308-317.

Lime soil mixtures

Soil Stabilization Utilizing Alternative Waste Materials, Greg Heckel and Riyad Wahab, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p318-327.

Lime soil stabilization

Reaction Products Formed in Lime-Stabilized Marine Clays, S. Narasimha Rao and G. Rajasekaran, GT May 96, p329-336.

Artificial Neural Networks and Durability of Sphinx Lime-stone, Jayanta K. Bandyopadhyay, Srinivas S. Yerrapra-gada and K. Lal Gauri, MT Aug. 95, p174-177.

Geophysical Characterization of Florida Limestoneeophysical Characterization of Fibrina Lintesone—Rinestigative Case History, D. S. Saxena, R. M. Dickinson and A. Saxena, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p73-85.

Pyramid Power, Vladimir Novokshchenov, CE Nov. 96,

p50-53.

Rethinking Foundation Design in Karst Residuum, Ray-mond A. DeStephen and Steven E. Conner, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p49-56.

Limit analysis

Bearing Capacity of Footings over Two-Layer Foundation Soils, Radoslaw L. Michalowski and Lei Shi, GT May

Limit Design of Axisymmetric Shells with Application to Cellular Cofferdams, P. de Buhan and A. Corfdir, EM Oct. 96, p921-929.

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, p2288-2309.

Limit equilibrium

State of the Art: Limit Equilibrium and Finite-Element Analysis of Slopes, J. Michael Duncan, GT July 96, p577-596.

Limit states

Application of the Limit-State Method for Probabilistic Unsaturated Flow Modeling, Yanyong Xiang and Srikanta Mishra, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p108-110.

Bayesian Assessment and Selection of Models for Structural Reliability Analysis, Philippe Geyskens and Armen Der Kiureghian, (*Probabilistic Mechanics & Structural Reliability*), Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p566-569.

BDS Implementation of AASHTO LRFD Design Philoso-phy, Toorak Zokaie, Richard Pickings and Karim Valimohamed, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p453-463.

Combining Snow and Earthquake Loads for Limit States Design, Bruce Ellingwood and David Rosowsky, ST Nov. 96, p1364-1368.

Development of a Miter Gate Reliability Model, D. B. Cleary, C. J. Hookham and J. W. Waller, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p862-865.

Development of Design Factors for Redundant Concrete Bridges, Michel Ghosn, Youhong Hang and Fred Moses, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p716-719.

Effects of Load Path and Load Correlation on the Reliability of Concrete Columns, Dan M. Frangopol, Yutaka Ide and Ichiro Iwaki, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p206-209.

Environmental Engineering Forum, Dee Ann Sanders, EE Nov. 96, p957.

Failure of Fiber-Reinforced Granular Soils, Radoslaw L. Michalowski and Aigen Zhao, GT Mar. 96, p226-234.

Ignorance Factors Using Model Expansion, Marc A. Maes, EM Jan. 96, p39-45.

Limit State Design Method of Structural System Using Reiliability-Based Optimization and Efficient Monte-Carlo Simulation Technique, Wataru Shiraki, (Building an In-ternational Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p635-

Load Space Formulation for Reliability Estimation of Complex Structures, X. L. Guan and R. E. Melchers, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p688-691.

Loading and Material Behavior Effects on System Redun-dancy, Dan M. Frangopol and Keito Yoshida, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p674-681.

po/4-081. Optimum Reliability-Based Design Earthquake Load, Jun Kanda and Khaled A. Ahmed, (*Probabilistic Mechanics* & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996, p. 194-197. Probabilistic Evaluation of Wood-Joist Floor Vibrations,

Omar A. Jaradat, Arshad A. Al-Foqaha'a and Kenneth J. Fridley, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p342-345

Probability-Based Design Requirements for Longitudinally Stiffened Panels in Ship Structures, G. J. White, B. M. Ayyub, A. E. Mansour and P. H. Wirsching, (Probabilis-tic Mechanics & Structural Reliability, Dan M. Frango-

tic Mechanics & Structural Reliability, Dan M. Frango-pol, ed. and Mircea D. Grigoriu, ed., 1996, p110-113.

Proposed Limit States Design Provisions for Masonry, Mark B. Hogan, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p345-354.

Reliability Analysis of Masonry Walls, A. S. Al-Harthy and D. M. Frangopol, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu ed. 1996) n338-341 goriu, ed., 1996), p338-341. Reliability of Post-Tensioned Concrete Slab Bridges, Sami

W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p712-715.

Resistance Factors for High Strength Blind Bolts, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p784-787.

Safety of Concrete Members Designed by ACI 318 Chapter 9 and Appendix C Load Combinations, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p218-221.

p218-221. Sensitivity Analysis of the Seismic Capacity for a RC Silo Due to Variance of Its Material Properties, Takeshi Kitahara and Hitoshi Seya, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p530-533. Target Safety Level for Bridges, Andrzej S. Nowak and Vijay K. Saraf, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p696-703.

Limiting factors

Statute of Limitations for Civil Engineering Liability, Robert W. Day and Michael M. Angello, El Apr. 96,

Evaluation of Equivalent Linear Analysis Methods of Bridge Isolation, J. S. Hwang, ST Aug. 96, p972-976.

Linear programming
Basic Concepts of L₁ Norm Minimization for Surveying
Applications, John Marshall and James Bethel, SU Nov.
96, p168-179.

Economic Preliminary Design of Bridges with Prestressed 1-Girders, Sami M. Fereig, BE Feb. 96, p18-25. Editor's Note, Thomas L. Theis, EE Sept. 96, p778.

LP Type Dynamic On-Ramp Traffic Control Model for Urban Expressway, Yasuo Asakura, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p434-438.

Mixed Optimization Technique for Large-Scale Water-Resource Systems, Marcello Niedda and Giovanni M.

Sechi, WR Nov./Dec. 96, p387-393.

Modeling Reservoir Espaporation Losses by Generalized Networks, Yung-Hsin Sun, Shu-li Yang, William W-G. Yeh and Peter W. F. Louie, WR May/June 96, p222-226. Optimal Regional Scheduling of Solid Waste Systems. I: Model Development, Jess W. Everett and Abhijit R.

Modak, EE Sept. 96, p785-792.
Optimal Regional Scheduling of Solid Waste Systems. II:
Model Solutions, Abhijit R. Modak and Jess W. Everett,
EE Sept. 96, p793-799.

Optimization of a Ground-Water Injection/Extraction System, Anand Prakash, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1167-1172.

Datinana, Cu., 1990, p.1107-1172.
Optimum Storage Reallocation and Gate Operation in Multipurpose Reservoirs, Abbass Afshar and Hamid Morad-Khani, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.1962-1967.

13700, PJ706-1307.
Solving Mathematical Programming Problems Using Genetic Algorithms, Siripong Malasri, Jennifer R. Martin and Ricardo A. Medina, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p233-239.

Linear systems

Comparison of LQR and H. Algorithms for Vibration Control of Structures in Seismic Zones, H. Allison Smith and J. Geoffrey Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshi

Crossing Rate Analysis of NonGaussian Response of Linear Systems, M. D. Pandey and S. T. Ariaratnam, EM

June 96, p507-511.

Dynamically Modified Linear Structures: Deterministic and Stochastic Response, Giuseppe Muscolino, EM Nov. 96,

Minimum Weight of Control Devices with Bounded LQG Control, Alexander A. Bolonkin, Duane E. Veley and Narendra S. Khot, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1230-1236.

Modal Analysis of Linear Dynamic Systems: Physical Inheterpretation, Anil K. Chopra, ST May 96, p517-527.

Modal Coupling and Accuracy of Modal Strain Energy

Method, Alessandra Zambrano, 10sé A. Inaudi and

James M. Kelly, EM July 96, p603-612.

Moment Equations for Linear Systems Subjected to Poly-nomials of Filtered Poisson Processes, M. Grigoriu and F. Waisman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p262-265.

Probability Density Function of Linear Systems Subjected to a Random Stream of Poisson Pulses, G. Muscolino and G. Ricciardi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p388-391.

Random Vibration of Mechanical and Structural Systems by T. T. Soong and Mircea Grigoriu, Dan M. Frangopol, EM Feb. 96, p184.

Stochastic Linearization of a Boolean Hysteresis Model, S. Dobson, M. Noori, Z. Hou and M. Dimentherg, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p502-505.

Time-Delay Linear Systems with Gaussian White Noise Input, M. Grigoriu, T. T. Soong and A. Reinhorn, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p422-425.

Linearity

Conditional Linearization in Nonlinear Random Vibration, R. N. Iyengar and D. Roy, EM Mar. 96, p197-200.

Analysis and Design of Liner System for a Large Ash Re-sidual Landfill, Yun Zhou, Luis E. Vallejo and Daniel C. Hsu, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Valle-jo, ed. and L. N. Reddi, ed., 1996), pl 14-129.

Case History of a Lined Wastewater Treatment Lagoon Failure, Kelly S. Merrill and Matt Stephl, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p518-532.

Detecting Leaks Electronically (Available only in Geo/ Environmental Engineering Special Issue), Rita Robison, CE Nov. 96, p16A.

Effect of Welding on a High-Density Polyethylene Liner, Reda M. Bakeer and Michael E. Barber, MT May 96, p94-100.

Modeling Impact of Small Kansas Landfills on Underlying Aquifers, Marios Sophocleous, Nicholas G. Stadnyk and Miles Stotts, EE Dec. 96, p1067-1077.

Predicting the Level of Frost Penetration into Landfill Covrestruing the Level of Frost Penetration into Landfill Cov-ers, Horace K. Moo-Young, Jr., Thomas F. Zimmie and Morris H. Morgan, III, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Impera-tive for the 21st Century, Robert F. Carlson, ed., 1996), p745-756.

Waste Not in Wisconsin, David A. Rudig, CE June 96, p68-70.

Yield Acceleration of Lined Landfills, Scott E. Shewbridge, GT Feb. 96, p156-158.

Construction Through Crude Oil, Kyle R. Ott, Richard J. Switalski and Dale J. Sadowski, CÉ Feb. 96, p56-59.

Turnback Project Moves Ahead, David A. Sutter, James P. Connolly and Ching Wu, CE Jan. 96, p36-39.

Liquefaction

Bayesian Liquefaction Resistance Analysis, Wilson H. Tang and Mauricio Angulo, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.

Roth, ed., 1996), p1195-1209.

Rotti, ed., 1990, pl 195-1200. Determination of Post-Liquefaction Strength: Steady State vs Residual Strength, S. Thevanayagam, C. C. Wang and K. Ravishankar, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1210-1224.

Evaluation of Soil Liquefaction by Energy Principles, J. Ludwig Figueroa, Adel S. Saada, Liqun Liang and Nitin M. Dahisaria, GT Sept. 94, p1554-1569.

Failure of Tapo Canyon Tailings Dam, Leslie F. Harder, Jr. and Jonathan P. Stewart, CF Aug. 96, p109-114.

Fluidized Drilling for Lunar Mining Applications, Brad R. Blair, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p813-820.

Influence of Spatial Variability of Soil Properties on Seismically Induced Soil Liquefaction, Radu Popescu, Jean H. Prevost and George Deodatis, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1098-1112.

Liquefaction and Postliquefaction Behavior of Sand, Y. P. Vaid and J. Thomas, GT Feb. 95, p163-173.

Liquefaction Behavior of Sand-Gravel Composites, Mark D. Evans and Shengping Zhou, GT Mar. 95, p287-298.

Liquefaction of Reclaimed Island in Kobe, Japan, Ahmed-W. Elgamal, Mourad Zeghal and Ender Parra, GT Jan. 96, p39-49.

Magnitude Scaling Factors for Soil Liquefaction Evalua-tions, Ignacio Arango, GT Nov. 96, p929-936.

Neural-Network Modeling of CPT Seismic Liquefaction Data, Anthony T. C. Goh, GT Jan. 96, p70-73.

Non-Statistical Uncertainties in Liquefaction Risk Assessment, Khalid M. El Zahaby and M. S. Rahman, (Uncertainty in the Geologic Environment: From Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1068-1082.

Performance of San Fernando Dams During 1994 North-ridge Earthquake, J. P. Bardet and C. A. Davis, GT July 96, p554-564.

Performance of Two Reservoirs during 1994 Northridge Earthquake, C. A. Davis and J. P. Bardet, GT Aug. 96, p613-622.

Reconsideration of Initiation of Liquefaction in Sandy Soils, Catherine E. Fear and Edward C. McRoberts, GT Mar. 95, p249-261.

Seismic Liquefaction Potential Assessed by Neural Net-works, Anthony T. C. Goh, GT Sept. 94, p1467-1480.

Simulation of Multi-Dimensional, Multi-Variate, Non-Gaussian, Homogeneous Stochastic Fields with Applications to Soil Liquefaction, Radu Popescu, George Deodatis and Jean H. Prevost, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Crigoriu, ed., 1996), p808-811. Strain Level and Uncertainty of Liquefaction Related Index Tests, D. Roy, R. G. Campanella, P. M. Byrne and J. M. O. Hughes, (*Uncertainty in the Geologic Environment:* from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1149-1162.

System Identification and Its Application to Estimating Soil Properties, Steven Glaser, GT July 95, p553-560.

Vulnerability of Pacific Northwest Port-Related Lifeline Structures Based on Observations from the Kobe Earthquake of January 17, 1995, David B. Swanson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p9-10.

Analysis of Liquid-Core Cylindrical Acoustic Waveguides Embedded in Solid Media, Hung-Liang (Roger) Chen and Yidong He, EM Jan. 96, p1-9.

Flow Induced Charging of Liquids in Reduced Gravity, Donald Pettit, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p545-

Laterally Excited Flexible Tanks with Nonuniform Density Liquid, Yu Tang, EM Oct. 96, p948-956.

Mechanisms Involved in Vibratory Destabilization of NAPL Ganglia in Sands, Lakshmi N. Reddi and Hui Wu, EE Dec. 96, p1115-1119

Probabilistic Simulation of Decomposition of Liquid Pro-pellant, N. R. Moore, N. W. Ferraro, D. H. Ebbeler, L. E. Newlin, J. J. Blandino, R. A. Beaudet, C. M. Moran and S. H. Moore, (Probabilistic Mechanics & Structural Re-II. Stoole, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p640-643.

Geoenvironmental Evaluation of Geological Formations of Lithuania for Radioactive Waste Disposal, Valentinas Kadūnas and Jurgis Valūnas, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p83-85.

ADR, 25 Years of Progress, Robert A. Rubin, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p21-29.

Article Should Be Required Reading, James Warner, P.E., CE Nov. 96, p32.

ASCE's Role in the Work of the National Construction Dispute Resolution Committee of the American Arbitra-tion Association, Robert F. Borg, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), pl. 9.

Construction Dispute Resolution Endorsed, CE June 96, p8. Design-Build Joint Venture Liability, Michael C. Loulakis and William L. Cregger, CE May 96, p32.

Editor's Note, Kenneth L. Carper, CF Feb. 96, p1.

Guest Editorial, David H. Nicastro, P.E., CF Feb. 96, p2-4. Hard Cases Make Bad Law, Carol J. Patterson, ME May/ June 96, p25-28.

A Landslide of Litigation, Walter F. Crampton, P.E., CE Oct. 96, p61-63.

Practitioners' Forum, Gary P. Ten Eyck, AE Mar. 96, p1-2. Risk Management Principles of Transportation Facility Design Engineering, Andrew G. Cooley, TE May/June 96, p207-209.

Suspicious Inspection Begs ASCE Intervention, Marshall D. Collins, CE Dec. 96, p28.

Upheavals in Soil Firms, CE Sept. 96, p11.

What Is the Standard of Care? Eugene A. Miller, ME Nov./Dec. 96, p40-46.

Littoral currents

Littoral currents

Comparison of Computed Three-Dimensional WaveDriven Currents with Measurements, Philippe Péchon
and Arnaud Desitter. (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p513-520.

Design of a Laboratory Facility for Longshore Sediment Transport Research, Julie D. Rosati, David G. Hamilton, Jimmy E. Fowler and Jane M. Smith, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p771-782.

Development of a Large-Scale Tidal Circulation Model for the Mediterranean, Adriatic and Aegean Seas, D.J. Mark and N. W. Scheffner, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p168-179.

Evaluation of the UK Coastal Research Facility, Richard R. Simons, Richard J. S. Whitehouse, Ruairi D. MacIver, Jonathan Pearson, Paul B. Sayers, Yingdao Zhao and Adrian R. Channell, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p161-172.

Finite Amplitude Shear Wave Instabilities, H. Tuba Özkan and James T. Kirby, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p465-476.

Longshore Currents Over Barred Beaches, A. J. H. M. Reniers, E. B. Thornton and T. C. Lippmann, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p413-424.

Longshore Nonuniformities of Nearshore Currents, F. E. Sancho, I. A. Svendsen, A. R. Van Dongeren and U. Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p425-436.

One-Dimensional Modelling of Individual Breaking
Waves, K. M. Wijnberg and L. C. van Rijn, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p341-354.

Permeable Pile Groins, Arved J. Raudkivi, WW Nov./Dec. 96, p267-272.

A Quantitative Skill Assessment of Numerical Hydrodynamic Models of Coastal Currents, Timothy R. Keen and Scott M. Glenn, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p26-40.

A Quasi-3D Model of Longshore Currents, A. F. Garcez Faria, E. Thornton and T. Stanton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p389-400.

Simulating the Transport of an Algae Bloom off the West Coast of Vancouver Island, M. G. G. Foreman, J. F. R. Gower, R. E. Thomson and J. Y. Cherniawsky, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p180-191.

Simulations of the Maine Coastal Current, Monica J. Hol-boke and Daniel R. Lynch, (Estuarine and Coastal Mod-eling, Malcolm L. Spaulding and Ralph T. Cheng,

1996), p156-167.

Spatial and Temporal Fluctuations of Nearshore Currents Induced by Directional Random Waves, Yoshimi Goda and Tetsuya Mizusawa, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p269-

Spingat, Frank, Hans-H. Dette and Karsten Peters, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p477-488.

Vertical Profiles of Longshore Currents and Bed Shear Stress, E. B. Thornton, C. M. C. V. Soares and T. P. Stanton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p449-459.

Vorticity and Eddies in the Surf Zone, D. Howell Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p460-464.

Wave Stress and Longshore Current on Barred Profiles, T. C. Lippmann, E. B. Thornton and A. J. H. M. Reniers, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p401-412.

Littoral drift

Changes of Sand Grain Distribution in the Surf Zone, Kazumasa Katoh and Shin-ichi Yanagishima, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p639-650.

A Bridge Live Load Model Including Overloads, Gongkang Fu and Osman Hag-Elsafi, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p34-37.

Bridge Rehabilitation Permits Higher Live Loads, Dennis W. Stolldorf, P.E. and Thomas A. Holm, P.E., (Materials for the New Millennium, Ken P. Chong, ed., 1996). p1082-1090.

Design Live Loads for Crowds in Motion, A. Ebrahimpour and R. L. Sack, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p420-427.

Determining Bridge Inspection Requirements for Fatigue Damage Using Reliability, Theodore Hopwood, II, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Fatigue-Load Models for Girder Bridges, Jeffrey A. Laman and Andrzej S. Nowak, ST July 96, p726-733.

Lateral Distribution Factor from Bridge Field Testing, Chung C. Fu, Maged Elhelbawey, M. A. Sahin and David R. Schelling, ST Sept. 96, p1106-1109.

Measuring Coherency of Human-Induced Rhythmic Loads Using Force Plates, A. Ebrahimpour and L. L. Fitts, ST July 96, p829-831.

Stretching Span Capability of Prestressed Concrete Bridges under AASHTO LRFD, Yohchia Chen and Alex Aswad,

BE Aug. 96, p112-120.

Verification of Site-Specific Live Load on Bridges, Sangjin Kim, Andrzej S. Nowak and Roger Till, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p214-217.

Load bearing capacity
Drilled Shaft Load Testing Los Angeles Coliseum, Paul R. Schade and Barry J. Meyer, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p574-581.

Editor's Note, David Darwin, ST Jan. 96, pl.

New High-Performance Concrete in Canadian Foot Bridge, CE July 96, pl 1.

oad combinations

Combining Snow and Earthquake Loads for Limit States Design, Bruce Ellingwood and David Rosowsky, ST Nov. 96, p1364-1368.

Load Combinations and Load Factors for Construction, David V. Rosowsky, CF Nov. 96, p175-181.

Minimum Design Loads for Buildings and Other Struc-tures, Revision of ANSI/ASCE 7-93 (St No. 95-007), American Society of Civil Engineers, 1996,

American Society of Civil Engineers, 1200, 0-7844-0092-X, 220pp.

Thin-Walled Prestressed Concrete Members under Combined Loading, B. M. Luccioni, J. C. Reimundín and R. Danesi, ST Mar. 96, p291-297.

Load criteria

Optimal Design of Prestressed Concrete Transmission Poles, Fatma Y. Kocer and Jasbir S. Arora, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p111-122.

Load distribution

Design Methodology for Strengthening of Continuous-Span Composite Bridges, H. A. El-Arabaty, F. W. Klaiber, F. S. Fanous and T. J. Wipf, BE Aug. 96, p104-111.

Effect of Sidewalks and Railings on Wheel Load Distribu-tion in Steel Girder Bridges, K. M. Tarhini, M. Mabsout and M. Kobrosly, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p881-886.

Lateral Distribution Factor from Bridge Field Testing, Chung C. Fu, Maged Elhelbawey, M. A. Sahin and David R. Schelling, ST Sept. 96, p1106-1109. Shear and Reaction Distributions in Continuous Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE Nov. 96, p155-165.

Theoretical Joist-Rupture Sequences in Wood-Floor Sys-tem Model, Timothy A. Philpot and David V. Rosowsky, ST Oct. 96, p1225-1233.

Load factors

Alternate Load Factor (Autostress) Design for Short to Medium Span Continuous Steel Bridges, C. C. Fu, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p298-306.

Calibration of Current Factors in LRFD for Steel, David V.

Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

Equivalent Single-Axle Load Factor for Rigid Pavements, Pin-Sien Lin, Yuan-Ting Wu, Tien-Kuen Huang and C. H. Juang, TE Nov/Dec. 96, p462-467. Extreme Wind Distribution Tails: A "Peaks over Threshold" Approach, E. Simiu and N. A. Heckert, ST May 96, p539-547.

Load Combinations and Load Factors for Construction, David V. Rosowsky, CF Nov. 96, p175-181.

Method for Uncoupling Load Factor Determination, Duane E. Castaneda, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p222-225.

Optimum Reliability-Based Design Earthquake Load, Jun Kanda and Khaled A. Ahmed, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p194-197. Proposed Limit States Design Provisions for Masonry,

Mark B. Hogan, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p345-354.

Standard for Load and Resistance Factor Design (LRFD) for Engineered Wood Construction (St No. 95-016), American Society of Civil Engineers and American For-est & Paper Association, 1996, 0-7844-0041-5, 125pp.

Stretching Span Capability of Prestressed Concrete Bridges under AASHTO LRFD, Yohchia Chen and Alex Aswad, BE Aug. 96, p112-120.

load resistance

Liquefaction Behavior of Sand-Gravel Composites, Mark D. Evans and Shengping Zhou, GT Mar. 95, p287-298.

Natural Disaster Losses to Conventional Construction and their Mitigation (An Insurance Company Response to Catastrophic Losses Since Hurricane Hugo), Edward M. Laatsch, Rose Geier Grant and Laird Macdonald. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p778-785.

VSL's Experience with Post-Tensioned Masonry, Hans Rudolf Ganz, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p25-36.

Wind Protection Tie-Downs for Manufactured Homes, John E. Pearson, Anatol Longinow and Donald F. Meinheit, SC Nov. 96, p126-140.

Load resistant design factor

Load resistant design accordance Achieving Reliable Designs for Pipelines Traversing Unstable Slopes, Dimitri A. Grivas, Chakravarthy Bhagvati, B. Cameron Schultz, Verne C. McGuffey, Gregg O'Neil and Gordon Simmonds, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p426-433.

Alternate Load Factor (Autostress) Design for Short to Me-dium Span Continuous Steel Bridges, C. C. Fu, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p298-306

BDS Implementation of AASHTO LRFD Design Philosophy, Toorak Zokaie, Richard Pickings and Karim Vali-mohamed, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p453-463.

Seridge Design by the AASHTO LRFD Bridge Design Specifications, Dennis R. Mertz and John M. Kulicki, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1-8.

Comparison of ASD and LRFD Design of an Office Building Supported by Arches, King-le Chang and Shuang Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p550-557.

A Comparison of Seismic Design Using ASD and LRFD, Jeffrey R. Soulages, Jon A. Heintz and James O. Malley, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p542-549.

1990, poa2599.
Cross-Frame Diaphragms for Steel Girder Bridges Using the AASHTO LRFD Bridge Design Specifications, Dennis R. Mettz, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p307-312.

- Design Model Bias Factors for Driven Piles from Experiments at NGES-UH, Gil L. Yoon and Michael W. O'Neill, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p759-
- Development of Design Factors for Redundant Concrete Bridges, Michel Ghosn, Youhong Hang and Fred Moses, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Editor's Note, David Darwin, ST Aug. 96, p843-844.

Effect of Load Models and Limited Data on Load and Resistance Factors for Fatigue Design, Clifford H. Lange and Steven R. Winterstein, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p58-61.

Method for Uncoupling Load Factor Determination, Duane E. Castaneda, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p222-225.

On Communicating Hydrologic Risk, Rafael G. Quimpo, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene

Z. Stakhiv, ed., 1996), p265-271.

Probability Based Design Requirements for Unstiffened Panels in Ship Structures, Bilal M. Ayyub, Gregory J. White, Alaa E. Mansour and Paul H. Wirsching, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p102-105

Reliability Based Design for Oil Country Tubular Goods, P. R. Brand, D. B. Lewis and M. A. Maes, (*Probabilistic* Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p534-537

Resistance Factors for High Strength Blind Bolts, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p784-787.

Target Safety Level for Bridges, Andrzej S. Nowak and Vijay K. Sarat, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p696-703.

Accelerated Evaluation of New Materials in Transportation Applications Using Advanced Technologies, Mark B. Snyder, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p505-509.

and Francesco Finppi, ed., 1770), p. 2007.

Behavior of Pile-Supported Dolphins in Marine Clay Under Lateral Loading, S. Narasimha Rao, V. G. S. T. Ramakrishna and G. Balarama Raju, GT Aug. 96, p607-612.

Behavior of Two Long-Span High Strength Concrete Pre-stressed Bridge Girders, Theresa M. Ahlborn, Carol K. Shield and Catherine W. French, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p141-152.

Cast-Iron-Column Strength in Renovation Design, Donald Friedman, CF Aug. 95, p220-230.

Cellular Rigid Pavement, John K. Bright and John R. Mays, TE Sept./Oct. 96, p381-387.

Control of Stacking Loads in Final Waste Disposal According to the Borehole Technique, Walter Feuser, Eike Bar-nert and Hendrik Vijgen, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p477-479.

p47/-4/9.
p47/-4/9.
Creeping Suspicion, Michael P. Bruen, Nicholas Pansic and M. I. Schwartz, CE May 96, p60-63.
Development of a Wireless Global Bridge Evaluation and Monitoring System (WGBEMS), Kenneth Maser, Robert Egri, Abba Lichtenstein and Steven Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p734-741.

Drilled Shaft Load Testing Los Angeles Coliseum, Paul R. Schade and Barry J. Meyer, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p574-581.

Equivalent Single-Axle Load Factor for Rigid Pavements, Pin-Sien Lin, Yuan-Ting Wu, Tien-Kuen Huang and C. H. Juang, TE Nov./Dec. 96, p462-467. Experimental Observation of Microstructural Behavior of

Concrete, Ahmed M. Farahat, Masashi Kawakami and

Tada-aki Tanabe, MT May 95, p87-95.

Load Testing and Strength Evaluation of a Non-Composite Steel Plate Girder Bridge, Y. Edward Zhou, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p884-

691. Long-Span Timber Trusses—Evaluating a Repair Method, Thomas E. Forsberg, SC May 96, p89-92. Not So Suspicious, H. Nierlich, CE Sept. 96, p30-31. Numerical Simulation of Permanent Deformation in Flexi-

Numerical Simulation of Permanent Deformation in Flexible Pavement Systems Subjected to Moving Loads, David J. Kirkner, Weixin Shen, Michael I. Hammons and Donald M. Smith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p430-433.

Proof Load Testing of Bridges, Vijay K. Saraf, Andrzej S. Nowak and Roger Till, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p526-529.

Reliability Framework for Managing Risk of Aging Structures, Bruce Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p590-597.

Riddle of the Riverbed, Kenneth D. Walsh, Robert E. Schock and Steven A. Jimenez, CE June 96, p64-67.

Sacramento River Pedestrian Bridge, Charles Redfield and

Sacramento River Pedestrian Bridge, Charles Redfield and Jiri Strasky, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p153-160.

Semicontinuous Mathematical Model for Bending of Multilayered Wire Strands, Claude Jolicoeur and Alain Car-

dou, EM July 96, p643-650.

Strain Localization in Confined High-Strength Concrete Columns, Daniel Cusson, François de Larrard, Claude Boulay and Patrick Paultre, ST Sept. 96, p1055-1061.

Strain Rate Effects on Stress-Strain Behaviour of Clay as Observed in Monotonic and Cyclic Triaxial Tests, Satoru Shibuya, Toshiyuki Mitachi, Akihiko Hosomi and Seong Chun Hwang, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p214-227.

Strengthening Requirements of Old, Timber Warren Trusses, H. C. Foo and G. Akhras, CF Aug. 96, p127-134

Structural Strength of Bridge Decks Reinforced with Welded Wire Fabric, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Sept. 96, p989-997.

Preter Chang, S.I. Sept. 30, p369-397.

Three-Dimensional Finite-Element Simulation of FWD Loading on Pavement Systems, W. Uddin, R. M. Hackett, P. Noppakumwijai and Z. Pan, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p284-294.

Use of Pasternak Foundation Model in Concrete Pavement Analysis, T. F. Fwa, X. P. Shi and S. A. Tan, TE July/

Aug. 96, p323-328.

Web Buckling in Thin Webbed Castellated Beams, Walid Zaarour and Richard Redwood, ST Aug. 96, p860-866.

Cement Among Grains, Jack Dvorkin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p869-872.
Difference between Load-Transfer Relationships for Later-

ally Loaded Pile Groups: Active P-Y or Passive P-8, M. F. Bransby, GT Dec. 96, p1015-1018.

Loading

Damage Assessment of Reinforced Concrete Structures through Acoustic Emission Monitoring, Christian C. Steputat and Sashi K. Kunnath, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p837-844.

Failure Criteria for Masonry Panels under In-Plane Loading, U. Andreaus, ST Jan. 96, p37-46.

Loading and Material Behavior Effects on System Redun-dancy, Dan M. Frangopol and Keito Yoshida, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p674-681.

Loading Cycles for Fatigue Reliability Assessment of Miter Gates at Navigation Locks on the Upper Mississippi River, Bilal M. Ayyub, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p854-857.

Loading Spectra for Railway Bridges under Current Operating Conditions, Daniel H. Tobias, Douglas A. Foutch and John Choros, BE Nov. 96, p127-134.

Method of Non-Linear Stochastic Dynamics - A Comparative Discussion, G. I. Schuëller and H. J. Pradlwarter, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p966-969.

Modeling the Lake Decatur Watershed in Illinois to Evalu-ate Effects of Best Management Practices on Nitrate Loading, Deva Borah, Misganaw Demissie and Laura Keefer, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p1681-1686.

Probability Density Function of Linear Systems Subjected to a Random Stream of Poisson Pulses, G. Muscolino and G. Ricciardi, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p388-391.

Proof Loads, Construction Error and the Reliability of Service Proven Structures, Mark G. Stewart, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p226-229.

Random Elastic Response Characteristics of Bar Structures by Monte Carlo Simulation, Michael Koutsoukis and Ed-mund S. Melerski, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p812-815.

Rate and Creep Effect on the Stiffness of Soils, Diego C. F. Lo Presti, Michele Jamiolkowski, Oronzo Pallara and Antonio Cavallaro, (Measuring and Modeling Time De-pendent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p166-180.

Reliability of Underground Pipelines Subject to Corrosion, M. Ahammed and R. E. Melchers, TE Nov./Dec. 94,

p989-1002

Statistical System Identification of Structures Using ARMA Models, Joel P. Conte and Satyendra Kumar, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p142-145.

Stochastic Damage Model for Brittle Materials Subjected to Monotonic Loading, S. Kandarpa, D. J. Kirkner and B. F. Spencer, Jr., EM Aug. 96, p788-795.

Strength and Reliability of Reinforced Concrete Columns with Sustained Loading, Stuart G. Reid, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p234-237.

Strongly Nonlinear Stochastic Response of a System with Random Initial Imperfections, Jiří Náprstek, (Probabilis-tic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p740-743.

Viscoelastic Modeling of Paper, Edmond P. Saliklis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p246-249.

Wind-Induced Fatigue Loading and Damage to Hip and Gable Roof Claddings, Y. L. Xu, ST Dec. 96, p1475-1483

Analysis of Concrete Pavements by Rectangular Thick-Plate Model, T. F. Fwa, X. P. Shi and S. A. Tan, TE Mar./Apr. 96, p146-154.

Optimizing Haul Unit Size and Number Based on Loading Facility Characteristics, Douglas D. Gransberg, CO Sept. 96, p248-253.

Loading history

Damage Evaluation in Steel Box Columns by Cyclic Load-ing Tests, Satish Kumar and Tsutomu Usami, ST June 96, p626-634

Nonlinear Behavior of Composite Columns Under Varying Load Histories, A. Dall'Asta, EM Aug. 96, p743-752.

Nonlinear Finite Element Reliability Analysis of Concrete, Dan M. Frangopol, Yong-Hak Lee and Kaspar J. Willam, EM Dec. 96, p1174-1182.

Optimizing Haul Unit Size and Number Based on Loading Facility Characteristics, Douglas D. Gransberg, CO Sept. 96, p248-253.

Loading rate

Brewery Wastewater Treatment in UASB Reactor at Ambi-ent Temperature, Yue-Gen Yan and Joo-Hwa Tay, EE June 96, p550-553.

Performance Evaluation of Overland Flow Wastewater Treatment System under Winter and Summer Condi-tions, R. Y. Surampalli, P.E., S. C. Chou and S. K. Ban-erji, P.E., CR Dec. 96, p163-177.

Rate-Sensitive Micromechanical Damage Model for Brittle Solid, Dipankar Chandra and Theodor Krauthammer, EM May 96, p412-422.

Viscoelastic Modeling of Paper, Edmond P. Saliklis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p246-249.

Alternative Strategies for Temporary Support during Struc-tural Repair of Reinforced-Concrete Beams, John Cairns, ST Mar. 96, p238-246.

Analysis of Shoring Loads Using Field Data, T. W. Phil-brick, Jr. and D. V. Rosowsky. (Building an Internation-al Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p711-718

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST

Aug. 94, p2288-2309.

Bridge Strength Evaluation Based on Field Tests, Jonathan S. Reid, Michael J. Chajes, Dennis R. Mertz and Geoffrey H. Reichelt, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p294-297.

Clay Brick Masonry Weight Variation, Clayford T. Grimm, AE Dec. 96, p135-137.

Deflection Control of Two-Way Reinforced Concrete Slabs, Shyh-Jiann Hwang and Kuan-Yung Chang, ST Feb. 96, p160-168.

Design and Construction of Large Diameter High Pressure s Transmission River Crossing for San Diego Gas and Electric Using Directional Boring, Jey K. Jeyapalan and Robert Dalby, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p379-386.

Design of Microtunneling and Jacking Pipe, Alan Atalah, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p395-402.

Development of Natural and External Man Induced Design Code Requirements Applicable to Special Facilities, John D. Stevenson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p149-150.

Developments in Sandwich Beam Theory and Practice, James C. LaBelle, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1017-1026.

Dynamic Response Analysis of Slab-Type Bridges, Jag-mohan L. Humar and Ahmed H. Kashif, ST Jan. 95,

Dynamic Stability of Viscoelastic Structures under Stoynamic Stability of Viscoetastic Structures under Sto-chastic Loading, S. T. Ariaratnam and G. Amaniampong, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p542-545.

Effects of Load Path and Load Correlation on the Reliability of Concrete Columns, Dan M. Frangopol, Yutaka Ide and Ichiro Iwaki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p206-209.

Fatigue Analysis with Random Loads, Igor Rychlik and Georg Lindgren, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-

goriu, ed., 1996), p46-49.

Field and Laboratory Measurements of Shoring Loads, Dryver R. Huston, Peter L. Fuhr and Jamie Willsey, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p704-710.

Improved Analysis Techniques for the Capacity and Fatigue Assessment of TPG Railway Bridges, Terrence W. Philbrick, Jr. and Scott D. Schiff, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p199-206.

Load Space Formulation for Reliability Estimation of Complex Structures, X. L. Guan and R. E. Melchers, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p688-691.

Loading Spectra for Railway Bridges under Current Oper-ating Conditions, Daniel H. Tobias, Douglas A. Foutch and John Choros, BE Nov. 96, p127-134.

Local Urban Transit Bus Impact on Pavements, Reed Gib-by, Rebecca Dawson and Peter Sebaaly, TE May/June 96, p215-217.

Localized Load Effects in High-Order Bending of Sandwich Panels with Flexible Core, Y. Frostig and M. Baruch, EM Nov. 96, p1069-1076.

Mean Stress Effects in Fatigue of Welded Steel Joints, Shahram Sarkani and David P. Kihl, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p50-53.

Minimum Design Loads for Buildings and Other Struc-tures, Revision of ANSI/ASCE 7-93 (St No. 95-007), Society of Civil Engineers, American 0-7844-0092-X, 220pp.

Modeling Rotation of Principal Load Axes in Brittle Solids with Damage, S. Karnawat and S. Yazdani, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p596-599.

On Moment Stability of Markov Dynamical Systems, Lamhos Katafygiotis and Yevgeny Tsarkov, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p546-549.

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Practical Estimation of Two-Way Slab Deflections, Kuan-Yung Chang and Shyh-Jiann Hwang, ST Feb. 96, p150-159

Probabilistic Analysis of Tendon Loads for a TLP in Deep Water, Charles G. Acquaah and Robert B. Gilbert, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p162-165.

Probabilistic Fatigue Models for Bridge Evaluation, Jeffrey A. Laman, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p286-289.

Program for Estimating the Remaining Fatigue Life of Steel Railway Bridges, Vinaya Sharma and John Choros, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p223-229.

Random Fields and Airplane Loads, Ludomir M. Laudan-ski, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p684-687

Reliability Analysis of Masonry Walls, A. S. Al-Harthy and D. M. Frangopol, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p338-341

Response Surface Method for Time-Variant Reliability Analysis, Timothy H.-J. Yao and Y.-K. Wen, ST Feb. 96, p193-201.

Risk Analysis of Ship and Barge Collision Loads on Bridgses, Michael A. Knott, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p724-727.

Safety Evaluation of Current Concrete Slab Formwork Practices, Saeed Karshenas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p656-659.

SFE-Based Structural Reliability Analysis, Jun Zhang and Bruce Ellingwood, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p170-173.

Statistical Characteristics of Strength and Load Random Variables of Ship Structures, Khaled Atua, Ibrahim As-sakkaf and Bilal M. Ayyub, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p106-109.

Stochastic Dynamics of Non-Linear Systems Excited by ochastic Dynamics of Non-Linear Systems Exerce by Parametric Delta Correlated Processes, Mario Di Paola and Antonina Pirrotta, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p930-933.

Stress Factors Explained, Robert T. Ratay, CE Dec. 96,

Paris Paris Structural Analysis with Fuzzy-Based Load Uncertainty, Robert L. Mullen and Rafi L. Muhanna, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p310-313.

Structural Fragility Analysis Using Finite Element Computational Models, Dan M. Ghiocel, Paul R. Wilson, Gary G. Thomas and John D. Stevenson, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p18-21.

Structural Load Modeling and Combination for Performance and Safety Evaluation by Y.-K. Wen, T. Igusa, EM Feb. 96, p183-184.

System Factors for Design of Wood Structural Assemblies, Bradford K. Douglas and Philip Line, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p798-

System Factors Using First-Order Reliability Methods, William M. Bulleit and Weifeng Liu, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p786-791

Tubular Members. I: Stability Analysis and Prelimir.ary Results, Spyros A. Karamanos and John L. Tassoulas, EM Jan. 96, p64-71.

Wave Induced Reaction Forces and Tension in TLP Ten-dons, John M. Niedzwecki, Dadi S. Soemantri and Oriol R. Rijken, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p586-587

"Dry Canal" to Link Atlantic and Pacific, CE Dec. 96, p18.

Bank Aids U.S. Exports to Japan, CE June 96, p8. Local area networks

Designing a PC Network to Meet the Specific Needs of Eneers, Shawn A. Dent, Daniel P. Davis and Thomas Gdula, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p937-943.

LAN Based Tools for a Project Environment, Edward Han-inger, Ludi Billings and Kate Oertel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p944-950.

Using Computers Effectively in Today's Civil Engineering Office, John P. Menniti, CP Oct. 96, p261-262.

Local government liability

Failure of Desert View Drive Embankment, Robert W. Day, CF Feb. 96, p11-14.

Local governments

Brownfields Boom, Monica Maldonado, CE May 96, p36-

The Debris Management Cycle: An Overview, Robert C. Swan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p171-172.

Environmental Justice: An Issue for States, Linda K. Mu-rakami, Sia Davis and Deb Starkey, (High Level Radio-active Waste Management, Technical Program Committee, 1996), p480-482

Grassroots Grants to Aid Sections, Branches Make an Impact at Local Level, NE Nov. 96, p1

Optimal Structures for Decentralized Provision of Roads, Frannie Humplick and Azadeh Moini-Araghi, IS Sept. 96, p127-138

Partnerships for Diversity in Water Resources Education, Neil S. Grigg, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4016-4020.

Water Resources Planning for the Fort Peck Indian Reservation, Montana, Deb Madison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4026-4029.

Wellhead Protection: Local and Community Efforts, Sharon Lien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p966-969.

Development of a Miter Gate Reliability Model, D. B. Cleary, C. J. Hookham and J. W. Waller, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p862-865.

Effects of Tow Sequencing on Capacity and Delay at a Waterway Lock, Ching-Jung Ting and Paul Schonfeld, WW

Jan./Feb. 96, p16-26.

Entrainment of Eggs and Larval Fish Into Propeller Jets, Stephen T. Maynord, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3147-3152.

Filling and Emptying System Model Study for the Innova-tive Lock Design, Richard L. Stockstill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3141-3146.

Flow-Induced Dynamic Response of Olmsted Physical Models, Mostafiz R. Chowdhury and Robert L. Hall, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Improving the Speed of Double Lockages, Mary K. Spence, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Loading Cycles for Fatigue Reliability Assessment of Miter Gates at Navigation Locks on the Upper Mississippi River, Bilal M. Ayyub, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p854-857.

McAlpine Intake Model Study for Innovative Lock Design, John E. Hite, Jr. and Larry Dalton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3135-3140.

Navigation Lock Improvements, Mary K. Spence, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3129-3134.

Probabilistic Assessment of Miter Gates, Nathan M. Kathir, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996). p866-869

Red River U-Frame Lock No. 1 Backfill-Structure-Foundation Interaction, Robert M. Ebeling and Reed L. Mosher, GT Mar. 96, p216-225.

Locomotives

Amtrak Breaks Ground on High-Speed Rail, CE Aug. 96,

DOT Crew Excavates Historic Train Cars, CE Nov. 96, p15,19.

Loess

Stream Instability in Loess Base Channels, Jon A. Zellars, Rollin H. Hotchkiss and Thomas Franti, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3369-3374.

CPT in Cold Regions Engineering: A Logging and Design Tool, Richard Fortier, Branko Ladanyi and Michel Al-lard, (Cold Regions Engineering: The Cold Regions In-frastructure—An International Importative for the 21st Century, Robert F. Carlson, ed., 1996), p459-470.

Logic programming languages

Constraint Logic Programming Contribution for Fleet Man-agement System in Freight Transport, Etienne Gaudin and Gérard Scémama, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p470-474. Development of a Decentralized Traffic Control System Based on Logic Programming, Giovanni Felici, Giovanni Rinaldi and Klaus Truemper, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p573-577.

Logistics

IFMS: Evaluation of Pilot Projects, Marco Monticelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p475-479.

Long Island Sound

Storm Surge Frequency Computations for Long Island, NY: A Comparison of Methodologies, Norman W. Scheffner and H. Lee Butler, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p80-

Long waves

Dynamic Processes on a Ridge and Runnel Beach, David Simmonds, George Voulgaris and David Huntley, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p868-878.

An Energetics Approach to Sand Transport on Beaches, Paul Russell, Yolanda Foote and David Huntley, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p829-840.

Forces on a Vertical Wall due to Long Waves, Bores, and Dry-Bed Surges, Jerald D. Ramsden, WW May/June 96, p134-141.

Influence of Short and Long Waves Coupling on Sand Suspending, Sergey Yu. Kuznetsov and Nikolay V. Pykhov, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p720-727.

Looking for Wave Groups in the Surf Zone, Merrick C. Haller and Robert A. Dalrymple, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p81-92.

On the Origin of Infragravity Waves in the Surf Zone of a Dissipative Multiple Bar System, B. G. Ruessink, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p93-104.

Loss reduction

Damaging Earthquakes: A Scientific Laboratory, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p151-152.

Education: Pathway to Mitigation, James W. Russell, (Nat-ural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p35-36.

FEMA Conference Stresses Preplanning for Natural Disasters, CE Feb. 96, p14,16.

GIS Gains Ground as Disaster Mitigation Tool, CE Sept. 96, p19-20.

Hurricanes Erin, Marilyn and Opal, Kishor C. Mehta, James R. McDonald and Douglas A. Smith, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p46-47.

Insurance and Damage Mitigation - Incentive or Disincentive, George R. Walker, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p195-196.

Mitigation, Preparedness & Sustainable Development: Linking Research & Resources in the Global Information Infrastructure, Robert J. Coullahan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p321-322.

Natural Disaster Mitigation: It Needs to Begin at Home, NE

A New Approach to Airport Security, Sal DePasquale, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p53-62.

Professional Liability — An Approach that Works, John G. Tawresey, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, p1288-1295.

Social Consequences of Flood Mitigation, Elliott Mittler, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p369-370.

Use of GIS Mapping to Illustrate the Sensitivity of Wind Hazard Insurance Loss Estimation to Modeling Parameters, Andrew Steckley, Lawrence A. Twisdale and Peter J. Vickery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p201-202.

Channel Routing with Flow Losses, Ming Jin and Danny L. Fread, HY Oct. 96, p580-582.

Correlation of Component Damage, Insurance Losses and Wind Storm Severity, Timothy A. Reinhold, Gregory L. F. Chiu and Robert Akins, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p191-192.

1997), p191-192.
Development of Flood Hazard Boundary Information, R. Cris Hughes and Gregory W. Lowe, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p365-366.

Chung, etc., 1997), p.50-300. Development of Integrated Inventory Databases and Earth-quake Damage and Loss Estimation Methodologies for Structures in Utah, Christopher Rojahn, Stephanie A. King, Roger E. Scholl, Anne S. Kiremidjian, Lawrence D. Reaveley and Robert F. Wilson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p7-8.

The DIMAK Scale for Disaster Magnitude Measuring in Service, Mark Klyachko and Ilia Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p76-77.

M. Chung, ed., 1997), p76-77.
Earthquake-Initiated Hazmat Releases: An Assessment, Michael K. Lindell and Ronald W. Perry, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p237-238.
Effects of Ignoring Well Losses on the Specific Capacity Function, Otto J. Helweg and Timothy Mays, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2224-2229.
Estimating Loss of Productivity Claims, Gasan G. Kallo, MF Nov Thee, 96, n13-15.

ME Nov./Dec. 96, p13-15.

ME Nov./Dec. 96, p13-15.

Extreme Winds as a Component of Catastrophic Risk, Gregory L. F. Chiu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p498-501.

FEMA-NIBS Earthquake Loss Estimation Methodology, Robert V. Whitman, Henry J. Lagorio and Philip J. Schneider, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p113-114.

A Framework for Estimating Losses Due to Hurricane Extreme-Winds, Gregory L. F. Chiu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p287-288.

GIS Gains Ground as Disaster Mitigation Tool. CF. Sept.

GIS Gains Ground as Disaster Mitigation Tool, CE Sept.

Housing Losses, Mary C. Comerio, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p167.

Ed., 1997), Piot. The Kobe Earthquake: Ground Shaking, Damage and Loss, Charles A. Kircher, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p908-916.

Periodic Variation in Karst Stream Losses, C. Warren Campbell, Mohamed Abd El Latif and Larry Foster, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1261-1266.

p1261-1266.
Residential Vulnerability Functions and Their Variability
Based on Claims Data, Ben Lashkari and Ronald Wardrop, (Natural Disaster Reduction, George W. Housner,
ed. and Riley M. Chung, ed., 1997), p307-308.
Seismic Vulnerability and Repair Cost of the University of
Memphis Buildings, Howard H. M. Hwang, Min Xu and
Jun-Rong Huo, (Natural Disaster Reduction, George W.
Housner, ed. and Riley M. Chung, ed., 1997), p143-144.
Toward A.D. 2000 in the IDNDR, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and
Riley M. Chung, ed., 1997), p285-286.
Use of a National Loss Estimation Methodology for Risk
Management, Thalia Anagnos, Scott Lawson, Jawhar

Management, Thalia Anagnos, Scott Lawson, Jawhar Bouabid and Mourad Bouhafs, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p.249-250.

Use of Risk Models to Mitigate Financial Impacts from Catastrophic Natural Events, Auguste Boissonnade, Peter Ulrich and Richard D. Wales, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p199-200.

Wind Hazards for Low-Rise Structures and Single Family Dwellings: A Possible Mitigation, H. W. Tieleman, T. A. Reinhold and M. R. Hajj, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p389-390.

Louisiana

Hurricane-Induced Storm Surge Analysis for the City of New Orleans, LA, David J. Mark and Norman W. Scheffner, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p343-344.

New Orleans Rolls the Dice (Available only in Structures Special Issue), Richard G. Weingardt and John F. Davis, CE May 96, p3A-7A.

Analysis of Bivariate Censored Low Flows, Shiping Liu, Jye-Chyi Lu and Cemal Unal, HY Feb. 96, p97-103.

Nonparametric Estimation of Low-Flow Frequencies, Kaz

Adamowski, HY Jan. 96, p46-49.
Water-Price Effect on Residential and Apartment Low-Flow Fixtures, Donald E. Agthe and R. Bruce Billings, WR Jan./Feb. 96, p20-23.

Low head

Precast Concrete Low-Head Pressure Pipe Significant in Historic Irrigation Canal Rehab, John J. Meyer and Steven K. Wagner, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p265-274.

Low-rise buildings

Low-rise outlands:
The Aerodynamic Forces on Low-Rise Structures: The Effects of Incident Turbulence, H. W. Tieleman, M. R. Hajj and T. A. Reinhold, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p975-978.

Lin and T. C. 32, 1790, 1975.
Analysis of Shoring Loads Using Field Data, T. W. Philbrick, Jr. and D. V. Rosowsky, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, p711-718.

Area-average Wind Pressures on a Low-rise Building, Russ D. Leffler and Jack E. Cermak, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1037-1044.

High Over Shanghai, Stan Korista, P.E., Mark Sarkisian, P.E. and Ahmad Abdelrazaq, CE Dec. 96, p58-61.

Low Building Wind Load Variability for Code Applica-tions, T. C. Eric Ho, (Building an International Communi-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1053-1060.

An Overview of Field Experiments on a Low-Rise Building, Douglas A. Smith, Kishor C. Mehta and Praveen Sandri, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Moham-

madi, ed., 1996), p1029-1036.

Blud, ed., 1990, processors.

Seismic Strengthening of Low Rise Buildings, Theodore A. Pruess and John C. Theiss, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p397-404.

Wild Hearth for Low Bice Structures and Single Family.

Wind Hazards for Low-Rise Structures and Single Family Dwellings: A Possible Mitigation, H. W. Tieleman, T. A. Reinhold and M. R. Hajj, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p389-390.

Wind Loads for Low-Rise Buildings on Escarpments, Brad Means, Timothy A. Reinhold and Dale C. Perry, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1045-1052.

Lowe, Kathy, Casey, Rose Women Engineers Take High Road in California's Trans-portation Scene, NE July 96, p11.

Dormant Season Alfalfa Water Balance on the NIIP, Brian Boman, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p231-236.

Nongrowing Season Evaporation in Northern Utah, Richard G. Allen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p225-230.

Machine foundations

Active Isolation of Machine Foundations by In-Filled Trench Barriers, T. M. Al-Hussaini and S. Ahmad, GT Apr. 96, p288-294.

Active Vibration Control of Machine Foundation, Mohamed Abdel-Rohman and Hasan Al-Sanad, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p566-573.

Investigation on Active Isolation of Machine Foundations by Open Trenches, S. Ahmad, T. M. Al-Hussaini and K. L. Fishman, GT June 96, p454-461.

Machinery

Adaptive Self-Tuning Control of Excavators, A. J. Koivo and Allen D. Nease, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p220-226.

Comparison of Static and Dynamic Performance of Polycarbonate Filled and Unfilled Gears, V. P. Gosavi and P. P. Chikate, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p338-347.

Controlled Excavation Along a Prescribed Path, Eugeniusz Budny and Witold Gutkowski, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p227-234.

Deformation Alicanomy Controlled Path Co

Deformation, Alignment, and Vibration in Large Turbine-Generator Set, W. F. Teskey, J. W. Lovse and N. N. Al-Hanbali, SU May 96, p65-79.

The Effect of the Lunar Surface Environment upon Machinery, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p639-645.

Improvements in Mining Technology, Jacques Nantel, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p806-812.

Intelligent On-Line Monitoring of Machine Health for Robots in Critical Environments, John P. H. Steele, Michelle Archuleta, Galen D. Brown, Tom Drouillard, Dirk Schlief and Tim D. Seifert, Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p262-275.

The International Walking Machine Decathlon: A Design Competition to Enhance Undergraduate Engineering Education, Gordon K. Lee, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p296–302.

Mobile Robots for Security, Anatoly Osipov, Vladimir Kemurdjian and Boris Safonov, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p290-295.

Possibilities of Fracture Mechanics Models Application to Optimisation of Operational Use of Large-Size Machine Components, Lech Bukowski and Piotr Artymiak, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p780-783.

Remotely Controlled Salvage Machines, Vladimir Kemurdjian, Analoly Osipov, Boris Safonov and Peter Astafurov, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p206-212.

The Resonance Drives with Adaptive Control, Teodor S. Akinfiev, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p947-950.

Vibratory Excavation and Anchoring Tools for the Lunar Surface, J. Ledile Klosky, Stein Sture, Hon-Yim Ko and Frank Barnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p903-911.

Magnetic field effects

Hazards to Personnel from Tower EMFs, James B. Haffield, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p499-504.

Magnetic Fluid Dynamics of Blood Flow, Yousef Haik, Ching Jen Chen and Vinay Pai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p458-461. Magnetic Investigation of a Simulated Hazardous Waste Site, Susan E. Burns and Kenneth E. Lemons, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996, p813–824.

Manuelle Sald

402

Dynamic Stability of Conducting Beam-Plates in Transverse Magnetic Fields, J. S. Lee, EM Feb. 96, p89-94.

Ground and Airborne Magnetic and Electromagnetic Surveys at a Hazardous Waste Site, Jonathan E. Nyquist, Les P. Beard and Don Johnson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p1-13.

Observational Cosmology from the Moon, Thomas L. Wilson and Hans-Joachim Blome, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p864-870.

Study of Clay-Cement Slurries with Mechanical and Electromagnetic Waves, M. A. Fam and J. C. Santamarina, GT May 96, p365-373.

Magnetic levitation trains

Comparison of High-Speed Rail and Maglev Systems, Fazil T. Najafi and Fadi Emil Nassar, TE July/Aug. 96, p276-281.

Maine

Simulations of the Maine Coastal Current, Monica J. Holboke and Daniel R. Lynch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p156-167.

Maintenance

Advanced Technologies Applied to Public Transport Fleets Maintenance: Diamante Project, Antonio Marqués, Vicente Sebastián, Vicente Macián and Ma. José Lerma, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p19-23.

Application of GIS Technology to Floodplain & Habitat Analyses, Scott E. Stonestreet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl 393-1398.

Assessment of Work Performance of Maintenance Contractors in Saudi Arabia, Abdul-Mohsen Al-Hammad and Sadi Assaf, ME Mar/Apr. 96, p44-49.

Automation-Related Quality Improvements in Power Plant Design and Operation, George V. Jones, Phillip W. Garrett, Jones Randall E. and Carl K. Toner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p487-493.

Balancing Aviation, Highway, and Development Needs: Multimodal Planning at Indianapolis International Airport, John W. Myers, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p24-33.

Inspection, Tom Gerlinger, George Robertson and Don Maurer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2050-2055.

Bridge Corrosion Cost Model Implementation and Coating Maintenance Model Using Dynamic Programming, C. K. Tam and S. F. Stiemer, CF May 96, p57-66.

Challenges in the Construction of a Lunar Base, Roy Sargent and Keith Hampson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p881-888.

Comparison of Water Backwash and Brush Cleaning Systems for Vertical Panel Fish Screens, Morton D. McMillen and Clint W. Smith, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1129-1134.

Computerized I&M Programs for Oil-Fired Space Heating Boilers, Alexander P. Economopoulos, EY Aug. 96, p61-74.

Considerations for Realistic Lunar Excavation, Michael J. Lally, Scott P. Mackey and Laurie R. Gaskins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p896-902. Crude Oil Pipe Line Crossing Western Panama, Hugh Lacy and Brant Brown, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p356-364.

Decision-Support System for Infrastructure Preservation, Yung-Ching Shen and Dimitri A. Grivas, CP Jan. 96, p40-49.

Development of Bridge Corrosion Cost Model for Coating Maintenance, C. K. Tam and S. F. Stiemer, CF May 96,

Development of Performance Models for PMS, Kathryn A. Zimmerman and Margaret R. Broten, (Meeting the Chal-lenge: Rebuilding Inner City Airports, Prianka lenge: Rebuilding Inner Cit Seneviratne, ed., 1996), p254-262.

Discussion of Environmental Engineering Forum: Long-Term Effects of Wetland Treatment of Mine Drainage (November/December 1993, Nov. 119, No. 6, by Thomas M. Walski (Environmental Engineering Forum)), Robert S. Hedin, EE Jan. 96, p83-84.

Effects of Faulty Design and Construction on Building Maintenance, Sadi Assaf, Abdul-Mohsen Al-Hammad and Mansoor Al-Shihah, CF Nov. 96, p171-174.

Engineers Cut a "Greenway" Through Atlanta, CE Oct. 96,

An Expert System as Support in Maintenance of Road Pavement Surface, P. Giannattasio, M. Crispino, V. Nicolosi, G. Ambrosino and M. Boero, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p500-504.

Florida Department of Transportation Aviation Office Statewide Pavement Maintenance Management Program, J. David Scherling, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996),

p263-272.

Genetic-Algorithm Programming of Road Maintenance and Rehabilitation, T. F. Fwa, W. T. Chan and C. Y. Tan, TE May/June 96, p246-253.

A GIS Sewer Database for a University Campus, D. J. Schuller, D. I. Pusey and A. R. Rao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1765-1770. Golden Gate Bridge Gets Its Color Back, CE Sept. 96, p12.

High-Performance Concrete in Bridge Structures in Virginia, Celik Ozyildirim and Jose Gomez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1357-1366.

Implementing the Knowledge Worker System (KWS) in an Engineering Environment, Bruce C. Goettel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p288-293.

nowsky, ed., 1996), p288-293.
Including Inspection Imperfection in Optimizing Structural Management Policies, Mingxiang Jiang, Ross B. Corotis and J. Hugh Ellis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p368-371.
Infrastructure Obsolescence and Design Service Life, Andrew C. Lemer, IS Dec. 96, p117-118.
Interested Infrastructure Maintenance Management, Carol

Integrated Infrastructure Maintenance Management, Carol Subick and Ilker Adiguzel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p207-213.

Joint Development Pianning for Inner City Airport Capital Improvements, Orikaye G. Brown-West, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p199-211.

Lessons Learned from Multiphase Reconstruction Project, Raymond J. Krizek, Wei Lo and Ahmad Hadavi, CO Mar. 96, p44-54. Moisture Conditions and Control in Buildings in Fairbanks,

Nature Conditions and Control in Buildings in Fairbanks, Alaska, Ross Adkins, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Impera-tive for the 21st Century, Robert F. Carlson, ed., 1996), p372-383.

New Sacrificial Anode for Cathodic Protection of Reinforced Concrete Structures, Miki Funahashi and Steven F. Daily, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1256-1265.

The O'Hare International Airport Pavement Management System, Margaret Broten, George Schwandt and William Weiss, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p273-283.

Operation and Maintenance of Ground Water Facilities (M&R No. 86), Committee on Ground Water of the Irri-Engineers, (Lloyd C. Fowler, chmn.), 1996, 0-7844-0139-X, 180pp.

Optimal Structures for Decentralized Provision of Roads, Frannie Humplick and Azadeh Moini-Araghi, IS Sept.

96, p127-138.

Overview of International Space Station Extravehicular Activity System, Jeff Dutton, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p473-479.

Praise for Ancient Water Works, Wilson V. Binger, Jr., CE Mar. 96, p26.

Predicting Stage-Discharge Curves in Channels with Bank Vegetation, Stephen E. Darby and Colin R. Thorne, HY Oct. 96, p583-586.

Ranking Models Used for Condition Assessment of Civil Infrastructure Systems, L. E. Chouinard, G. R. Andersen and V. H. Torrey, III, IS Mar. 96, p23-29.

Recent Advancements in Smart Tagged Composites for In-frastructure, Robert F. Quattrone and Justin B. Berman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1045-1054.

Reliability-Based Maintenance Strategy Using NDI, Achin-tya Haldar and Zhengwei Zhao, (*Probabilistic Mechan-*ics & Stractural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p364-367.

Reservoir Sediment Management Practices of the Los Angeles County Department of Public Works, Sree Kumar and Martin Moreno, (North American Water and Envient Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1651-1656.

Bisk-Based Planning and Management of Maintenance Dredging, L. Leigh Skaggs and David A. Moser, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2403-2408.

Road and Airfield Maintenance, John C. Becker and David C. Esch, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p249-270.

South Platte River Restoration Through Maintenance, Ben R. Urbonas and Bryan W. Kohlenberg. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3533-3538.

Venice, Italy: an Integrated Approach to Solve the Environ-mental Problems of Its Unique Collection System, Federico G. A. Vagliasindi, Vincenzo Belgiorno, Rodolfo M. A. Napoli and Giorgio Conti, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1801-1806. Maintenance costs

Billion Dollar Water Q&M Market Projected, CE May 96, p19,21.

Expert System for Assessing Main Pipeline Reliability and Residual Lifetime, Sviatoslav A. Timashev and Inessa L Yablonskith, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p322-325.

Malaysia

The Tailer the Deeper (Available only in the Geo/ Environmental Special Issue), Clyde N. Baker, Jr., Elliost E. Drumright, P.E., Leonard M. Joseph and Tarique Azam, CE Nov. 96, p3A-6A.

The Tracks of a Contractor's Tiers, CE Nov. 96, p95.

Management

19 Tough Acts to Follow, Eric Rasmussen, CE July 96, p44-49

Advice to Environmental Execs: Get Tougher, CE Dec. 96,

Analysis of Changes in Airport Ground Access Mode Use, Geoffrey D. Gosling, (Meeting the Challenge: Rebuild-ing Inner City Airports, Prianka Seneviratne, ed., 1996),

Are Bridge Conditions Improving Under Bridge Manage-ment: A Panel Discussion, Bojidar S. Yanev, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p282-289

At AWWA Conference, Public Utilities Put Up a Fight, CE

Sept. 96, p24-25.

Automated On-Scene Management of Traffic Accidents, George M. Vasilakis and Yorgos J. Stephanedes, (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p292-295.

Best Management Practices and Community Education, Richard Boon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2648-2653.

Bonuses Up Sharply, ME Nov./Dec. 96, p12.

Business Plans Live and Grow, Jack E. Reinhard, P.E., ME Nov./Dec. 96, p3-4.

Chebyshev Model for Water-Quality Management, Andrews K. Takyi and Barbara J. Lence, WR Jan/Feb. 96,

COASTMAP: An Integrated System for Environmental Monitoring, Modeling and Management, Thomas Opishinski, Malcolm L. Spaulding and Craig Swanson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2528-2532.

Company-Level Cash-Flow Management, R. Navon, CO Mar. 96, p22-29.

Continuous Excellence: Building Effective Organizations, Mel Hensey, 1995, 0-7844-0013-X, 105pp.

A Decision Support System for Minimizing the Distur-bance of Airfield Construction (SFIA Case Study), Adib Kanafani and Manar Shami, (Meeting the Challenge: Re-building Inner City Airports, Prianka Seneviratne, ed., 1996), p234-245.

Developments in Effective Emergency Management: A Means of Natural Disaster Cost Reduction, Gerald R. Schimke, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p37-38.

Drought Management in Northeastern Colorado, Darell D. Zimbelman, (North American Water and Environn Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p863-868.

Emerging Concepts for Management of Salinity and Drain-age in Irrigated Regions, M. E. Grismer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2126-2129.

Emerging Role of Management in Civil Engineering, Louis Berger, ME July/Aug. 96, p37-39.

Enhancing AVM Systems by Operator Support DRS Func-tionalities, G. Ambrosino, M. Boero and P. Sassoli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p413-417.

Examination of Emerging Consciousness in Engineering Management, Amarjit Singh, ME July/Aug. 96, p50-57.

Fluid Management in Space-Based Systems, Jack A. Salzman, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p521-526.

Geographic Information Systems for Emergency Response Management of Transportation Systems, Anne Kirem-idjian, Nesrin Basoz, Kincho Law and Stephanie King, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p355-356.

A GIS Sewer Database for a University Campus, D. J. Schuller, D. I. Pusey and A. R. Rao, (North American) Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1765-1770.

I Don't Believe in Change Just for the Sake of Change, Gary D. Bates, ME May/June 96, p20-24.

Including Inspection Imperfection in Optimizing Structural Management Policies, Mingxiang Jiang, Ross B. Corotis and J. Hugh Ellis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p368-371.

The Influence of Trust on Risk-Based Decision Making, David L. McLain and B. Katarina Hackman, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p169-179.

Innovative Effluent Management for Sustainability, Dan Bruinsma, Mary Ellen Dick, Eric Rosenblum and David Tucker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1614-1619.

An Integrated Approach to Maintaining a Program Baseline on the International Space Station, Roy Patrick Norris and Larry D. Toups, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p450-457.

Integrated Civil Engineering Curriculum: Implementation and Management Issues, Neil S. Grigg, Marvin E. Cris-well and Thomas J. Siller, El Oct. 96, p151-155.

Interport Modelling with State Automata, Maurizio Maz-zucchelli, Valerio Recagno and Giuseppe Sciutto. (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p104-108.

Investigating the Non-Convexity of the Groundwater Quali-ty Management Response Function, David P. Ahlfeld and Mary Palumbo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p854-856.

Leadership Development, Jim Krug, ME Nov./Dec. 96, p15-16.

Lifeline Failure and Disaster Preparedness of Businesses, Melvin J. D'Souza, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p105-

A Little Common Sense for the New Boss, David Purdy, SC Aug. 96, p91-92.

Manage Better by Planting Your Garden, Gary D. Bates, ME Jan./Feb. 96, p6.

Management Bonuses Rise, CE Sept. 96, p11.

Management Buys Back HDR From French Parent, CE Nov. 96, p27

Management of Contaminated Groundwater Using Natural Attenuation, David F. Laney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2011-2020.

anagement of the Hanford Engineer Works in World War II, Harry Thayer, 1996, 0-7844-0160-8, 225pp.

Managing Border Irrigation for Near-Zero Discharge, T. S. Strelkoff and A. J. Clemmens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1711-1715.

A New Strategic Management of Pumping Station in Sewer Systems, David Tsoi and Tsun-Hou Kuan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2486-2491.

Planning an International Moon Mission: Lessons Learned. Joan Johnson-Freese, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p109-115.

Planning and Analysis of Airport Access Using GIS: SLCIA Example, John Bergener, Massoud Javid and Pri-anka Seneviratne, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p89-95.

Preparing for Project Management, David J. Williams, 1996, 0-7844-0175-6, 94pp.

Procurement Issues, Delon Hampton, ME Nov./Dec. 94,

p45-49. Risk-Based Plann

isk-Based Planning and Management of Maintenance Dredging, L. Leigh Skaggs and David A. Moser, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p.2403-2408.

The Scour at Bridges Management Program in Rhode Island, Edward J. Kent, Jeffrey S. Glenn and Joseph T. Boardman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p489-498.

Secret Strategies Revealed, ME May/June 96, p11.

Seven Guidelines for Managing Uncertainty in Geoenviron-mental Design, Robert B. Gilbert and Travis C. McGrath,

mental Design, Robert B. Gilbert and Travis C. McGrath, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p774-796. Some Thoughts About Ecosystems: Management, Control, and Uncertainty, Daniel E. Willard, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p191-206.

Stronger Leadership Needed, ME Nov/Dec. 96, p13.
Time for an Integrated Approach to Facility Management,
Paul Scarponcini, CP Jan. 96, p3. Why Satisfied Customers Defect, Thomas O. Jones, ME

Nov./Dec. 96, p11.

Management engineering 100 Tips for Managers, Roger C. Andersen, ME July/Aug. 96, p7-9.

Catalysts for Improvement, Gary D. Bates, P.E., ME Nov./ Dec. 96, p5.

Editor's Letter, Bob McCullouch, ME July/Aug. 96, p3-4. Editor's Letter, 500 McCulrouca, 5412 July/Aug. 96, p5.
Forum, El Oct. 96, p139-146.
Join the EMPN, Gary D. Bates, ME July/Aug. 96, p4-5.

Louis Berger, Who Built Large Firm, Dies at 82, CE Oct.

Management Event in San Diego Is Occasion for Praising Outstanding Division Members, NE Jan. 96, p15.

The Management of Engineering, Mel Hensey, ME July/ Aug. 96, p10. Trends in Engineering: Education and Practice, Thomas T. Theis, CE Nov. 96, p6.

Management methods

Continuous Excellence: Building Effective Organizations, Mel Hensey, 1995, 0-7844-0013-X, 105pp. The Future of Engineered Quality, Michael T. Kubal, ME Sept./Oct. 96, p45-52.

How to Manage with Questions, ME Jan./Feb. 96, p10. It's Project Management, Stupid! Stuart G. Walesh, ME Jan./Feb. 96, p14-17.

Learning on the Jagged Edge, Bill Hayden, Jr., ME Jan./ Feb. 96, p23-25.

Manage Better by Planting Your Garden, Gary D. Bates, ME Jan./Feb. 96, p6.

ME Jan./Feb. 96, p6.
Management Framework for Large-Scale Water Problems,
Neil S. Grigg, WR July/Aug. 96, p296-300.
Owner-Contractor Relationships on Contaminated Site Remediation Projects, Cynthia M. Ruff, David A. Dzombak
and Chris T. Hendrickson, CO Dec. 96, p348-353.
Rules of Thumb, Nancy Gibson and John Whittaker, ME
Nov./Dec. 96, p34-39.

Total Quality Management Implementations and Results, John A. Kuprenas, Carlos J. Soriano and Sanscho Ramhorst, SC May 96, p74-78.

Management planning
Current Status of the Demonstration Management Improvement Program, G. J. Butler and R. E. Ware, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3476-3479.

The Debris Management Cycle: An Overview, Robert C. Swan, (Natural Disaster Reduction, George W. Housner,

ed. and Riley M. Chung, ed., 1997), p171-172.
Drought Management: Crisis vs. Risk Management, Michael J. Hayes, Donald A. Wilhite, Mark D. Svoboda and Kelly Helm Smith, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p371-

I Don't Believe in Change Just for the Sake of Change, Gary D. Bates, ME May/June 96, p20-24.

An Integrated Coastal Management Plan for Mamala Bay, Donald R. F. Harleman and Susan E. Murcott, (North

Donald R. F. Harleman Aussan E. Murcott, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4096-4100.
The Management Improvement Program: A Model to Im-prove the Performance of Irrigated Agriculture, A. R. Dedrick, E. Bautista and S. A. Rish, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3470-3475.

The Management Improvement Program: An Irrigation District's Perspective of the Demonstration Program, Brian M. Betcher and Gary Sloan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3480-3485.

Criefichary a Borathai, etc., 1995, 19340-3-945.
Strategic Planning in Construction Companies, Abraham Warszawski, CO June 96, p133-140.
United States Bureau of Reclamation (USBR) Perspectives on the Management Improvement Program As a Vehicle for Integrated Resource Planning, Thomas G. Burbey and Stephen M. Longe, (Marth American Water and Envi and Stephen M. Jones, (North American Water and Envi-ronment Congress & Destructive Water, Chenchavya Bathala, ed., 1996), p3490-3495.

Management style

100 Tips for Managers, Roger C. Andersen, ME July/Aug.

Five Quick Tips for Becoming a Better Manager, Gary D. Bates, ME July/Aug. 96, p5.

Management systems

Approaches to Organization Development, Mel Hensey, ME Sept./Oct. 96, p11.

Constraint Logic Programming Contribution for Fleet Man-agement System in Freight Transport, Etienne Gaudin and Gérard Scémama, (Applications of Advanced Technologies in Transportation Engineering, Yorgos Stephanedes, ed. and Francesco Filippi, ed., 1996), p470-474.

p470-474.
Data and Data Interpretation in Bridge Management Systems, George Hearn, Dan M. Frangopol, Tianna Szanyi and Steven Marshall, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p245-252.
Development of a Wireless Global Bridge Evaluation and Monitoring System (WGBEMS), Kenneth Maser, Robert Egri, Abba Lichtenstein and Steven Chase, (Building an International Community of Structural Engineers, S. K.

International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p734-741

DGT Architecture for Traffic Data Management Systems, Adrián Marín Puigpelat and Jesús López López, (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p238-242.

Filippi, ed., 1990), p.236-242.
An Engineering Information System Application for Water Supply and Distribution Systems, Chun-Hou Orr, Sérgio Teixeira Coelho and Helena Alegre, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4214-4219.
The EURATN Project, Jean-Michel Crenais, (Applications of Advanced Language Congress)

of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi,

ing, 10 10 sephaneues, ed. and Francesco Frippi, ed., 1996, p159-165.
The Financial-Economic Evaluation of ATT Systems in Road Freight Transport, Ferdinand Ballhaus, (Applica-tions of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filip-

pi, ed., 1996), p465-469. IFMS: Evaluation of Pilot Projects, Marco Monticelli, (Ap-

IFMIS: Evaluation of Pilot Projects, Marco Monticelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p475-479.
Re-Assessment of Concrete Bridges, P. Thoft-Christensen, Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p613-620.
Reliability Concent and Application in Patrick

Reliability Concept and Application in Bridge Management System, Zongwei Tao and Brian J. Stearman, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p442-445.

gopol, ed. and Mircea D. Grigoriu, ed., 1996), p442-445.
A Sequential Hypothesis-Testing Based Freeway Incident Response Decision-Making System, Samer M. Madanat, Hua-Liang Teng and Pen-Chi Liu, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p286-291.
Study Released on New Planning Technique, ME Jan/Feb. 96, r2-8.

96, p7-8.

System for Bridge Management in a Rural Environment, Matthew S. Gralund and Jay A. Puckett, CP Apr. 96, p97-105.

Toward a Generic Kernel for Air Traffic Managerr tem, C. Dujardin, G. Joly, D. Hollinger and O. Palmade, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p87-91.

Training for the Big One - A Proactive Approach, Andrew M. Hui and David R. Putnam, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p43-44.

Using Fuzzy Logic in Aircraft Navigation Systems, A. Lopes Pereira, A. K. Achaibou and F. Mora-Camino, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p99-103.

Vulnerability Assessment within BMS, Edgar P. Small and Steven B. Chase, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p446-449.

gement training

ACEC Launches Executives Institute, ME Jan./Feb. 96, p7. Consensus! Engineering Students Need More Management Education, Jeff Russell, James P. T. Yao, John Farr, P.E. Stuart G. Walesh, P.E. and John Bishop, P.E., ME Nov./ Dec. 96, p17-29.

Managers

100 Tips for Managers, Roger C. Andersen, ME July/Aug. 96, p7-9.

The Construction Manager as Project Integrator, Charles H. Kluenker, ME Mar/Apr. 96, p17-20.

Five Quick Tips for Becoming a Better Manager, Gary D. Bates, ME July/Aug. 96, p5.

How to Manage with Questions, ME Jan./Feb. 96, p10. A Little Common Sense for the New Boss, David Purdy, SC Aug. 96, p91-92.

Promote People Skills, Jim Krug, ME Sept./Oct. 96, p1. Retaining Generation X Employees, Joan Lloyd, ME Nov./ Dec. 96, p5-6.

Slow Starter, Strong Finisher, Mel Hensey, ME July/Aug. 96, p10.

Manholes

No-Dig Gains Ground, Luis Aguiar, Thomas G. Scheller, P.E., James T. Cowgill, P.E. and Iqbal Noor, CE Aug. 96, p54-57.

50, p. 50-53.
Hysical Modeling to Determine Head Loss at Selected Surcharged Sewer Manholes, K. H. Wang, T. G. Cleveland, C. Towsley and D. Umrigar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3835-3840.

Manpower utilization

Construction Representative: Scheduling and Cost Management, Allan F. Samuels and Michael J. Bruder, CO Sept. 96, p281-290.

Manufactured homes

Wind Protection Tie-Downs for Manufactured Homes, John E. Pearson, Anatol Longinow and Donald F. Meinheit, SC Nov. 96, p126-140.

Manufacturing

Cast-in-Place Factory Largest for Industry, CE Nov. 96, p13.

A Computer Controlled Filament Winding Technique for Manufacturing Cement Based Cross-Ply Laminates, B. Mobasher and A. Pivacek, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1347-1356.

The Fabric Dyers' Use of Recycled Water, Chuck Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2666-2671.

OSHA May Use Administrative Subpoena, CE Dec. 96, p24.

Paradox at the rocky Mountai Arsenal, Colorado: Benefits of Applied Research, Robert D. Jarrett, Joseph P. Capesius and Mark A. Gonzalez, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1553-1554.

These Straw Houses Won't Blow Down, CE Nov. 96, p13-

"Banding" Timber Crossties Using Composite Fabrics for Improving Their Performance, S. S. Sonti and H. V. S. GangaRao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), pl.449-1457.

Manufacturing facilities

Design and Implementation of a Multi-Faceted Site Reme-diation, Stephen A. Kessel and Arnold S. Vernick, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

A Process Unit Based Approach to Media-Integrated Waste Minimization: A Paint Manufacturing Case Study, Rafal D. Walicki, Isobel W. Heathcote and Gordon Hayward, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

alidation of the Simplified Audit Process at a Roofing Tar Paper Speciality Product Manufacturer - Part 2, Pierre Sylvestre, Ronald Zaloum, Chantal Goyette and Claude Audet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p93-98.

Mapping
Application of GIS Technology to Floodplain & Habitat
Analyses, Scott E. Stonestreet, (North American Water
A Destructive Water, Chenand Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1393-1398.

chayya Bathaia, ed., 1990, pl.393-1398.
Autonomous Mapping System for an Interior Finishing Robot, Abraham Warszawski, Yehiel Rosenfeld and Igal Shohet, CP Jan. 96, p67-77.
Behaviour-Oriented Models of Shoreface Evolution, Marcel J. F. Stive, Huib J. De Vriend, Peter J. Cowell and Alan Wm. Niedoroda, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p998-1005

1005.
Coastal Flood Hazard Analysis Using Digital Photogrammetry, Margery Overton, Cheryl Petrina and John Fisher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p187-188.
Dangerous Digging Requires New Excavation Methods, CE May 96, 922-23.
Earthquake-Induced Landsliding Analyzed and Predicted With a Geographic Information System, James P. McCalpin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p3-4.

McCarpin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p3-4. Editorial, Earl F. Burkholder, SU Nov. 96, p143-144. Gator Communicator Design of a Hand Held Digital Data Mapper, John F. Alexander, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1052-1057.

Interaction between the Crack Tips of a Circular Arc Crack, Y. C. Shiah and Y. M. Tsai, *Engineering Mechanics*, Y. K. Lin and T. C. Su, 1996), p592-595.

Mapping Groundwater Vulnerability to Nitrate and Pesti-cide Contamination in the Salinas Valley, Monterey County, California, Weibo Yuan, Joe LeClaire, Ali Diba, Michael Inada and Matt Zidar, (North American Water Michael Inada and Matt Zidar, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1099-1104.
Mapping the Future, CE July 96, p18-19.
Mapping Underground, ET June/July 96, p7,11.
Photogrammetric Mapping, U.S. Army Corps of Engineers, 1996, 0-7844-0143-8, 332pp.

A Rapid Barrier Island Hazard Mapping Technique as a Basis for Property Damage Risk Assessment and Mitiga-tion, David M. Bush, William J. Neal and Orrin H. Pilkey, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p185-186.

Site Characterization Process Saves Time and Money, ET

Mar/Apr. 96, p1,4.
WQMAP in a Windows Environment, Daniel Mendelsohn Eoin Howlett and J. Craig Swanson, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p555-569.

Assessing the Local Geologic Component of the Earth-quake Hazard in the Portland Metropolitan Area, Mat-thew A. Mabey and Ian P. Madin, (Natural Disaster Re-duction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p177-178.

Creating of a Data Base of Small Earth Dam for Natural Disaster Reduction, Shigeru Tani, Kenichi Ushikubo and Souji Harima, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p72-73.

Development of the Deterministic Caltrans Seismic Hazard Map of California, Lalliana Mualchin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p297-298.

Earthquake Hazard Assessment of Iran, Behrooz Tavakoli and Mohsen Ghafory Ashtiany, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p301-302.

Every Road That Rises Must Converge on GIS, Eric Rasmussen, ET Oct./Nov. 96, p8.

Korean Gas Company Digitizes Maps, Records, CE Dec.

New USGS Seismic Hazard Maps for the United States, A. Frankel, C. Mueller, D. Perkins, T. Barnhard, E. Leyen-decker, E. Safak, S. Hanson, N. Dickman and M. Hopper, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p173-174.

Supermaps Help Fight Fires, CE Dec. 96, p20.

Anisotropic Thermal Expansion Causes Deformation of Marble Claddings, Clemens Widhalm, Elmar Tschegg and Walter Eppensteiner, CF Feb. 96, p5-10.

Behavior of Marble under Compression, C.-T. Chang, P. Monteiro, K. Nemati and K. Shyu, MT Aug. 96, p157-

Weathering Rates of Marble in Laboratory and Outdoor Conditions, Srinivas S. Yerrapragada, Surendra R. Chir-ra, John H. Jaynes, S. Li, Jayanta K. Bandyopadhyay and K. L. Gauri, EE Sept. 96, p856-863.

Marine animals

Attachment Strength of Zebra Mussels on Natural, Polymeric, and Metallic Materials, Josef Daniel Ackerman, Catherine M. Cottrell, C. Ross Ethier, D. Grant Allen and Jan K. Spelt, EE Feb. 96, p141-148.

Marine borers

Marine Borers are Back, Vahan Tanal and Alex Matlin, CE Oct. 96, p71-73.

Marine Borers Date Back 60 Million Years, Raymond C. Oliger, CE Dec. 96, p31.

Marine clays

Behavior of Pile-Supported Dolphins in Marine Clay Under Lateral Loading, S. Narasimha Rao, V. G. S. T. Ramakrishna and G. Balarama Raju, GT Aug. 96, p607-612

Drained Creep Behavior of Marine Clays, Armand J. Silva and Horst G. Brandes, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p228-242.

Prediction of Time-Dependent Behaviour of Remolded Soft Marine Clay in Axi-Symmetric Undrained Conditions, Satoshi Murakami, Kazuya Yasuhara and Kaoru Bessho, (Measuring and Modeling Time Dependent Soil Behav-ior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p181-194.

Reaction Products Formed in Lime-Stabilized Marine Clays, S. Narasimha Rao and G. Rajasekaran, GT May 96, p329-336.

Marine engineering

Design Criteria for Fenders at Ferry Landings, Charles T. Jahren and Ralph Jones, WW July/Aug. 96, p187-194.

Field Testing & Evaluating Carbon Cable Prestressed Pile, Srinivasa L. Iyer, Sivakumar Ramabhadran and Brian S. Vulcan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p386-393.

A Method for Structural Reliability Analysis of Marine Structures Using Combined Plate and Frame Structure Models, Hiroo Okada, Koji Masaoka, Yoshisada Murot-su, Shigeyuki Hibi and Wataru Kiyokawa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p150-153.

Prefabricated Epoxy-Coated Rebar for the U.S. Navy, Douglas F. Burke, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1199-1208.

Towards a Probabilistic Model for Marine Corrosion of Steel, Robert E. Melchers, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p660-663.

Undersea Engineering Feat, CE Oct. 96, p12.

Marine plants

Relationship between Kelp Beds and Beach Width in Southern California, M. Hany S. Elwany and Reinhard E. Flick, WW Jan./Feb. 96, p34-37.

Marine terminals

Oil Spills: Prevention, Prediction, and Preparation, Richard E. Burke, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p770-775.

Marine transportation

Marine Engines Emissions for Vessels of the United States Coast Guard, Zoltan C. Mester, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3355-3356.

Market research

Intranet Technology to Aid Engineers, CE Dec. 96, p20. Marketing and Selling A/E and Other Engineering Services, Scott C. Gladden and Arnold Olitt, 1996, 0-7844-0100-4, 120pp.

Marketing Business Development Basics, Mel Hensey, P.E., ME Nov./Dec. 96, p8-9.

CERF Receives Award, CE Nov. 96, p8.

Contractor Markets Management Software, CE Dec. 96,

Engineering Sales: Process of Understanding, Larry G. Crowley, ME Mar/Apr. 96, p40-43.
Engineers Seek Better Way to Market New Building Technology, CE Sept. 96, p26-27.

Environmental Standards Digitized, CE Dec. 96, p20. An Evaluation of TLC Systems Benefits and Potential Mar-ket in Italy, Ennio Cascetta and Bruno Montella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p59-65.

Market Value of Asteroidal Precious Metals in an Age of Diminishing Terrestrial Resources, Jeffrey S. Kargel, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p821-829.

Marketing and Selling A/E and Other Engineering Services, Scott C. Gladden and Arnold Olitt, 1996, 0-7844-0100-4, 120pp.

Marketing Engineering Services: Partnering Pales by Comparison, Oscar C. Boldt, ME Jan./Feb. 96, p3-5.

Marketing is Top Priority for Construction Firms, ME Mar./Apr. 96, p9

Metacomputing on the Horizon, CE Dec. 96, p20.

On the Web, CE Oct. 96, p11. On the Web, CE Nov. 96, p8

On the Web, CE Dec. 96, p20.

Rain Making: The Professional's Guide to Attracting New Clients by Ford Harding, Judith Nitsch, P.E., ME Nov./ Dec. 96, p6-7.

Sticking with the Web, Peter Salwen, CE June 96, p36-41. Trends in Engineering: Education and Practice, Thomas T. Theis, CE Nov. 96, p6.

Markov chains

Analysis of Crack Propagation in Concrete Structures by Markov Chain Model and R-curve Method, Yunping Xi and Zdeněk P. Bažant, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p358-361.

Markov process

Fatigue Analysis with Random Loads, Igor Rychlik and Georg Lindgren, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p46-49.

gottle, Ca., 1996, p. 107-114.

Grigoriadis, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p. 1107-1114.

Including Inspection Imperfection in Optimizing Structural Management Policies, Mingxiang Jiang, Ross B. Corotis and J. Hugh Ellis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p368-371.

A Network Transfer Function Model with a Markovian Prior for Tracer Tests Evaluation, Nela Zavaljevski and Alvin Shapiro, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p70-72.

onhomogeneous Markov Model for Daily Precipitation, Balaji Rajagopalan, Upmanu Lall and David G. Tarbo-ton, HE Jan. 96, p33-40.

On Moment Stability of Markov Dynamical Systems, Lam bros Katafygiotis and Yevgeny Tsarkov, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol,

ed. and Mircea D. Grigoriu, ed., 1996), p546-549.

Response of an Oscillator with One-Sided Barrier under Non-White Random Excitation, G. Q. Cai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p112-115.

Computer Model Aids Everglades Restoration, CE Apr. 96, p8.

Foundation Design Considerations for Construction on Marshlands, A. Rhett Whitlock and Shahzad S. Moosa, CF Feb. 96, p15-22.

The Use of an Equivalent Porosity Method to Model Flow in Marshes, Ian P. King and Lisa C. Roig, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3734-3739.

Analyzing Water Balances and Ranking Maryland's Water-sheds Related to Growth, Development and Loss of Habitat, Marcia Smith, David Bleil and James Ahl, (North American Water and Environment Congress & Destruc

American Water, Chenchayya Bathala, ed., 1996), p4365–4370.
Retrofitting an Urban Watershed for Improved Water Quality, David Ennis, Michael Clar, Candace Szabad and Chien Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed. 1006-4006-4006

ed., 1996), p4202-4207.

Analysis of Masonry Structures with Elastic/Viscoplastic Models, Teymour Manzouri, P. Benson Shing and Bernard Amadei, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p61-71.

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST

Aug. 94, p2288-2309.

Architect Chooses Slenderwall for Gothic Church, CE July

ailding Code Requirements for Masonry Structures (ACI 530-95/ASCE 5-95/TMS 402-95); Specification for Masonry Structures (ACI 530.1-95/ASCE 6-95/TMS 602-95); Commentary on Building Code Requirements for Masonry Structures (ACI 530-95/ASCE 5-95/TMS 402-95); Commentary on Specification for Masonry Struc-tures (ACI 530.1-95/ASCE 6-95/TMS 602-95) (St No. 95-005, 95-006), Masonry Standards Joint Committee, (James Colville, chmn.), 1996, 0-7844-0115-2, 97pp.

Clay Brick Masonry Weight Variation, Clayford T. Grimn AE Dec. 96, p135-137.

Composite Materials Reinforcement of Existing Masonry Walls, J. Bradley Christensen, Jeremy Gilstrap and Charles W. Dolan, AE June 96, p63-70.

Coring Technique Reinforces Historic Masonry, CE May 96, p13-14.

A Cost Effective Rehab Scheme for URM Structures, M. Ala Saadeghvaziri, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p262-

Ductile Masonry Construction in California, Hanns U. Bau-mann, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed.,

1996), p93-100.

Editor's Note, David Darwin, ST Oct. 96, p1127.

Establishing R, and C, Factors for Confined Masonry

Buildings, María O. Moroni, Maximiliano Astroza, Juan

Gómez and Rafael Guzmán, ST Oct. 96, p1208-1215.

Estimating Transverse Strength of Masonry Infills, Richard Angel and Joseph Uzarski, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p101-111.

Evaluation of Structural Integrity of Damaged Masonry Building, Sherif A. Mourad and Farouk A. El-Hakim, CF

May 96, p73-78.

Experimental Evaluation of Masonry-Infilled RC Frames, Armin B. Mehrabi, P. Benson Shing, Michael P. Schuller and James L. Noland, ST Mar. 96, p228-237.

An Expert System for Wind-Resistant Residential Con struction, James R. McDonald, Douglas A. Smith and Kishor C. Mehta, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p982-988.

Failure Criteria for Masonry Panels under In-Plane Load-

ing, U. Andreaus, ST Jan. 96, p37-46.

Hazard Mitigation in the Built Environment, Susan Dowty, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p383. Implications Derived from Recent Research in Mexico on

Confined Masonry Structures, Sergio M. Alcocer, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p82-92.

Innovative Development of Prestressed Masonry, G. Shaw, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p13-24.

Loss of Capacity of Concrete Shear Walls, Hassan Sassi and Richard Ranous, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p80-81.

Masonry Designers' Guide - A Comprehensive Design Tool, John H. Matthys, (Worldwide Advances in Struc-tural Concrete and Masonry, A. E. Schultz, ed. and S. L.

McCabe, ed., 1996), p322-333.

Measured Seismic Behavior of a Two-Story Mason Building, Gregory R. Kingsley, Guido Magenes and G. Michele Calvi, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p123-134.

Minimum Thermal Protection for Cold Weather Masonry, C. J. Korhonen, E. R. Cortez and R. D. Thomas, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p128-140.

Nonlinear Finite Element Analysis of Masonry-Infilled Re-inforced Concrete Frames, Medhat A. Haroun and Essam H. Ghoneam, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p1022-1025.

Nonlinear Finite-Element Model of Hollow Masonry, E. Y. Sayed-Ahmed and N. G. Shrive, ST June 96, p683-690. Parameter Models for Estimating In-Situ Tensile Force in

Tie-Rods, Stefano Sorace, EM Sept. 96, p818-825. Power of Prayer, Francis A. Hahn, CE Aug. 96, p31. Prover of Prayer, Francis A. Hahn, CE Aug. 96, p31.
Proposed Limit States Design Provisions for Masonry, Mark B. Hogan, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p345-354.
Proposed Prestressed Masonry Design Provisions, Matthew J. Scolforo, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p355-364.
Rehabilitation of Masonry, Buildings, see the ATC 32.

1990), p353-364.
Rehablitation of Masonry Buildings per the ATC-33 Guidelines, Daniel P. Abrams, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1131-1138.
Reliability Analysis of Masonry Walls, A. S. Al-Harthy and D. M. Frangopol, (Probabilistic Mechanics & Structural Reliability), Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p338-341.
Residential Construction Enilures Caused by Hurricane Analysis

Residential Construction Failures Caused by Hurricane Andrew, Wimal Suaris and Mohammed S. Khan, CF Feb.

Response of Building Systems with Rocking Piers and Flexible Diaphragms, Andrew C. Costley and Daniel P. Abrams. (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p135-140. 95, p24-33.

The Return of Masonry as a Structural Material, Daniel P. Abrams, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p1-12.

Seismic Behavior of Masonry Walls: Experimental Simula-tion, Miha Tomaževič, Marjana Lutman and Ljubo Pet-

ković, ST Sept. 96, p1040-1047

Seismic Behavior of Masonry Walls: Modeling of Hysteretic Rules, Miha Tomaževič and Marjana Lutman, ST Sept. 96, p1048-1054.

Seismic Resistance of Partially-Grouted Masonry Shear Walls, Arturo E. Schultz, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p211-222.

Tall Buildings Triumph, CE June 96, p21-22.

Update of Building Code Requirements for Masonry, 1992 to 1995 Editions, J. Gregg Borchelt, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p334-344.

VSL's Experience with Post-Tensioned Masonry, Hans Rudolf Ganz, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p25-36.

Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996, 0-7844-0164-0, 580pp.

Effect of Uncertainty on an Active Mass Damper System, H. S. Deoskar, R. V. Tappeta and B. F. Spencer, Jr., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p426-429.

The Effects of Construction Joint in Mass Concrete, Donald D. Liou, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p193-202.

Bubbleless Fiber Aerator for Surface Waters, Peter T. Weiss, Bryan T. Oakley, John S. Gulliver and Michael J. Semmens, EE July 96, p631-639.

Effects of Vapor Extraction on Contaminant Flux to At-mosphere and Ground Water, Tjalfe G. Poulsen, Joel W. Massmann and Per Moldrup, EE Aug. 96, p700-706.

Enhanced Trichloroethene Desorption from Long-Term Contaminated Soil Using Triton X-100 and pH Increases, Dipak Sahoo, James A. Smith, Thomas E. Imbrigious and Heather M. McLellan, (North American Water and Environment Congress & Destructive Water, Chencher and Congress & Congr chayya Bathala, ed., 1996), p1215-1220.

Evaluation of a Bedrock DNAPL Pool Site, Dackyoo Hwang, Christopher Reitman and William Richardson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N.

Reddi, ed., 1996), p731-742.

Retuit, cu., 1930, p. 13-1-12.
The Importance of Water Depth for Sparger Performance, Charles Clauss, John S. Gulliver and Steven C. Wilhelms, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1305-1310.

Intraparticle Mass Transport Mechanism in Activated Carbon Adsorption of Phenols, E. G. Furuya, H. T. Chang, Y. Miura, H. Yokomura, S. Tajima, S. Yamashita and K.

E. Noll, EE Oct. 96, p909-916.

Leaching of PCBs from a NAPL Entrapped in Porous Media, Zafar Adeel, Richard G. Luthy and David A. Dzombak, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p649-660.

Multicomponent NAPL Composition Dynamics and Risk, Catherine A. Peters, Paula A. Labieniec and Christopher D. Knightes, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation,

Lakshmi N. Reddi, ed., 1996), p681-692.

Rate-Controlled Micellar Solubilization of an LNAPL in auc-Contolied Micelial Solinization of an LNAFL in Aquifer Materials, Dianne J. Luning Prak, Kurt D. Pen-nell, Linda M. Abriola and Walter J. Weber, Jr., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p639-648.

Rates of Release of PAHs from DNAPL Mixtures, Suparna Mukherji, Catherine A. Peters and Walter J. Weber, Jr., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N.

vironment: Assessment and remeasuron, Larstmut P. Reddi, ed., 1996), p575-582.
Use of Fluorspar in Water Fluoridation, Ching-Gang Peng, Jian Qi and Alan J. Rubin, EE Feb. 96, p132-140.
VOCs in Fixed Film Processes. II: Model Studies, Wayne J. Parker, Hugh D. Monteith and Henryk Melcer, EE July 96, p564-570.

Mass transport Analysis of the Gasoline Spill at East Patchogue, New York, James W. Weaver, Joseph E. Haas and John T. Wilson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p707-718.

Conservative Characteristics-Based Schemes for Mass Transport, C. W. Li and T. S. Yu, HY Sept. 94, p1089-

Effect of Divergent Flow on Mass Conservation in Eulerian-Lagrangian Transport Schemes, Ling Tang and E. Eric Adams, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p106-115.

Loss of Contaminants from Soil During Runoff Events, A. Part, S. Zou and B. McEnroe, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p70-81.

New Trends in Biomechanics, Y. C. Fung, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1-15.

Simulation of Dissolved Oxygen in Sacramento-San Joaquin Delta, Haridarshan L. Rajbhandari, Gerald T. Orlob and Francis I. Chung, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3545-3550. Thermal Management with Ventilation, George Danko,

Thomas A. Buscheck, John J. Nitao and Steven Saterlie, (High Level Radioactive Waste Management, Technical

Program Committee, 1996), p420-422.

Mass transportation

Green Light for Whom? Hermann Zutraun, P.E., CE Sept. 96, p38.

Metro Green Line Opens in Los Angeles, CE Feb. 96, p20. Soft-Ground Subway Construction, Mohammad Irshad, P.E. and John R. V. Dickson, P.E., CE Nov. 96, p54-57.

Modeling Outfall Plume Behavior Using Far Field Circula-tion Model, Alan F. Blumberg, Zhen-Gang Ji and C. Kirk Ziegler, HY Nov. 96, p610-616.

Perfecting Bridge Inspecting, Albert Leung, CE Mar. 96, p59-61

Master plans

Experimentation of the ERTMS System on the Italian, German and French Railways, Daniel Lancien, Florian Kollmannsberger and Paolo Ripamonti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p30-38.

San Francisco International Airport Light Rail System, Wil-liam Leder and Gene Bordegaray, (Meeting the Chal-lenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p106-114. Sanitary Sewer System Modeling Model Comparison Ra-cing Wiccognin Robert W. Cere and Thomps J. Bunker.

cine, Wisconsin, Robert W. Carr and Thomas J. Bunker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

pl/80-1704. The Strategic/Master Plan at Boeing Field: A Means of Optimizing Airport Utilization at an Inner City Airport, Julie Rodwell, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), pl2-23. University Arts Building Presents Structural Challenge, CE Nov. 96, pl0.

Materials

Aerated Concrete Finds First U.S. Commercial Application, CE June 96, p14.

Building an International Community of Structural Engineers, 2 vols., S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, 0-7844-0158-6, 1320pp.

Design and Operation of the Sub-Orbital Lunar Explorer, Walter Collins, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p949-

Editorial, Victor C. Li, MT Nov. 96, p183.

Engineering Research on Smart Materials and Structural Systems, Ken P. Chong, S. C. Liu and O. W. Dillon, IS

June 96, p41-44.

Fracture Mechanics of Concrete: Applications of Fracture Mechanics to Concrete, Rock and Other Quasi-Brittle Materials by Surendra P. Shah, Stuart E. Swartz, and Chengsheng Ouyang, Walter H. Gerstle, ST Nov. 96, p1390-1391.

Ground Improvement Salvation, Peter J. Nicholson, CE May 96, p6.

The Idea of Building: Thought and Action in the Design and Protection of Buildings by Steven Groak, Jeffrey S. Russell, ME July/Aug. 96, p15-17.

New High-Performance Concrete in Canadian Foot Bridge, CE July 96, p11.

Nonstructural Evaluation of Competing Bridge Materials, Robert L. Smith and Robert J. Bush, MT May 96, p88-

75. Optical Waveguide Solar Energy System for Lunar Materials Processing, T. Nakamura, J. A. Case and C. L. Senior, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p783-790.

Performance Characteristics of a Smart Hinge for Solar Array Deployment, Dirk B. Warnaar and Rodney G. Gal-loway, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1162-1168.

Right Questions, Wrong Answers, Eugene H. Harlow, CE June 96, p26-27.

Significance of Tests for Highway Materials, E. Ray Brown, P. S. "Ken" Kandhal, Dah Yinn Lee and K. Wayne Lee, MT Feb. 96, p26-40.

Smeared Crack Approaches—Material Modeling, Marco Petrangeli and Joško Ožbolt, EM June 96, p545-554.

Systematic Analysis of Long-Term Fate of Disposed Dredged Material, Norman W. Scheffner, WW May/June 96, p127-133

Toning Asphalt, ET Aug./Sept. 96, p1,7.

Utilization of 3-D CADD in Analysis, Design and Construction of Mobile Service Tower for Atlas Launch Vehicles, Norm Bobczynski, Matthew Wrona, David Hansen and Harold Howell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pi 197-1204.

Materials engineering

Constitutive Driver for Cohesive-Frictional Materials, K. Willam and M.-M. Iordache, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p751-760.

Editorial, Victor C. Li, MT Nov. 96, p183.

Fast-Track Concrete Paving—Overview of Key Components, Lawrence W. Cole and Gerald F. Voigt, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p446-455.

Low Temperature Solidification of CaCO, Using Hydro-thermal Hot-Pressing, Kazuyuki Hosoi, Toshiyuki Hashi-da, Hideaki Takahashi, Nakamichi Yamasaki and Takashi Korenaga, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p694-700.

Measuring Blast Damage, Clifton E. R. Lawson, P.E., CE Oct. 96, p38-39.

Predicting the Service Lives of Materials of Construction, Geoffrey Frohnsdorff, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p38-53.

Process Research in Support of the Human Exploration and Development of Space: Issues in Program Development, Bradley M. Carpenter, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p509-515.

Radical Rebar Forges Ahead, Eric Rasmussen, ET June/ July 96, p1,8.

Recent Advances in the Development of High Performance Cement-Based Materials, J. Francis Young, (Materials for the New Millennium, Ken P. Chong, ed., 1996), pl 101-1110.

Shape Memory Release Device Experiment, Bernie F. Carenter, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p76-79.

Smart Materials and Structures: A Review, C. Shakeri, M. N. Noori and Z. Hou, (Materials for the New Millennium,

Ken P. Chong, ed., 1996), p863-876. Structural Redundancy and Fracture in Composite Lattice/ Skin Structures, A. K. Maji, E. Fosness and D. Satpathi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p641-644. Testing on the Web, CE Oct. 96, p11.

Materials failure

Continuous and Discontinuous Failure Modes, Z. Chen, EM Jan. 96, p80-82.

Probabilistic Aspects of Material Failure, David F. Bizup and Nozer D. Singpurwalla, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p474-477

Stochastic Damage Model for Brittle Materials Subjected to Monotonic Loading, S. Kandarpa, D. J. Kirkner and B. F. Spencer, Jr., EM Aug. 96, p788-795.

A Study on the Link between Damage Mechanics and Fracture Mechanics, Zhen Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p739-742.

Materials testing

Accelerated Evaluation of New Materials in Transportation Applications Using Advanced Technologies, Mark B. Snyder, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p505-509.

Impact of Weight Falling onto the Ground, Jose M. Roesset, Eduardo Kausel, Vicente Cuellar, Jose L. Monte and Julian Valerio, GT Aug. 94, p1394-1412.

Material Properties, Specifications and Testing for Pave-ments in Cold Regions, Edwin J. Chamberlain, Vincent C. Janoo and Stephen A. Ketcham, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p289-318.

Significance of Tests for Highway Materials, E. Ray Brown, P. S. "Ken" Kandhal, Dah Yinn Lee and K. Wayne Lee, MT Feb. 96, p26-40.

Materials tests

Corrosion Test on Candidate Waste Package Basket Materials for the Yucca Mountain Project, Richard A. Van Konynenburg and Paul G. Curtis, (High Level Radioac-tive Waste Management, Technical Program Committee, 1996), p464-467

In-Situ Corrosion Testing of Selected HLW Container Materials, E. Smailos, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p462-

Pitting Corrosion of Container Materials in Anticipated Repository Environments, Ajit K. Roy and R. Daniel McCright, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p454-456.

Materials, properties
An Alternate Method for Prediction of the Macromechanical Properties of Laminated Composites, Joel G. Bennett, Mark A. Kenamond and Keith S. Haberman, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p1014-

Analysis of Work-of-Fracture Method for Measuring Fracture Energy of Concrete, Zdeněk P. Bažant, EM Feb. 96,

A Boolean Material Property Database, S. Dobson, M. Noori and A. Crespo, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p673-676.

Characterization of a Nonlinear Polymer-Based Composite Material System, R. M. Hackett and P. I. Rodriguez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p771-780.

Cold Neutron Facility Gets a Face-Lift, ET Mar/Apr. 96,

Composite Beam Analogy Fracture Model for Concrete, Mohammed E. Haque and Farhad Ansari, EM Oct. 96, p957-965.

Dissipated Energy as a Function of Material Microstruc-ture, Mark J. Meisner and George N. Frantziskonis, (En-gineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Durability and Long Term Performance of Cementitious Composites, A. Bentur, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1502.

Impact of Weight Falling onto the Ground, Jose M. Roesset, Eduardo Kausel, Vicente Cuellar, Jose L. Monte and Julian Valerio, GT Aug. 94, p1394-1412.

Investigation of Structural Properties of Used Formwork Stringers, Saeed Karshenas and Eyad Mizian, MT Feb. 96, p51-56.

96, [p.1-30.] Material Properties, Specifications and Testing for Pavements in Cold Regions, Edwin J. Chamberlain, Vincent C. Janoo and Stephen A. Ketcham, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p289-318.

Materials for the New Millennium, 2 vols., Ken P. Chong, ed., 1996, 0-7844-0210-8, 1776pp.

Mechanical and Load-Settlement Characteristics of Two Lunar Soil Simulants, Steven W. Perkins and Craig R. Madson, AS Jan. 96, p1-9.

Neural Network Constitutive Models Determined from Structural Tests, Jamshid Ghaboussi, David A. Pecknold, Ming-Fu Zhang and Rami M. HajAli, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p701-704.

New Applications for Gypsum Products, Semyon Shimanovich and Christian Meyer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1687-1693.

Probabilistic Fatigue Life Analysis of High Density Elec-tronics Packaging, N. R. Moore, E. A. Kolawa, S. Sutharshana, L. E. Newlin and M. Creager, (*Probabilis-*tic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p886-889

Representative Volumes of Composite Materials, Yunping Xi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p735-738.

Representative Volumes of Composite Materials, Yunping Xi, EM Dec. 96, p1159-1167.

SFEM for Reliability of Structures with Material Nonlinearities, Jun Zhang and Bruce Ellingwood, ST June 96, p701-704

Smart Materials and Structures: A Review, C. Shakeri, M. N. Noori and Z. Hou, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p863-876.

Stochastic Parallel-Brittle Networks for Modeling Materials, D. A. Gasparini, P. Bonacuse, L. Powers and A. Romeo, EM Feb. 96, p130-137.

Variability Response Functions for Plane Elasticity Prob-lems with Multiple Stochastic Material/Geometric Prop-erties, Lori Craham and George Deodatis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p174-177.

Variability Response Functions for Random Eigenvalue Problems, George Deodatis and Lori Graham, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p681-684.

Mathematical models

2D Velocity Distributions in Nearshore Currents, Marek Szmytkiewicz, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p366-376. Analysis and Computation, Franklin Y. Cheng, ed., 1996, 0-7844-0163-2, 522pp.

Application of Mathematical Models for Flood Forecasting in Sri Lanka, G. T. Dharmasena, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1549.

Automatized System of Runoff Forecasting for the Amu-darya River Basin, L. N. Borovikova, U. G. Konovalov and S. U. Myagkov, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p454.

Beach Profile Evolution Under Mean Conditions, José-María Medina V., Luis Moreno and José C. Santás, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p595-606.

Behaviour-Oriented Models of Shoreface Evolution, Marcel J. F. Stive, Huib J. De Vriend, Peter J. Cowell and Alan Wm. Niedoroda, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p998-1005

Biosphere Model for Assessing Doses from Nuclear Waste Disposal, Marsha I. Sheppard, R. Zach, S. C. Sheppard, B. D. Amiro, G. A. Bird, J. A. K. Reid and J. G. Szekely, (High Level Radioactive Waste Management, Technical

Program Committee, 1996), p240-243.

A Combined Physical and Mathematical Modeling Scheme for Kapichira Hydropower Project, Malawi, K. Sivakumaran and E. Cole, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3806-3811.

Control of an Irrigation Canal, Leslie Skertchly Molina and J. P. Miles, HY July 96, p403-410. Coupled Processes of Gas Hydrates Dissociation and Fluid Filtration in Saturated Porous Media, Alexey Maksimov, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Delay Estimation and Optimal Length for Four-Lane Divided Freeway Workzones, David R. Martineli and Danquing Xu, TE Mar/Apr. 96, p114-122.

ing Xu, 1E Mar/Apr. 96, p114-122.
Dissolution of NAPLs Entrapped in Heterogeneous Porous Media, Indumathi Manivannan, Susan E. Powers and Garrey W. Curry, Jr., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p563-574.
Electrokinetic Remediation: II: Theoretical Model, Akram

N. Alshawabkeh and Yalcın B. Acar, GT Mar. 96, p186-

Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996, 0-7844-0165-9, 730pp. Evaporation of Petroleum Products from Contaminated Soil, Seon-Hong Kang and Charles S. Oulman, EE May

96, p384-387.

30, p304-367. A Finite Element Analysis of Mach Reflection by Using the Boussinesq Equation, Shoichiro Kato, Toshimitsu Takagi and Mutsuto Kawahara, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3440-3445.

Flow Investigation for Landfill Leachate (FILL), Reza M. Khanbilvardi, Shabbir Ahmed and Phillip J. Gleason, EE

Jan. 95, p45-57.

Friction-Term Response to Boundary-Condition Type in Flow Models, Raymond W. Schaffranek and Chintu Lai, HY Feb. 96, p73-81.

Game Model Approach to Multi-Purpose/Multi-Objective Water Resources Related Environmental Protection Pro-Water Resources Related Environmental Protection Pro-ject Planning and Management in Developing Nations: A Nigerian Example, Azuka Benjamin Anyika, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1057-1062. Geochemical Modeling of Lead in Vadose Zone, K. V. Nedunuri, R. S. Govindaraju, A. P. Schwab and L. E. Er-ickson, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1221-1226.

1996), p1221-1226.

How Input Active Biomass Affects Sludge Age and Proc-ess Stability, Bruce E. Rittmann, EE Jan. 96, p4-8.

Hydraulic Analysis of Linear Dewatering Systems, Jerzy M. Sawicki, IR Nov./Dec. 96, p348-353.

Identification of Vortex-Induced-Response Parameters in Time Domain, Himanshu Gupta, Partha P. Sarkar and Kishor C. Mehta, EM Nov. 96, p1031-1037.

Magnetic Fluid Dynamics of Blood Flow, Yousef Haik, Ching Jen Chen and Vinay Pai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p458-461.

Mathematical Model for Durability of Cladding, K. D. Hjelmstad, D. A. Lange, I. D. Parsons and F. V. Law-rence, MT Aug. 96, p172-174.

Mathematical Modeling of Electrochemical Steel Corrosion in Concrete, G. Balabanić, N. Bićanić and A. Dureković,

EM Dec. 96, p1113-1122.

Mathematical Modelling of Coastal Morphodynamics Near a Tidal Inlet System, Jan S. Ribberink, Eelco H. Negen and Gerrit Hartsuiker, (Coastal Dynamics '95, Willi R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p915A Model of the Juncture Vortex, Elie Monnier and M. R. Dhanak, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p1126.

Modeling in Water Losses Evaluation for Nonhomogeneous Furrow Set, Z. Popova and R. Kuncheva, IR Jan./

ous Furrow Set, 2: Fope-Feb. 96, p.1-6.

Modeling Project Performance for Decision Making, Luis F. Alarcón and David B. Ashley, CO Sept. 96, p.265-273.

Modulated Waves in Porous Media Saturated by Liquid and Gas, Inna Edelman, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p.653-656.

and T. C. Su, 1996), p653-656.
Moisture-Induced Pressures in Concrete Airfield Pavements, C. A. Kodres, MT Feb. 96, p41-50.
Near Field Modeling, Philip J. W. Roberts, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3892-3897.
New Approach for Optimization of Overall Construction Schedule, Shirong LJ, CO Mar. 96, p7-13.
Numerical Model for Sea Outfall Hydraulics, Zhen-Ren Guo and Imput. J Sharn HY Eeb 96, 882-89.

Guo and James J. Sharp, HY Feb. 96, p82-89. Numerical Simulation of Hydraulic Transients in Hydro-power Plant Using Safety Membranes, Fusheng Ni, Peicheng Hu and Qiaohong Wang, HY June 96, p298-3000

Optimum Design and Operation of Multiple Subunit Drip Irrigation Systems, G. C. Dandy and A. M. Hassanli, IR Sept./Oct. 96, p.265-275.

Parametric Sensitivity of Comprehensive Model of Aerobic Fluidized-Bed Biofilm Process, A. B. Shahalam, R. El-Samra, G. M. Ayoub and A. Acra, EE Dec. 96, p1085-1093

1093.
Tredicting THM Formation with Artificial Neural Networks, Paul H. Hutton, Nicky Sandhu and Francis I. Chung, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3551-3556.

1996), p3551-3556.
 Prediction of Concrete Cracking Under Coupled Shrinkage and Creep Conditions, Wei Yang, Kejin Wang and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p564-573.
 Probabilistic Analysis of Randomly Distributed Fiber-Reinforced Soil, Gopal Ranjan, R. M. Vasan and H. D. Charan, GT June 96, p419-426.
 Reduction of Structural Response by Energy Dissipation Devices Modelled on Shape Memory Materials, C. W. S. To and J. M. Kelly, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p491-494.
 Relative Celerities of Mobile Bed Flows with Finite Solids Concentrations, Peter H. Morris and David J. Williams,

Concentrations, Peter H. Morris and David J. Williams, HY June 96, p311-315.

Seismic Behavior of Masonry Walls: Modeling of Hysteret-ic Rules, Miha Tomaževič and Marjana Lutman, ST Sept. 96, p1048-1054.

Sept. 90, p1048-1034.
Semicontinuous Mathematical Model for Bending of Multi-layered Wire Strands, Claude Jolicoeur and Alain Cardou. EM July 96, p643-650.
Spatial Spring Runoff Modeling in a River Basin for Purpose of Forecasting. M. Sosedko and V. Manukalo, (North American Water and Environment Congress & Destroyers Water (Purphasers Bathel). Destructive Water, Chenchayya Bathala, ed., 1996), p247-248.

Transport of Organic Compounds in Thermoplastic Geomembranes. I: Mathematical Model, Jae K. Park, Joni P. Sakti and John A. Hoopes, EE Sept. 96, p800-

800.
Unsteady Flow in Hydraulic Capsule Pipeline, C. W. Lenau and M. M. El-Bayya, EM Dec. 96, p1168-1173.
Validation of a Model for Cross-Shore Sediment Transport, Irene Katopodi and Nikos Kitou, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1006), app. 6171. 1996), p806-817.

Weathering Rates of Marble in Laboratory and Outdoor Conditions, Srinivas S. Yerrapragada, Surendra R. Chir-ra, John H. Jaynes, S. Li, Jayanta K. Bandyopadhyay and

K. L. Gauri, EE Sept. 96, p856-863. Zonification of Areas with Inundation Risk by Means of Mathematical Modeling in the Rosario Region, Argenti-na, G. A. Riccardi, E. D. Zimmermann and R. A. Navarto, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3704.

Mathematical programming

Formal Specification of Concurrent Finite Element Sys-tems, Harpreet S. Chadha and John W. Baugh, Jr., (Anal-ysis and Computation, Franklin Y. Cheng, ed., 1996), p166-176

A Fuzzy Logic Paradigm for Fault Trees and Event Trees in Risk Assessment, Timothy J. Ross and Sunil Donald, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p369-375.

Paul Chinowsky, ed., 1990), p309-373.
Modeling and Solving Water Resources Engineering Design Problems as Stochastic Programs to Account for an Uncertain Future, D. S. Yakowitz, W. Elshorbagy and K. Lansey, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p106-117.

Solving Mathematical Programming Problems Using Genetic Algorithms, Siripong Malasri, Jennifer R. Martin and Ricardo A. Medina, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p233-239.

Statewide Programming: Implementing Transportation-Policy Objectives, Debbie A. Niemeier, Tracy L. Reed, G. Scott Rutherford and Pat Morin, IS Mar. 96, p30-39.

Basic Concepts of L₁ Norm Minimization for Surveying Applications, John Marshall and James Bethel, SU Nov. 96, p168-179.

Computer-Developed Structural Calculations, Russell D. Snyder, P.E., SC Nov. 96, p122-125.

Intersection of Spiral Curve with Circle, Olcay Öztan and Orhan Baykal, SU Feb. 95, p3-12.

Mathematical Techniques & Software for Stochastic De-sign Optimization, Jean M. Parks and Chun Li. (*Probabi-*listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p118-121.

A Norm-Based Approach to the Quantification of Model Uncertainty, E. Zio and G. E. Apostolakis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p252-254.

Using Cavity Well to Determine Aquifer Thickness and Constants, Mohammad Saleem, IR May/June 94, p504-

Matrix methods

Stiffness Formulation for Nonprismatic Beam Elements, Arturo Tena-Colunga, ST Dec. 96, p1484-1489.

Ohio Transportation Goes to the Mat to Protect a Creek, CE Mar. 96, p82.

Structural Analysis Model for Mat Foundations, Gin-Show Liou and S. C. Lai, ST Sept. 96, p1114-1117.

"SIMCON-A Novel High Performance Fiber-Mat Reinforced Cement Composite for Repair, Retrofit and New Construction", Neven Krstulovic-Opara, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p288-297

Maximum probable flood

Po95: Where the Past (Paleoflood Hydrology) Meets the Present, Understanding Maximum Flooding, Robert D. Jarrett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1148.

California Probable Maximum Precipitation, John L. Vogel, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p55-56.

Estimation of the Probable Maximum Rainfall and Snow-melt Floods Via Physically Based Model of River Runoff Generation, L. S. Kuchment, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1337.

Hazard Assessment of Extreme Earthquakes and Floods Using the Theory of Outstanding Values, Reza Noubary, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p66-67.

Incorporation of Time-Intensity and Spatial Variability Into Probable Maximum Precipitation (PMP) Estimates, Ana Paula Barros, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), 664-65.

McMaster, Eugene R. (Fellow, ASCE) Gene McMaster, Seattle Consultant, Was ASCE National Officer, NE Apr. 96, p7.

Meanders

Meanders
Restoration of Abandoned Meanders on the Middle Fork
Forked Deer River, Tennessee, B. J. Doeing, R. A.
Gaines and W. A. Thomas, (North American Water and
Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3375-3380.
River Meander Zones and Floodplain Reconnection, David
A. Bella, Peter C. Klingeman and Hiram W. Li, (North
American Water and Environment Congress & Destruc-

American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2613-2618.

Assessing Corrosion on Steel Structures Using Corrosion Coulometer, Richard D. Granata, James C. Wilson and John W. Fisher, IS Sept. 96, p139-144.

Blueprint for Measuring Project Quality, James D. Stevens, ME Mar/Apr. 96, p34-39.

Coastal Engineering Laboratory and Field Measurements: Some Uncertainties in Measurement, Frederic Raichlen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

onnecting Random Acts of Quality: Global System Stan-dard, William M. Hayden, Jr., ME May/June 96, p34-44. Design of an Advanced Fork System for Assembly Burnup Measurement, Ronald I. Ewing and Kevin D. Seager, (High Level Radioactive Waste Management, Technical

Program Committee, 1996), p340-341.

Detailed Measurements of Scour at Bridges, David S. Mueller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p2541-2549.

The Effect of Measurement Scale on the Worth of Hydraulic Conductivity Data: Slug Tests and Pumping Tests, Willy Zawadzki and Roger Beckie, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1034-1051.

An Electro-Optical Accelerometer for Civil Structural Applications, Maria Q. Feng, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p877-886.
An English Units Plea, Ernest Gubry, CE Sept. 96, p38.
Estimation of Mean Flow Velocity in Ice-Covered Chan-

nels, Martin J. Teal, Robert Ettema and John F. Walker, HY Dec. 94, p1385-1400.

Evaluating the Performance of Construction Equipment Operators in Egypt, Ashraf M. Elazouni and Ismail M. Basha, CO June 96, p109-114.

Basna, C. June 96, p109-114.
Evaluation of Dormant Season Evapotranspiration, Jerry L.
Hatfield, John H. Prueger and Thomas J. Sauer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p418-423.
Experimental Uncertainty and Measurement Errors in Hydraulic Engineering, Fred L. Ogden, (North American Water, Congress)

Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1135-1138. A Geologist Discovers ASCE Dinosaurs, Martin Kappeyne,

CE June 96, p26.

Hurricane Disaster Mitigation Through Real-time Wind Analysis, Mark D. Powell, Samuel H. Houston and Igna-cio Ares, (Natural Disaster Reduction, George W. Hous-

cro Ares, (vaurus Disaster Keauction, George W. Houser, ed. and Riley M. Chung, ed., 1997), p.289–290.
Implications of Measured Near-Field Ground Motion on Structural Response, Wilfred D. Iwan, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p.1213-1220. p1213-1220.

In Situ Measurement of Rockfill Properties, Anne Eckert Clift, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed.,

1996), p37-48.

Indianapolis Uses New Radar Technology to Refine Hyeto-graphs for CSO Model and SSES Studies, Patrick L. Stevens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1236-1241.

Measurement Comparisons Could Enhance Trade, ET Mar./Apr. 96, p2.

Measurements of Erosion of Undisturbed Bottom Sedi-ments with Depth, Joe McNeil, Catherine Taylor and Wilbert Lick, HY June 96, p316-324.

Measuring Coherency of Human-Induced Rhythmic Loads Using Force Plates, A. Ebrahimpour and L. L. Fitts, ST July 96, p829-831.

Measuring Dielectric Properties of Concrete over Low RF, Rami H. Haddad and Imad L. Al-Qadi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1139-1149.

A Metric Experience, Marco A. Raudales, CE Nov. 96,

p41. Operational Strategy for Metal Bioleaching Based on pH Measurements, Y. G. Du, R. D. Tyagi and T. R. Sreekrishnan, EE July 95, p527-535.

ORP Measurement in Anaerobic Systems Using Flow-Through Cell, Munish Gupta, Ashutosh Gupta, Makram T. Suidan, Gregory D. Sayles and Joseph R. V. Flora, EE Nov/Dec. 94, p1639-1645.

Particle Spinning Motion during Saltating Process, Hong-Yuan Lee and In-Song Hsu, HY Oct. 96, p587-590.

Prototype Monitoring Study of Wave Climate and Beach Profile in the Surfzone, Joachim Grüne, (Coastal Dynam-ics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p559-570.

Scour Processes Observed in Field Data, Mark N. Landers and David S. Mueller, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3052-3061.

Scour-hole Dimensions at Selected Bridge Piers in New York, Gerard K. Butch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3043-3051.

Surface Profiling System for Measurement of Engineering Structures, Xiaoli Ding, Richard Coleman and J. Michael Rotter, SU Feb. 96, p3-13.

Survey Distance Units: A Better Way, Larry E. Stanfel, SU Aug. 94, p130-132.

Thermogravimetric Analysis of Fiber Reinforced Plastics, Luca Prian, Ritsuko Pollard and Aaron Barkatt, (Materi-als for the New Millennium, Ken P. Chong, ed., 1996), p54-62.

Three-Dimensional Organized Vortices Above Flexible Water Plants, Syunsuke Ikeda and Minoru Kanazawa, HY Nov. 96, p634-640.

Traffic Dynamics: Method for Estimating Freeway Travel Times in Real Time from Flow Measurements, Do H. Nam and Donald R. Drew, TE May/June 96, p185-191.

Uncertainty in Evaluation of Historical Subsidence Meas ncertainty in Evaluation of Historical Subsidence Meas-urements, Kevin M. O'Connor, Sean M. Killen, Mark R. Chandler, Jan E. Stache and John A. Siekmeier, (Uncer-tainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p710-726.

Velocity Measurements of Post-Breaking Turbulence Generated by Plunging Breakers, Paul A. Quinn, Timothy C. D. Barnes, Simon T. Lloyd, Clive A. Greated and D. Howell Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p293-304.

Direct Outcome-Based Assessment Measures, J. D. Bakos, Jr., El Jan. 96, p31-34.

Mechanical engineering

Corrections, CE Nov. 96, p41.

Development of Tension Grips for GFRP Rebars, Hota V. S. GangaRao and Derek Altizer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p394-399.

Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996, 0-7844-0184-5, 1025pp.

Mechanical properties

ASTM A913/A913M: The Perfect Steel for Seismic Design, J. C. Gérardy, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p558-565.

Bed-Load Transport. I: Mechanical Characteristics, Chunhong Hu and Yujia Hui, HY May 96, p245-254.

Behavior of Fresh Mortar in a Vacuum and Microstructure of Mortar Hardened in a Vacuum, L. J. Powers-Couche and T. D. Lin, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p608-

Constitutive and Structural Behavior of Siliceous High-Strength Concretes After a Thermal Cycle at High Temperature, Roberto Felicetti and Pietro G. Gambarova, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p583-592.

Development and Characterization of Cellular Grouts for Sliphining, C. Vipulanandan and V. Jasti, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p829-830

Dynamic Mechanical Properties of SBR Modified Asphalt, Fariborz Gahvari and Imad L. Al-Qadi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p133-143

The Effect of Saturation on the Mechanical Properties of Tuff at Yucca Mountain, Moses Karakouzian and Nick Hudyma, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p407-408.

Effect of Temperature and Galvanization on Cold-Formed Steel, A. B. Abdel-Rahim and D. Polyzois, MT Aug. 96, p114-122

Effect of Transition Zone on the Pre-Peak Mechanical Behavior of Mortar, G. Ramesh, E. D. Sotelino and W. F. Chen, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1238-1245.

Fundamental Thermal Mechanical Modeling of Gas-Filled Porous Composites, N. J. Salamon and Ramnath Gane-san, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p52-55.

Low Temperature Solidification of CaCO₃ Using Hydro-thermal Hot-Pressing, Kazuyuki Hosoi, Toshiyuki Hashi-da, Hideaki Takahashi, Nakamichi Yamasaki and Takashi Korenaga, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p694-700.

Material Development for High-Performance Bridge Steels, J. M. Chilton and S. J. Manganello, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p100-107.

Mechanical and Load-Settlement Characteristics of Two Lunar Soil Simulants, Steven W. Perkins and Craig R. Madson, AS Jan. 96, p1-9.

Mechanical Properties Characterization of Asphalt Concrete Barrier for Radioactive Nuclear Waste Vaults, Bernard A. Vallerga, Akhtarhusein A. Tayebali, Shmuel L. Weissman and Carl L. Monismith, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1288-1297.

Mechanical Properties of JSC-1 Lunar Regolith Simulant, J. Ledlie Klosky, Stein Sture, Hon-Yim Ko and Frank Barnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p680-688.

Mechanical Properties of Reinforcing and Prestressing Steels after Heating, I. Cabrita Neves, João Paulo C. Ro-drigues and António de Pádua Loureiro, MT Nov. 96,

Mechanical Properties of Vitrified Soils, Christopher Y. Tuan and William C. Dass, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p731-740.

Mechanical Response of Woven Graphite/Copper Composites, Brett A. Bednarcyk, Christopher C. Pauly and Marek-Jerzy Pindera, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p628-631.

Mechanistic Evaluation of Fly Ash Asphalt Concrete Mix-tures, N. Ali, J. S. Chan, S. Simms, R. Bushman and A. T. Bergan, MT Feb. 96, p19-25.

A Micromechanical Model for Asphalt Materials, C. A Plaxico, W. Uddin and R. M. Hackett, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p761-770.

Pitch-Based Carbon Fibre Reinforced Concretes, A. M. Brandt and L. Kucharska, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p271-280.

Postbuckling of Moderately Thick Circular Plates With Edge Elastic Restraint, G. Venkateswara Rao, N. Ra-jasekhara Naidu and K. Kanaka Raju, EM Oct. 94, p2232-2238.

Probabilistic Assessment on Variability of Mechanical Properties of Rock Masses, Hang Gao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p934-937.

A Progress Report on the Large Block Test, W. Lin, D. Wilder, J. Blink, P. Berge, S. Blair, V. Brugman, K. Lee,

M. Owens, C. Radewan, Ramirez, A., N. Rector, J. Roberts, D. Ruddle and J. Wagoner, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p122-124.

Reactive Powder Concrete (RPC), A New Material for Prestressed Concrete Bridge Girders, Scott K. Gilliland, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p125-132.

Scale Effects of Shallow Foundations on Lunar Regolith, Steven W. Perkins and Craig R. Madson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p963-972.

Scoping Analysis of In Situ Thermal-Hydrological Testing at Yucca Mountain, Thomas A. Buscheck and John J. Nitao, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p130-132.

Study of Clay-Cement Slurries with Mechanical and Electromagnetic Waves, M. A. Fam and J. C. Santamarina, GT May 96, p365-373.

Asymptotic Approximation of Reliability Integrals for Un-certain Systems, C. Papadimitriou, J. L. Beck and L. S. Katafygiotis, (*Probabilistic Mechanics & Structural Re*liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p574-577.

Biaxial Low-Cycle Fatigue Behavior of Steel Fiber-Reinforced Concrete, Li Fang and Christian Meyer, (Ma-terials for the New Millennium, Ken P. Chong, ed.,

1996), p436-445.
Choice of Input Fields in Stochastic Finite Elements, Ove Ditlevsen and Niels Jacob Tarp-Johansen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol,

ed. and Mircea D. Grigoriu, ed., 1996), p820-837.

Damage Mechanics Model for Evaluation of Bridge Deterioration, Roberto Lopez-Anido, Hota V. S. GangaRao and

oration, Roberto Lopez-Anido, Hota V. S. GangaRao and Raimondo Luciano, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p458-461.

Dynamic Stability of Viscoelastic Structures under Sto-chastic Loading, S. T. Aniaratnam and G. Amaniampong, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p542-545 p542-545

Engineering Mechanics, 2 vols., Y. K. Lin and T. C. Su, 1996, 0-7844-0172-1, 1240pp.

Equations of Motion for Mechanical Systems, Firdaus E. Udwadia and Robert E. Kalaba, AS July 96, p64-69.

Error Estimates for FORM and SORM Computations of Failure Probability, Jean-Claude Mitteau, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p562-565.

Laminate Bonding for Concrete Repair and Retrofit, D. V. Reddy, G. B. Gervois and L. A. Carlsson, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1579-

Micromechanics Based Design of FRCC Components, Christopher K. Y. Leung and Y. Philip Geng, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p419-425.

Ostoja-Starzewski, A. Al-Ostaz, I. Jasiuk and K. Alzeb-deh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p362-363.

Moment Lyapunov Exponent and Stability Index for Linear Stochastic Systems with Small Diffusion, Nikolai Moshchuk and Rafail Khasminskii, (Probabilistic Mechanics

chuk and Katali Khashinishi, (Prodobishe Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p538-541.

A New Method for Efficient Reliability-Based Design Optimization, Y.-T. Wu and W. Wang, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed. 1906), 272-273. and Mircea D. Grigoriu, ed., 1996), p274-277.

- Nonlinear SDOF System Subject to Poisson-Distributed Pulse Process, Sau-Lon James Hu, George Tsiatas and Shuang Jin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p680-683.
- Numerical Methods in Structural Mechanics, Co-published with Thomas Telford, U.K., Zdenek Bittnar and Jiff Sejnoha, 1996, 0-7844-0170-5, 422pp.
- On Moment Stability of Markov Dynamical Systems, Lambros Katafygiotis and Yevgeny Tsarkov, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p546-549.
- On the Almost-Surely Lyapunov Exponent of a Duffingvan der Pol Delay Oscillator, M. S. Fofana, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p550-553.
- On the Development of a Selective Algorithm in Advanced Monte Carlo Simulation, Helmut J. Pradlwarter, Napat Harnpornchai and Gerhart I. Schweller, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p14-17.
- On Translation Processes and Upcrossing Probabilities, Michael Macke and Christian Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p608-611.
- Probabilistic Simulation of Decomposition of Liquid Propellant, N. R. Moore, N. W. Ferraro, D. H. Ebbeler, L. E. Newlin, J. J. Blandino, R. A. Beaudet, C. M. Moran and S. H. Moore, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p640-645.
- Recent Advances in Sensitivity Analysis for Thermomechanical Postbuckling of Composite Panels, Ahmed K. Noor, EM Apr. 96, p300-307.
- Recent Developments in Stochastic Mechanics Relevant to Earthquake Engineering, M. Shinozuka, (*Probabilistic* Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), pl-1.
- Reliability Procedures as a Design Tool for Structures and Mechanical Components, G. I. Schuëller, M. Gasser, J. Hartl and G. Lener, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p800-803.
- Role of Moment Exponent in Stochastic Bifurcation, S. T. Ariaratnam, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p554-557.
- A Simulation Procedure for First Passage Problems of Nonlinear Structures, Veit Bayer and Christian Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p8
- Stochastic Linearization of a Boolean Hysteresis Model, S. Dobson, M. Noori, Z. Hou and M. Dimentberg, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p502-505.
- Structural Analysis with Fuzzy-Based Load Uncertainty, Robert L. Mullen and Rafi L. Muhanna, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p310-313.
- A Study on the Link between Damage Mechanics and Fracture Mechanics, Zhen Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p739-742.

Mediation

- ASCE's Role in the Work of the National Construction Dispute Resolution Committee of the American Arbitration Association, Robert F. Borg, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p1-9.
- Mediation Does Not Abrogate Arbitration, CE Oct. 96, p30.

Medical devices

Biaxial Mechanical Behavior of Bovine Pericardium as a Bioprosthetic Material, Michael S. Sacks, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p200-203.

- Biomechanics and Testing of Mechanical Circulatory Support Devices, Harvey Borovetz, James Antaki, William Wagner, Marina Kameneva, John Pristas, Stephen Winowich, William Mandarino, Philip Litwak, Robert Kormos and Bartley Griffith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p35.
- Chaotic Advection in a Bioengineering System, Ahmet C. Omurtag, Victor Stickel and Rene Chevray, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p450-453.
- Computation of Velocity Fields of Intravenous Balloon Pumping, Huaqiang Li, Tin-Kan Hung, Chiuping Chang and Pat Sawzik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p326-329.
- Computational Modeling of Fluid Dynamics in Aortopulmonary Shunts: Comparison to In Vitro Studies, Kevin K. Whitehead, Theresa A. Tacy and Edward G. Cape, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p334.
- Engineering a Novel Intravenous Oxygenator, William Federspiel, Frank Walters, Pat Sawzik, Gary Reeder, Harvey Borovetz and Brack Hattler, Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p43.
- Engineering Design Considerations for Artificial Lungs, L. F. Mockros and K. E. Cook, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p33-34.
- Minimally Invasive Endoluminal Vascular Grafts, L. Pinchuk, J. P. Dereume, H. Kontges, N. Frid, Y. P. Kato, B. A. Weber, J. B. Martin, I. J. Khan, R. Alcime, G. J. Wilson and D. C. MacGregor, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p192-195.
- Pulsatile Flow Circuitry for Dynamic Study of a Volume Plethysmograph, Alex A. Yu, Jeff Raines and Ned H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p204-207.
- Su, 1990, p.ob-207.
 Simulation of Pulsatile Flow Past a St. Jude Valve, L. Niu,
 D. Bluestein and R. T. Schoephoerster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p330-333.

Mediterranean S

- Multiscale Shore Variability at Two Coasts, Pierluigi Aminti, Zbigniew Pruszak and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p617-628.
- Wave Induced Nearshore Circulation in the Ebro Delta, A. Sánchez-Arcilla, F. Collado, M. G. Coussirat and A. Rodriguez, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p437-448.
- Wavelets in Random Processes Representation, Marina Vannucci, Antonio Moro and Pol D. Spanos, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p672-675.

Membranes

- Analyses of Lunar Membrane Structures for Potential Failure Scenarios, James Day and Phil Richter, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1052-1058.
- Bubbleless Fiber Aerator for Surface Waters, Peter T. Weiss, Bryan T. Oakley, John S. Gulliver and Michael J. Semmens, EE July 96, p631-639.
- Denitrification Incorporating Microporous Membranes, A. R. Reising and E. D. Schroeder, EE July 96, p599-604.
- Earth Slide on Geomembrane, A. C. Stamatopoulos and P. C. Kotzias, GT May 96, p408-411.
- Engineered Contaminated Soils and Interaction of Soil Geomembranes, Geotechnical Special Publication No. 59, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996, 0-7844-0213-2, 144pp.
- Flexible-Membrane Wave Barrier. I: Analytic and Numerical Solutions, M. H. Kim and S. T. Kee, WW Jan/Feb. 96, p46-53.
- HDPE Geomembrane/Geotextile Interface Shear Strength, Timothy D. Stark, Thomas A. Williamson and Hisham T. Eid, GT Mar. 96, p197-203.
- Interaction Between Geomembranes and Granular Materials, Luis E. Vallejo and Yun Zhou, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p82-96.

Lunar Neighborhoods: Architecture for Extreme Environments, Milton Schwartz, Jeffrey Schwartz, John Bergquist, Carsten Keller, Preston Kelsey and Todd Stringer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1027-1031.

Membrane Analogy for Saint-Venant Torsion: New Results, S. M. Heinrich, EM Nov. 96, p1110-1112.

Model of Electrodialysis Process Associated with Organic Adsorption, Thawach Chatchupong and Robert J. Mur-phy, EE Feb. 96, p154-161.

Numerical Simulation of Hydraulic Transients in Hydro-power Plant Using Safety Membranes, Fusheng Ni, Peicheng Hu and Qiaohong Wang, HY June 96, p298-

Posttesting Correction Procedure for Membrane Compli-ance Effects on Pore Pressure, Atilla M. Ansal and Ayfer Erken, GT Jan. 96, p27-38.

Sealing Leaks in Geomembrane Liners Using Electrophore-sis, Glenn T. Darilek, M. Yavuz Corapcioglu and Albert T. Yeung, EE June 96, p540-544.

Tensioned Fabric Structures: A Practical Introduction, Task Committee on Tensioned Fabric Structures of the Technical Committee on Special Structures of the Technical Administrative Committee on Metals of the Structural Division of the A.S.C.E., (R.E. Shaeffer, chmn.), 1996, 0-7844-0156-X, 80pp.

Transport of Aqueous Organic Compounds in Thermoplas-tic Geomembranes. II: Mass Flux Estimates and Practi-cal Implications, Jae K. Park, Joni P. Sakti and John A. Hoopes, EE Sept. 96, p807-813.

Transport of Organic Compounds in Thermoplastic Geomembranes. I: Mathematical Model, Jae K. Park, Joni P. Sakti and John A. Hoopes, EE Sept. 96, p800-806

Versatile Variable-Node Flat-Shell Element, Chang-Koon Choi and Wan-Hoon Lee, EM May 96, p432-441.

Membranes, linings Lining the Line, Walter Mergelsberg, Vojtech Gall and Gerhard Sauer, CE Mar. 96, p50-52.

Mercury Glascrete? - Disposing of Non-Recyclable Glass, Venkata S. Panchakarla and Millard W. Hall, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p509-518.
Risk Reduction of Lead and Mercury in Michigan, Jona-than W. Bulkley, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p315-325.

Big Business, Paul J. Zofnass, CE May 96, p52-55.

Environmental Firms Merge, CE Dec. 96, p22. Getting (and Giving) Good Value, ME July/Aug. 96, p11. Let the Buyer (and Seller) Beware, Gary Gough, CE Sept. 96, p68-69.

Systems Engineering Firms Merge, CE Dec. 96, p22. Two Firms to Merge, CE Jan. 96, p8.

Calibration of XRF and Laboratory Analyses of Soil, Blair J. McDonald, Janice J. Trautner, Alan G. Seelos and Richard K. Glanzman, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p287-296.

Comprehensive Fate Model for Metals in Municipal Waste-water Treatment, Wayne J. Parker, Hugh D. Monteith, John P. Bell, Henryk Melcer and P. Mac Berthouex, EE Sept/Oct. 94, p1266-1283.

Constructed Wetlands for Metals Removal, Charles R. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1184-1189.

ed., 1996), p1184-1189.
Corrosion and Hydrogen Permeation Inhibition by Thin
Layer Zn-Ni Alloy Electrodeposition, D. H. Coleman, B.
N. Popov and R. E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1281-1287.
Discussion of Environmental Engineering Forum: LongTerm Effects of Wetland Treatment of Mine Drainage

(November/December 1993, Vol. 119, No. 6, by Thomas M. Walski (Environmental Engineering Forum)), Frederick M. Williams and Lloyd R. Stark, EE Jan. 96, p84-85.

Dissolution of Lead Paint in Aqueous Solutions, Gregory L. Barnes and Allen P. Davis, EE July 96, p663-666.

Editor's Note, Thomas L. Theis, EE Aug. 96, p675.

High-Performance Metals for Civil and Marine Structures, John W. Fisher, Richard Sause and Robert J. Dexter, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p23-37.

Immobilization of Metals and Solids Transported in Urban Pavernent Runoff, John Sansalone, Steven Buchberger and Joseph Koran, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3115-3120.

Influence of Flooding Events on Suspended Matter Quality of the Meuse River (The Netherlands), J. J. G. Zwolsman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3273-3274.

Innovative Technology Development for Safe Excavation, Xiaodong Huang, Daniel Bernd and Leonhard E. Ber-nold, CO Mar. 96, p91-96.

Long-Term Leaching of Metals from Concrete Products, Matthew T. Webster and Raymond C. Loehr, EE Aug. 96, p714-721.

Market Value of Asteroidal Precious Metals in an Age of Diminishing Terrestrial Resources, Jeffrey S. Kargel, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p821-829.

Monitoring Stable Crack Propagation in Metals, Luis A. de Bejar, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p890-893

Parameter Models for Estimating In-Situ Tensile Force in Tie-Rods, Stefano Sorace, EM Sept. 96, p818-825.

Photocatalytic Degradation of Formic Acid via Metal-Supported Titania, Heung Yong Ha and Marc A. Anderson, EE Mar. 96, p217-221.

Pitting Corrosion of Container Materials in Anticipated Re-pository Environments, Ajit K. Roy and R. Daniel McCright, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p454-456.

Risk Model Applied Backwards, Monica Maldonado, ET Oct./Nov. 96, p1,7.

Rock 'N' Roll in Cleveland, Rita Robison, CE Feb. 96, p48-49.

Snow Guards for Metal Roofs, Wayne Tobiasson, James Buska and Alan Greatorex, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p398-409.

Structural Damage due to Hurricane Marilyn in St. Thomas and Culebra, Luis A. Godoy, Roberto Huyke, Ricardo R. Lopez, J. A. Martinez-Cruzado and Raul Zapata, (Natu-

ral Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p135-136.

Three Year Evaluation of a Metal-Plate Connected Wood Truss Bridge, Michael H. Triche and Michael A. Ritter, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p276-281.

Washing of Zinc (II) from Contaminated Soil Column Allen P. Davis and Inderbir Singh, EE Feb. 95, p174-185

Meteorology

Analysis of Exceptional Meteorological Conditions on July and August in Conakry, Mamadou Tounkara, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1144.

The System for the Hydrological Forecasting in Serbia, Bo-jan Palmar and Borjanka Palmar, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p716-717.

Tornadoes and Severe Storms in Russia, Nikolay A. Popov, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p133-134.

Using NOAA's New Climate Outlooks in Operational Hydrology, Thomas E. Croley, II, HE July 96, p93-102.

Meteors

Air Force Planetary Defense Technology, J. Darrah, S. Worden and G. H. Stokes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p32-45.

The Danger to Satellites from Meteor Storms—A Case Study of the Leonids, P. Brown, J. Jones and M. Beech. (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p13-19.

Issues of Landing on Near Earth Asteroids, D. J. Scheeres, S. J. Ostro and R. S. Hudson, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed.,

1996), 954-60.

Meteoroid Hazards in the Lunar Environment, Frank J.

Rooney and John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p653-662.

A Model of Meteoroid Atmospheric Entry with Implica-tions for the NEO Hazard and the Impact of Comet Shoe-maker-Levy 9 on Jupiter, D. A. Crawford and M. B.

maker-Levy 9 on Jupiter, D. A. Crawford and M. B. Boslough, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p81-87.

Optimal Detection of Short-Warning Near-Earth Object Threats, Gregory H. Canavan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996-1997.

1996), p26-31.

ORDER: A Preliminary Concept for ORbital DEbris Removal, Brian A. Phail, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p334-340.

Sizes and Masses of Satellite Observed Meteoroids, Z. Ceplecha, R. E. Spalding, C. Jacobs and E. Tagliaferri, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p95-101.

Methane Anaerobic Treatment of High-Sulfate Wastewater and Substrate Interactions with Isopropanol, Peter Fox and Swamy Ketha, EE Nov. 96, p989-994.

Biodegradation of Dichloromethane in Leachate, R. Kerry Rowe, Leila Hrapovic, Naim Kosaric and D. Roy Culli-more, (North American Water and Environment Con-

more, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2021-2026. Coupled Processes of Gas Hydrates Dissociation and Fluid Filtration in Saturated Porous Media, Alexey Maksimov, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), 220-223.

Landfill Leachate Treatment by Evaporation, Deborah R. Birchler, Mark W. Milke, A. Leigh Marks and Richard G. Luthy, EE Sept./Oct. 94, p1109-1131.
Protective Film Helps Landfills Make Energy, CE Nov. 96,

Pulling Propellants Out of Thin Air: Demonstration of an aning roperlains out of thin Air Demonstration of a End-to-End Mars In-Situ Propellant Production Unit, John F. Connolly and Robert M. Zubrin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p706-716.

Reductive Pyrolysis for the Destruction of Chloromethane: A Reaction Pathway Model Based on Thermodynamic and Thermokinetic Considerations, Varadarajan Ravin-dran, Massoud Pirbazari, Badri N. Badriyha and Sidney W. Benson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, 1996), p1367-1372.

Waste Not in Wisconsin, David A. Rudig, CE June 96, p68-70

Methane generation Pilot Study Shows Higher Methane Yields, CE May 96, p14-15.

Protective Film Helps Landfills Make Energy, CE Nov. 96, p95.

Methanols

Methanois
Bioenergy in Transition, Ralph P. Overend, Charles M. Kinoshita and Michael J. Antal, Jr., EY Dec. 96, p78-92.
Methanol Plant Construction Begins, CE Feb. 96, p8.
Vapor Phase Biofiltration for Removal of VOCs, Malcolm
K. Man, Badri N. Badriyha, Walter Den and Massoud
Bibbarric (Warth American Western Emissions)

Pirbazari, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1209-1214.

Methodology

Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Geotechnical Special Publication No. 62, Paul Michaels, ed. and Richard Woods, ed., 1996, 0-

os, I aut Pitchaets, ed. and Richard Woods, ed., 1996, 0-7844-0208-6, 128pp.
Comparison of Methods for Estimating REF-ET, D. M. Amatya, R. W. Skaggs and J. D. Gregory, IR Nov/Dec. 95, p427-435.

35, pp27-33.
A Damage Simulation Model for Buildings and Contents in a Hurricane Environment, N. Stubbs and D. C. Perry, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p989-996.

Design Synthesis: Transcending to Stochastic Realm Part 3: Optimization, Jean M. Parks, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and

Mircea D. Grigoriu, ed., 1996), p130-133.

Development of Integrated Inventory Databases and Earthquake Damage and Loss Estimation Methodologies for Structures in Utah, Christopher Rojahn, Stephanie A. King, Roger E. Scholl, Anne S. Kiremidjian, Lawrence D. Reaveley and Robert F. Wilson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p7-8

Double-Layer Grids: Review of Static and Thermal Analysis Methods, Ramesh B. Malla and Reynaud L. Serrette,

ST Aug. 96, p873-881.

The Elements of Academic Research, Richard H. McCuen, ed., 1996, 0-7844-0171-3, 290pp. Estimation of Flash Flood Potential for Large Areas, K. P.

Georgakakos, A. K. Guetter and J. A. Sperfslage, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1147.

Exterior Cladding Methods: A Technoeconomic Analysis, Igal M. Shohet and Alexander Laufer, CO Sept. 96,

p242-247.

External Inspection of an Ocean Outfall, Mike Heinz, Don Siverts and Bob Ooten, (North American Water and En-vironment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p.2056-2059.
Flood Control in the Brazilian Electric System Reservoirs at Parana River Basin, A. L. Lopes and V. F. Rocha, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Flood Quantiles for Small Watersheds Using Peak Elevation to Volume Method, Michael C. Morgan and Eric D. Loucks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p146-151.

Fuzzy Rule-Based Estimation of Flood Probabilities under Climatic Fluctuations, Istvan Bogardi, Roland Reiter and Peter Nachtnebel, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p61-79.

Impact of Anthropogenic Activities in Rivers Upon Accuracy of Hydrological Forecasts and on Development of Forecasting Methodologies— Experiences From the Slovak-Hungarian Reach of Danube, K. Hajtasova and A. Svoboda, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1718.

Incorporating Damage Control in Structural Design, Dan M. Frangopol, Marek Klisinski and Kai-Yung Lin, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed.,

1996), p598-605.

"1996), p598-605.

A Knowledge-Based System For International Hurricane Risk Management, Surya K. Gunturi, Chris Austin, Aida RiveraMarzan, Ping Zhang, John Lieberman, Paul VanderMarck, Mark Broido and Auguste C. Boissonnade, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p15-16.

Method for Uncoupling Load Factor Determination, Duane E. Castaneda, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p222-225.

Methods and Procedural Considerations in Demolishing Tall Concrete Chimneys, Kenneth K. Walker, Cliff Schexnayder, Richard E. Mayo and Kenneth D. Walsh, CO Sept. 96, p223-230.

CO Sept. 96, p223-230.

minimum Risk Evaluation Methodology for Fault Toler-ant Automotive Control Systems, P. Borodani, L. Gortan, R. Librino and M. Osella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p552-557. A Minimum Risk Evaluation Methodology for Fault Toler-

Mitigation of Predation at a Juvenile Bypass Outfall Site, J. DenBleyker and L. J. Weber, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p893-898.

Multi-Hazard Risk Assessment of Lifelines: Methodologies and Research Needs, Erik Vanmarcke and Ricard Pama, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p359-360.

ed. and Kitey M. Chung, ed., 1997), p399-300. Neptune--An Integrated Approach to Determining NW European Coastal Extremes, Jerzy Graff and Witold Cieślikiewicz, (Coastal Dynamics '95, William R. Dally,

ed. and Ryszard B. Zeidler, ed., 1996), p1035-1046.
Observation and Conditional Stochastic FEM, M. Hoshiya and I. Yoshida, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p178-181.
Practical Approach & Linguistic Mechanics

goria, ed., 1999, p1/o-101.

A Practical Approach to Uncertainty Modeling in Geotechnical Engineering, C. Hsein Juang and David J. Elton, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1269-1283.

Probabilistic Modeling of Radiation Damage in Charge-Coupled Devices, D. H. Ebbeler, L. E. Newlin and N. R. Moore, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p776-779.

Probabilistic Seismic Analysis Including Soil-Structure In-teraction, Dan M. Ghiocel, Paul R. Wilson and Gary G. Thomas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p620-623.

Reducing Uncertainty in Environmental Site Characteriza-tion, Yi-Chang Tsai and J. David Frost, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1019-1033. Reliability Assessment Methodology for Sliding Stability

of Gravity Structures, Bilal M. Ayyub and Ru-Jen Chao, (Probabilistic Mechanics & Structural Reliability, Dan Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Response Cumulants of Nonlinear Systems Subject to Ex-ternal and Multiplicative Excitations, C. Papadimitriou, L. S. Katafygiotis and L. D. Lutes, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p744-747

Risk Analysis of Ship and Barge Collision Loads on Bridg-es, Michael A. Knott, (*Probabilistic Mechanics & Struc-*tural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p724-727.

Storm Surge Frequency Computations for Long Island, NY: A Comparison of Methodologies, Norman W. Scheffner and H. Lee Butler, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p80-

Vertical Uplift Capacity of Horizontal Anchors, Kanaka Subba Rao and Jyant Kumar, GT July 94,

p1134-1147

Metric systems

Chemical Engineer Joins Metric Debate, James A. Sloss, CE Mar. 96, p31.

An English Units Plea, Ernest Gubry, CE Sept. 96, p38. Fear of Metric, Edward Kausel, CE Apr. 96, p38.

For Public Works, Metrication is a Luxury, Ronald F. Kilmartin, CE Jan. 96, p31-32. A Geologist Discovers ASCE Dinosaurs, Martin Kappeyne,

CE June 96, p26.

Getting Wet with Metric, Frederick A. Locher, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3685-3689. A Metric Experience, Marco A. Raudales, CE Nov. 96,

The Metric System as Viewed by Napoleon, R.E. Crysler, CE Jan. 96, p30.

New Metric Guide Stresses "Preferred Numbers" to Aid in Building Construction, NE June 96, p10.

Practitioners' Forum, AE June 96, p45-48.

Problems with Metrication in Transboundary Water Projects, Conrad G. Keyes, Jr., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3680-3684.

A Proponent of Choice, Robert E. Steacy, CE Feb. 96, p28. Should Conversion to SI System Continue to be Debated? Autar K. Kaw and Melissa Daniels, El Apr. 96, p69-72.

Structural Design Forum, Carl J. Lehman, SC May 96, p60-66.

Structural Design Forum, SC Aug. 96, p62-68. Use of the Metric System in Water Resources, Jan van Schilfgaarde, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3690-3695. Since When is 5% Slight?', Merlyn Isaak, CE Feb. 96. p31-32.

Mexico

Border Environment Cooperation Commission: 1995 Year End Status Report, Peter Silva, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1819-1821.

Chayya Bathala, ed., 1996), p1819-1621.

Besign and Implementation of On-Farm Surface Drainage

Projects in the Humid Tropics of Mexico, John C. Tiedeman and Rodolfo Namuche Vargas, (North American

Water and Environment Congress & Destructive Water,

Chenchayya Bathala, ed., 1996), p2480-2485.

Environmental Planning for Water Resources Develop-ment, Cuatro Cienegas Region, Coahuila, Mexico, James r. Kunkel and Dario Rodríguez-Bejarano, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1249-1254.

GPS High Accuracy Geodetic Networks in Mexico, Tomás Soler, Gabriel Álvarez-García, Antonio Hernández-Navarro and Richard H. Foote, SU May 96, p80-94.

History of Coastal Engineering in Mexico, J. Antonio Maza, Rodolfo Silva and Carlos Sánchez, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p375-389.

Impacts of NAFTA on Environmental Engineering, Mark W. Killgore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2306-2311.

Implications Derived from Recent Research in Mexico on Confined Masonry Structures, Sergio M. Alcocer, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p82-92

The Management and Policies of the BECC, April Lander, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1813-1818.

Mexican Border Ground Water Agreement, Conrad G. Keyes, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed. 1996), p2330-2334.
NAFTA Pact May Change as U.S. Engineers Mull Licensing Details, NE May 96, p16.

Nopal I Uranium Deposit: A Study of Radionuclide Migra-tion, Virgina Wong, Elizabeth Anthony and Philip Goodell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p43-45.

Problems with Metrication in Transboundary Water Projects, Conrad G. Keyes, Jr., (North American Water and Environment Congress & Destructive Water, Chen-

Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3680-3684.

Simulation of Regional Ground-Water Flow on a Trans-boundary Flowline; Trans-Pecos, Texas and Chihuahua, Mexico, Barry J. Hibbs, Bruce K. Darling, John M. Sharp, Jr. and John B. Ashworth, (North American Water

Sharp, Jr. and John B. Ashworth, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1323-1330.
The South Bay Ocean Outfall, Frank X. Collins, Gregory W. McBain, Jon Y. Kaneshiro, Luciano Meiorin and Lar-ry Stout, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1006) 2044 2040.

1996), p2044-2049.

U.S. Looks to Mexico for New Infrastructure Projects, CE Oct. 96, p28.

US/Mexico Border Drinking Water Study, Blake L. Atkins, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2120-2125.

Water Allocation on US/Mexico Boundaries, Conrad G. Keyes, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3429-3433.

"California Border Environment Activities Since Passage of NAFTA", James M. Stubchaer, Bart Christensen and Susan Phillips, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1807-1812.

Michener, Percy Z. (Fellow, ASCE)

Percy Michener, Engineer of Chesapeake Bridges, Dies at 92, NE Apr. 96, p7.

Michigan

Risk Reduction of Lead and Mercury in Michigan, Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p315-325.

Mickle, D. Grant (Fellow, ASCE)

Grant Mickle Dies; Held Top Highway Posts, NE Feb. 96, p14.

Micro piles

Chicago's Micropile Debut, Steven D. Scherer, William H. Walton and Ron Johnson, CE Aug. 96, p51-53.

Controlling Microbial Biota Transfer in the Garrison Diversion Unit, Charles J. Moretti, David M. Kopchynski and Tia L. Cruise, WR May/June 96, p197-204.

EPA Requires Cryptosporidium Watch, CE July 96, p20. Model for Effective Diffusivities in Aerobic Biofilms, Roger K. Hinson and Walter M. Kocher, EE Nov. 96,

p1023-1030.

ORP Measurement in Anaerobic Systems Using Flow-Through Cell, Munish Gupta, Ashutosh Gupta, Makram T. Suidan, Gregory D. Sayles and Joseph R. V. Flora, EE Nov/Dec. 94, p1639-1645.

Oxygen Supplies for Bioremediation in Tundra Soils, Dan-iel M. White and Robert L. Irvine, (Cold Regions Engi-neering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p339-350.

Ozone Update Requested, Ernest Nussbaum, CE Nov. 96,

Phenol- and Thiocyanate-Based Wastewater Treatment in RBC Reactor, Goutam Banerjee, EE Oct. 96, p941-948.

Physical Distribution System Models for Assessing the Impact of Water Quality on Regrowth and Corrosion, Anne K. Camper, Warren L. Jones and Calvin Abernathy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p143-7-1441.
Protecting Drinking Water: Rapid Detection of Human Fecal Contamination, Injured, and Non-Culturable Pathogenic Microbes in Water Systems, D. C. White, D. E. Nivens, A. A. Arrage, B. M. Appelgate, S. R. Reardon and G. S. Sayler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathaland) la, ed., 1996), p1645-1650.

Microbial activity

Autotrophic and Heterotrophic Bacterial Diversity from Yucca Mountain, M. Khalil, D. L. Haldeman, A. Igbino-via, P. Castro, L. Ragatz and P. Amy, (High Level Radio-active Waste Management, Technical Program Committee, 1996), p9-11.

Distribution and Nutrient Limitations of Heterotrophic Bac-teria from Yucca Mountain, D. L. Haldeman, L. Ragatz and P. S. Amy, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p30-32.

Evaluating Coatings for Concrete Wastewater Facilities, C. Vipulanandan, H. Ponnekanti, Dara N. Umrigar and A. D. Kidder, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p851-862. Factors Limiting Microbial Activity in Volcanic Tuff at Yucca Mountain, Thomas L. Kieft, William P. Kovacik and Jennifer Taylor, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

In Situ Characterization of the Microbiota in Yucca Moun-tain Sediments, David B. Ringelberg, Julia O. Stair, David C. White and Larry H. Hersman, (High Level Ra-dioactive Waste Management, Technical Program Com-

mittee, 1996), p33-35.

Initial Studies to Assess Microbial Impacts on Nuclear Waste Disposal, J. M. Horn, Annemarie Meike, R. D. McCright and B. Economides, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p7-8.

Leachate Chemistry: Its Implications for Clogging, Bruce E. Rittmann, Ian R. Fleming and R. Kerry Rowe, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p28-33.

Microbial Decontamination of Polluted Soil in a Slurry Process, M. J. Geerdink, R. H. Kleijntjens, M. C. M. van Loosdrecht and K. C. A. M. Luyben, EE Nov. 96, p975-

Microbial Studies in the Canadian Nuclear Fuel Waste Management Program, Simcha Stroes-Gascoyne, (High Level Radioactive Waste Management, Technical Pro-gram Committee, 1996), p4-6.

Microbiological Influenced Corrosion (MIC) of Carbon Steel Utilized in the Construction of Nuclear Waste Canisters, Dave Bergman, Pati Castro, Beth Pitonzo, Penny Amy and Denny Jones, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p12-18.

Microbiological Sorption and Transport: Field and Laboratory Experiments, Larry E. Hersman, (High Level Radio-active Waste Management, Technical Program Commit-

tee, 1996), p27-29.

Numerical Modeling of Biologically Reactive Transport Near Nutrient Injection Well, T. Prabhakar Clement, Bri-an S. Hooker and Rodney S. Skeen, EE Sept. 96, p833-

Operational Strategy for Metal Bioleaching Based on pH Measurements, Y. G. Du, R. D. Tyagi and T. R.

Sreekrishnan, EE July 95, p527-535.

Potential Microbial Impacts on Groundwater Quality, D. Roy Cullimore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p40-45.

A Program to Assess Microbial Impacts on Nuclear Waste Containment, Joanne Horn and Annemarie Meike, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p1-3.

SEAM2D: A Numerical Model for Two-Dimensional Solute Transport and Sequential Electron Acceptor-Based Bioremediation of LNAPL-Contaminated Aquifers, Dan W. Waddill, Mark A. Widdowson and J. Steven Brauner, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p466-477.

Microcomputers

Advanced Control Systems for Integrated Transportation by LIM Devices, R. Di Stefano, G. Gentile, S. Meo, N. Ro-tondale and M. Scarano, (Applications of Advanced Technologies in Transportation Engineering, Vorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p49-

Application of Mathematical Models for Flood Forecasting in Sri Lanka, G. T. Dharmasena, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1549.

Chayya Bathan, ed. 15-29, 18-20, 18-2 la, ed., 1996), p304-309.

Parallel Structural Analysis with Computers and Engineers, Edward L. Wilson, (Analysis and Computation, Franklin

Y. Cheng, ed., 1996), p1-18.

Microcosms

Leachate Chemistry: Its Implications for Clogging, Bruce E. Rittmann, Ian R. Fleming and R. Kerry Rowe, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p28-33.

Small Inocula Can Effect In Situ Biodegradation, Rolf U. Halden and Daryl F. Dwyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2402.

Microporosity
Denitrification Incorporating Microporous Membranes, A.
R. Reising and E. D. Schroeder, EE July 96, p599-604.

Behavior of Cementitious Composites with Randomly Dis-persed Microfibers, D. A. Lange, C. Ouyang and S. P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p281-287.

Microstructure

Anaerobic Degradation of Cornstarch in Wastewater in Two Upflow Reactors, Tin Sang Kwong and Herbert H.
P. Fang, EE Jan. 96, p9-17.

Behavior of Marble under Compression, C.-T. Chang, P. Monteiro, K. Nemati and K. Shyu, MT Aug. 96, p157-

Continuous and Discontinuous Failure Modes, Z. Chen, EM Jan. 96, p80-82.

Dissipated Energy as a Function of Material Microstruc-ture, Mark J. Meisner and George N. Frantziskonis, (En-gineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Effect of Inclusion Strength and Geometry on Mortar Frac-ture, Mohsen A. Issa, A. B. Shafiq and A. Chudnovsky, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

The Effect of Moisture on Spalling of Normal and High Strength Concretes, N. Khoylou and G. L. England, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p559-570.

Effect of Temperature and Salt Contamination on Carbonation of Cements, Mohammed Maslehuddin, C. L. Page and Rasheeduzzafar, MT May 96, p63-69.

Experimental Observation of Microstructural Behavior of Concrete, Ahmed M. Farahat, Masashi Kawakami and Tada-aki Tanabe, MT May 95, p87-95.

Inelastic Strains of Porous Saturated Media, Victor N. Ni-kolaevskiy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p927-930.

Su. 1990), P247-30.
Material Development for High-Performance Bridge Steels, J. M. Chilton and S. J. Manganello, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p100-107.

Microstructural and Phase Characteristics of Phosph sum-Cement Mixtures, Amitava Roy, Ramesh vakaalva and Roger K. Seals, MT Feb. 96, p11-18.

Multi-Scale Models of the Diffusivity of Concrete, Dale P. Bentz and Edward J. Garboczi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p574-582.

Non Linear Computation of Fiber Reinforced Micro-Concrete Structures, Mouloud Behloul, Régis Adeline and Gérard Bernier, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p518-529.

Representative Volumes of Composite Materials, Yunping

Xi, EM Dec. 96, p1159-1167. Smeared Crack Approaches—Material Modeling, Marco Petrangeli and Joško Ožbolt, EM June 96, p545-554.

Some Phenomenological Aspects of High Performance Concretes, and their Consequences for Numerical Analy-sis, Ravindra Gettu, Ignacio Carol and Pere C. Prat, (Worldwide Advances in Structural Concrete and Masonry, A. p506-517. A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

Microtunneling

Construction Forum, SC Nov. 96, p99-103.

Design of Microtunneling and Jacking Pipe, Alan Atalah, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p395-402.

Microtunneling Database for the USA and Canada From 1984 to 1995, Alan Atalah and Paul Hadala, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996),

"Ductile Iron Microtunneling Pipe, Non-Traditional Instal-lation Applications", Ralph R. Carpenter and Randall C. Conner, (*Pipeline Crossings 1996*, Lawrence F. Ca-talano, ed., 1996), p312-321.

Rocket Experiments and Demonstrations for Microwave Power Transmission (MPT), Nobuyuki Kaya, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p280-286.

Solar Power Satellites as an Alternative Energy Source, Wendy Shefelbine, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1307-1310.

Studying the Ozone Layer from Space, Emilia K. Arguello, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1259-1261.

'SPS 2000" and its Internationalisation, Patrick Collins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p269-279.

Regineering Aspects of Wetland Mitigation, A. Mahendra Rodrigo, Kenneth P. Dunne, Lewis O. Morgan and Rao Nivargikar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2027-2032.

Numerical Modeling of Deep Well Injection Near a Fault, Peikang Jin and Michael E. Barber, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p912-926.

A Screening Level Model for Estimation of Vadose Zone Screening Level Model for Estimation of Vadose Zone Leaching and Saturated Zone Mixing: VLEACHSM, Sang B. Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1736-1741.

Significance of Geologic Features on the Contaminant Mi-gration from Landfill Sites, Rao Nivargikar and Thomas Voss, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p988-993.

Surface Bypass-Collector Concepts and Performance, Peter C. Klingeman, Lisa M. Wieland, Kenneth R. Elbert and Thomas K. Lorz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p673-678.

la, (d., 1996), porture.

A Surface Collection Design Approach on the Lower Columbia River, Donald R. Chambers and John H. Plump, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p667-672.

poot-o/2.
Vertical Migration of Diesel into Silty Sand Subject to Cyclic Freeze-Thaw, K. W. Biggar and J. C. R. Neufeld, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p116-127.

Military engineering
Air Force Planetary Defense Technology, J. Darrah, S.
Worden and G. H. Stokes, (Engineering, Construction,
and Operations in Space, Stewart W. Johnson, ed., 1996), p32-45.

1990), p32-43.
Alternative Scenarios for Military Deployment of Unmanned Ground Vehicles, John G. Blitch and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p36-42.
Assault Bridge Tested, CE Oct. 96, p24-26.
New Faces in Familiar Places, NE Nov. 96, p15.
Seec. Debrie Housel Level

Space Debris Hazard to Defense Systems, Gregory H. Canavan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p20-25.

Name wastes
Sand Variability from Ground Penetrating Radar Data,
Charles T. Young and Jon P. Doucette, (Uncertainty in the Geologic Environment: from Theory to Practice,
Charles D. Shackefford, ed., Priscilla P. Nelson, ed. and
Mary J. S. Roth, ed., 1996), p368-382.

Mineral analysis

Use of Fluorspar in Water Fluoridation, Ching-Gang Peng, Jian Qi and Alan J. Rubin, EE Feb. 96, p132-140.

Mineral deposits

Lunar Sample Return: A Near-Term Marketing Opportuni-ty? Brad R. Blair, (Engineering, Construction, and Oper-ations in Space, Stewart W. Johnson, ed., 1996), p194-

Operational Satellite Remote Sensing for Mineral Exploration, Charles Sabine, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p237-244.

Mineralogy

Appalachian Piedmont Regolith: Relations of Saprolite and Residual Soils to Rock-Type, Milan J. Pavich, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p1-11.

Applications of Soil Nailing in Residual Soil, James W. Sigourney, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson,

ed., 1996), p57-65.

Estimation of In Situ Hydraulic Properties of Saprolite, Gordon M. Matheson, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p66-73.

Air Quality at a Zinc/Lead Mine in Arctic Alaska, Charlotte MacCay and Jack Coutts, (Cold Regions Engineering: The Cold Regions Infrastructure-An International In perative for the 21st Century, Robert F. Carlson, ed., 1996), p804-815.

American Rivers Rates Worst Waterways, CE Oct. 96, p19-20.

Erosion and Stability of a Mine Soil, Tien H. Wu. Alan T. Stadler and Chin-wah Low, GT June 96, p445-453

Remote Sensing in Investigation of Engineered Underground Structures, William F. Kane, Douglas C. Peters and Robert A. Speirer, GT Aug. 96, p674-681.

Settlement of Shallow Foundations on Uncontrolled Mine Spoil Fill, J. Richard Cheeks, CF Nov. 96, p143-151.

Minimum weight design

Minimum Weight of Control Devices with Bounded LQG Control, Alexander A. Bolonkin, Duane E. Veley and Narendra S. Khot, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1230-1236.

Commercial Mining Activities for the Space Frontier, David M. Neil, Russell J. Miller, David S. McKay and Brad R. Blair, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p800-

Earthquakes, Bombs and Mines, CE July 96, p8. Evaluating Risk to the Environment from Mining Using Failure Modes and Effects Analysis, Kelvin Dushnisky and Steven G. Vick, (Uncertainty in the Geologic Envi ronment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p848-865.

Fluidized Drilling for Lunar Mining Applications, Brad R. Blair, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p813-820.

Improvements in Mining Technology, Jacques Nantel, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p806-812.

Market Value of Asteroidal Precious Metals in an Age of Diminishing Terrestrial Resources, Jeffrey S. Kargel, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p821-829.

River Restoration Considerations Beyond Channel Design, William T. Fullerton, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3091-3096.

Banasta, Cu., 1990, p.3091-3090.
Sample Returns to Enable Asteroid Mining, Alan J. Willoughby, Alan L. Friedlander, Darla J. German, Mark K. Jacobs, Jeffrey A. George and Kurt J. Hack, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p840-846.

Technology for Mining of Building Materials at First Stages of Moon Development, Oleg V. Nagovicin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p830-839.
Traditional People and a Modern Mining Company Working Towards Sustainability in Indonesia, Bruce E. Marsh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2982-2992.

Minnesota

The Cost of Highway Bridge Scour in the State of Minne-sota, W. Robert Ivarson, Mark Gieseke and Dave Hal-vorson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3500-3508.

Minnesota Featured State at Bridge Conference, CE Aug. 96, p16.

Minnesota Intelligent Transportation Systems' Laboratory, Lowell A. Benson, Dennis L. Foderberg and Yorgos Stephanedes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p525-534.

Minority groups

Commentary on MBE and FBE Participation in the Con-struction Industry, Amir Tavakoli, ME July/Aug. 96, p6-

Environmental Justice: The Department of Energy's Re-sponse to Executive Order 12898, Alvaro Nieves, Dee Wernette and Georgia Johnson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p483-485.

Minority Set-Aside Unconstitutional, CE Oct. 96, p30. Procurement Issues, Delon Hampton, ME Nov./Dec. 94,

Missiles

Demonstration of the Smart Crane Ammunition Transfer System, E. Craig Bradley, Steven M. Killough and John C. Rowe, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p192-198.

Local Damage Assessment of Metal Barriers under Turbine Missile Impacts, Amde M. Amde, Amir Mirmiran and Thomas A. Walter, ST Jan. 96, p99-108.

Space Applications of Surplus Ballistic Missiles, Matthew A. Bille, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p406-412.

US Space Policy and the Use of Excess US Ballistic Missile Assets, Mike Trial, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Utilization of 3-D CADD in Analysis, Design and Construction of Mobile Service Tower for Atlas Launch Vehicles, Norm Bobczynski, Matthew Wrona, David Hansen and Harold Howell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pi 197-1204.

Mississippi River
Distributions of Return Flow in Navigable Waterways, Ta
Wei Soong, Renjie Xia and Nani Bhowmik, (North
American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2855-2860.

Hydrodynamic Changes Associated with Navigation Traffic on the Upper Mississippi River System, Nani G. Bhownik, Ta-Wei David Soong and Renjie Xia, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2849-2854.

Improving the Speed of Double Lockages, Mary K. Spence, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2867-2872.

Measurements of Bridge-Scour Depths in Mississippi, K. Van Wilson, Jr., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3023-3032.

Navigation Lock Improvements, Mary K. Spence, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3129-3134.
Postaudit of Upper Mississippi River BOD/DO Model, Wu-Seng Lung, EE May 96, p350-358.

Reliability of the Navigation Channel of the Upper Mississippi River, Vijay Tulsiani, James H. Lambert, Yacov Y. Haimes and S. K. Nanda, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p142-153

Risk-Based Planning and Management of Maintenance Dredging, L. Leigh Skaggs and David A. Moser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2403-2408.

Stabilization of a Creeping Slope Using Soil Nails, Peter R. Cali, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p109-121.

Upper Mississippi River System Environmental Management Program (EMP), Doyle W. McCully, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3320-3325.

Impacts of Climate Change in the Missouri River Basin, Rollin H. Hotchkiss, Steven F. Jorgensen, Ranjan S. Muttiah, Jeffrey G. Arnold, Thomas A. Fontaine, Scott J. Kenner and John M. Antle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3399-3404.

Operating Rule Optimization for Missouri River Reservoir System, Jay R. Lund and Inès Ferreira, WR July/Aug. 96, p287-295.

Mitchell, Stephen C. (Fellow, ASCE)

COFPAES Supports House Bill on Design-Build Fee Re-imbursement, CE June 96, p73.

EcoBlocks: Nontraditional Use for Mixed Wastepaper, A. M. Springer, Marc Rose and Rich Ryu, EE May 96, p437-444. A Plastic Tomb for DOE's Mixed Waste, CE May 96, p19.

Bifurcation of Line Thermals, M. Dehghani and V. H. Chu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p446-449.

Buoyant Plumes from Multiport Diffuser Discharge in Deep Coflowing Water, María M. Méndez-Díaz and Gerhard H. Jirka, HY Aug. 96, p428-435.

Chaotic Advection in a Bioengineering System, Ahmet C. Omurtag, Victor Stickel and Rene Chevray, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p450-453.

Characteristics of Radial Jets and Mixing under Buoyant Conditions, Zhen-Ren Guo and James J. Sharp, HY Sept. 96, p495-502.

Comparison of Worst-Case and Probabilistic Approaches to Ocean Outfall Mixing Zone Analysis, Hening Huang and Robert E. Fergen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3674-3679.

Energy Transfer Rates in Unsteady Plane Mixing Layers, M. R. Hajj and I. M. Janajreh, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1066-1069.

Experimental Investigation of the Temporal Intermittency in the Transition to Turbulence of a Plane Mixing Layer, A. L. W. Bokde, D. A. Jordan, Jr. and R. W. Miksad, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1070-1073

Experimental Studies of Merging Plumes, G. A. Daviero and P. J. W. Roberts, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p918.

and T. C. 5a, 1990), p. 16.
High-Strength, Rapid-Setting Concrete with Blended Cement, Billy D. Neeley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1627-1636.

Hindcast Simulations of Ocean Currents in Norwegian Coastal Waters; Part 2: Summary of the Main Results, Eivind A. Martinsen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p391-403

p391-403.
Hindcast Simulations of Ocean Currents in the Norwegian Coastal Waters. Part 1: Model Set Up and Sensitivity Tests, Harald Engedahl, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p379-390.

HPFRCC - Extruded Pipes, Henrik Stang and Carsten Pedersen, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p261-270.

Hydrodynamic Model and Sensitivity Analysis for San Juan Bay, P. R. Lisa J. Wolf and Gavin Gong, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p505-517.

Improved Characterization of Mixing for Sludge Condition-

Improved Characterization of Mixing for Sludge Conditioning, Jimmy Roland Christensen, George Lee Christensen and Jens Aage Hansen, EE Mar. 95, p.236-244.
Lunar Concrete Made with the Dry-Mix/Steam-Injection Method, T. D. Lin, Liang Tseng and Sam Chou, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p592-599.

Mixing in Distribution System Storage Tanks: Its Effect on Water Quality, Robert M. Clark, Farzaneh Abdesaken, Paul F. Boulos and Russell E. Mau. EE Sept. 96, p814-

Mixing Influences on Cement-Based Waste Forms, James B. Stong, James R. Weber and Kevin J. Hull, (North American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996), p1597-1601. Mixing of a Bent-over Jet in Crossflow, Paul C. K. Chu and Joseph H. W. Lee, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p910-913.

Modeling Horizontal Diffusion with Sigma Coordinate Sys-tem, Wenrui Huang and Malcolm Spaulding, HY June 96, p349-352.

'95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p389-400. Resistance of Silica-Fume Concrete to Corrosion-Related Damage, Safwan A. Khedr and Ahmed F. Idriss, MT May 95, p102-107.

A Screening Level Model for Estimation of Vadose Zor Leaching and Saturated Zone Mixing: VLEACHSM, Sang B. Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1736-1741. Selective Withdrawal through Intake Fitted with a Collar, James J. Sharp, T. M. Parchure and Z. R. Guo, HY Dec.

96, p683-686.

Shear Dispersion in the Benthic Boundary Layer, C. G. Hannah, J. W. Loder and Y. Shen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T.

Cheng, 1996), p454-465. Study of Surf-Zone Macroturbulence and Mixing Using Delta '93 Field Data, A. Rodriguez, A. Sánchez-Arcilla, J. Gomez and E. Bahia, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p305-316.

Thermohaline Buoyancy Effects on Turbulent Flows, R. E

Baddour, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p454-457.
Turbulence Measurements in Saline Gravity Current Fronts, Jeffrey D. Parsons and Marcelo H. García, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p914-917.

Mixtures

Analytical Study and Verification of a Coupled Theory of Mixtures for Application in Cone Penetration and Tunnel Boring in Soils, George Z. Voyiadjis, Murad Y. Abu-Farsakh and Mehmet T. Tumay, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p543-546.

163, 1. N. Lin and 1. C. Sa., 1970), po43-340.
165, 1. N. Lin and 1. C. Sa., 1970), po43-340.
167, 1970, possible of the Hydration of Blended Cementitious Mixtures. B. Mobasher, R. Devaguptapu and A. M. Arino. (Materials for the New Millennium, Ken P. Chong, ed., 1996), pl677-1686.
High Performance Fiber-Cement Composites by Extrusion Processing, Yixin Shao and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), po251-266. p251-260

Laboratory Study of Large Stone Asphalt Paving Mixtures, Joe W. Button, W. W. Crockford and E. G. Fernando, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p603-611.

Polyolefin Fiber Reinforced Concrete, Billy D. Neeley and Edward F. O'Neil, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p113-122.

Toxicity of Organic Chemicals and Their Mixtures to Activated Sludge Microorganisms, E. Hall, B. Sun, J. Prakash and N. Nirmalakhandan, EE May 96, p424-429.

(DM)³: A Modular Mobile Manipulator, Christopher Lee and Yangsheng Xu, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p107-113.

Control of Legged Robots, S. T. Venkataraman, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p100-106.

Demonstration of the Smart Crane Ammunition Transfer System, E. Craig Bradley, Steven M. Killough and John Craw, (Robotics for Challenging Environments, Lau-ra A. Demsetz, ed., 1996), p192-198.

Design and Construction Balances for Bascule Bridges, Sagin and Constitution Balances for Bascule Bridges, Andrew W. Herrmann and Nicholas J. Altebrando, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p9-15.

Development of a Mobile Instrument Deployment Device (MIDD), Lutz Richter, Klaus Schilling, Marco C. Ber-nasconi, Christoph Jungius and César Garcia-Marirotofiga, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p283-289.

A General Framework for Approaching Mobility Problems in Urban Areas, Walter Ukovich, Davide Tercelli, Nicola Campanella and Marco Crasnich, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p166-170.

Guideline for Automatic Docking in Space, Samuel E. Moskowitz, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p164-170.

Incorporating Terrain Uncertainties in Autonomous Vehicle Path Planning, Kevin K. Gifford and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Dem-setz, ed., 1996), p15-21.

Mobile Robots for Security, Anatoly Osipov, Vladimir Kemurdjian and Boris Safonov, (Robotics for Challeng-ing Environments, Laura A. Demsetz, ed., 1996), p290-

Mobility Forecast in an Urban Area through the Use of Neural Networks, Maria Nadia Postorino and Giuseppe M. L. Samè, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p213-217.

Package System for Supporting Decisions in a County Area, Quinto Riccardo Bertini and Pietro Antonio Cappa, Area, Quinto Riccardo Bertini and Fietro Antonio Cappa, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p408-412.

Performance Characteristics of a Smart Hinge for Solar Array Deployment, Dirk B. Warnaar and Rodney G. Gal-loway, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1162-1168.

A Robotic Inspector for Low-Level Radioactive Waste, Joseph S. Byrd and Robert O. Pettus, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996),

Simulation and Visualization of Martian Rover, William Lincoln, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p143-149.

Strategies for Searching an Area with Semi-Autonomous Mobile Robots, Robin R. Murphy and J. Jake Sprouse, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p22-28.

Studies in Guidance, Navigation and Control for an Articulated-Body Mars Rover Testbed, Songjae Lee and Gordon K. Lee, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p157-163.

A Wheeled Mobile Robot for Automated Pavement Crack Sealing, K. J. Mueller, D. Hong and S. A. Velinsky, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p178-184. Wind-Resistant Tie-Downs for Mobile Homes, Anatol Longinow, Donald F. Meinheit and John E. Pearso, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p966-973.

Modal analysis

Modal analysis Comprehensive Modal Tests of a Space Truss Model for Damage Assessment, Cesar J. Carrasco, Roberto A. Osegueda, Carlos M. Ferregut, Brian Harms, David Meza and Mike Grygier, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1141-1147.

Computation of Structural Flexibility for Bridge Health Monitoring Using Ambient Modal Data, Scott W. Doe-bling and Charles R. Farrar, (Engineering Mechanics, Y.

K. Lin and T. C. Su, 1996), p1114-1117.

Delamination Modes in Composite Plates, H. Luo and S. Hanagud, AS Oct. 96, p106-113.

Editor's Note, David Darwin, ST Dec. 96, p1393.

Evaluation of Bridge Strengthening Measures Using Forced Vibration Tests. Kosal Krishnan, Frieder Seible and Gerand Pardoen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p845-852. Modal Analysis of Linear Dynamic Systems: Physical In-

Modal Analysis of Linear Dynamic Systems; Physical Interpretation, Anil K. Chopra, ST May 96, p517-52. Interpretation, Anil K. Chopra, ST May 96, p517-52. Modal Filter Based On-Line Monitoring of Uncertain Structural Systems, E. A. Johnson, L. A. Bergman, P. G. Voulgaris and L. C. Freudinger, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p156-159.

Modal Identification of a Cable-Stayed Bridge, W-H. P. Yen, T. T. Baber and F. W. Barton, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p600-603.

Nonlinear Dynamic Response of Frames Using Lanczos Modal Analysis, Steven M. Vukazich, Kyran D. Mish and Karl M. Romstad, ST Dec. 96, p1418-1426.

Peculiarities of the Mode Shapes of Two-Dimensional Spinning Bodies, Marc P. Mignolet and Chris D. Eick, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Structural Model Updating Using Expanded Modeshapes, James L. Beck and Michael W. Vanik, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p152-155.

chanics, Y. N. Lin and T. C. Su, 1990, p132-133.
Vibration Absorber for Offshore Structures: Frequency-Domain Analysis, Mikhail F. Dimentherg, Shiyu Chen, Zhikun Hou and Mohammad Noori, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p588-591.

Evaluation of Logit and Probit Models in Mode-Choice Sit-uation, Ahmed Hamdy Ghareib, TE July/Aug. 96, p282-

Model accuracy Different Travel Patterns: Interzonal, Intrazonal, and Exter-Trips, Ahmed Hamdy Ghareib, TE Jan./Feb. 96, p67-75 Ignorance Factors Using Model Expansion, Marc A. Maes,

EM Jan. 96, p39-45.

Methodological Framework for Air-Travel Demand Foreasting, Matthew G. Karlaftis, Konstantinos G. Zografos, Jason D. Papastravrou and John M. Charnes, TE Mar./ Apr. 96, p96-104.

Numerical Simulation of Widening and Bed Deformation of Straight Sand-Bed Rivers. II: Model Evaluation, Stephen E. Darby, Colin R. Thorne and Andrew Simon, HY Apr. 96, p194-202.

Reducing Model Study Time and Improving Reliability, Ralph Finch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4341-4346. Reliability of Remediation Designs in Presence of Model

ing Error, Changqing Zhen and James G. Uber, WR July/Aug. 96, p253-261.

Search for Physically Based Runoff Model—A Hydrologic El Dorado, David A. Woolhiser, HY Mar. 96, p122-129.

Evaluation of Logit and Probit Models in Mode-Choice Situation, Ahmed Hamdy Ghareib, TE July/Aug. 96, p282-

Model studies

Filling and Emptying System Model Study for the Innova-tive Lock Design, Richard L. Stockstill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3141-3146.

McAlpine Intake Model Study for Innovative Lock Design, John E. Hite, Jr. and Larry Dulton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3135-3140.

Structural Model Updating Using Expanded Modeshapes, James L. Beck and Michael W. Vanik, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p152-155.

Model tests

Arching in Piled Embankments, B. K. Low, S. K. Tang and V. Choa, GT Nov. 94, p1917-1938.

Bearing Capacity of Shallow Foundations on Noncohesive Soils, Bohdan Zadroga, GT Nov. 94, p1991-2008.

Combined Refraction-Diffraction - Wave-Current Interaction Over a Complex Nearshore Bathymetry, B. A. O'Connor, P. B. Sayers and N. J. MacDonald, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p173-184.

Hydraulic Model Study of the Prado Dam Spillway, Chris D. Bahner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3800-3805.

Predicted and Observed Cyclic Performance of Piles in Calcareous Sand, Riadh H. Al-Douri and Harry G. Poulos, GT Jan. 95, p1-16.

Reproducibility of Beach Profiles and Sand Ripples Generated by Huge Waves, Masahiro Ito, Hiroshi Murakami and Takeshi Ito, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p698-708.

Search for Physically Based Runoff Model—A Hydrologic El Dorado, David A. Woolhiser, HY Mar. 96, p122-129.

Study of Hydraulic Jump Lengths on Inclined Channel Beds, Tiao J. Chang, Cheng F. Li and Hong Y. Sun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

A Three Dimensional Oil Spill Model, Li Zheng and Pooji-tha D. Yapa, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3764-3769.

Update on Scour Prediction, Robert B. Nairn, P.E., CE Sept. 96, p36.

Model verification

3D Numerical Modeling of Cohesive Sediments, Scott A. Yost and Nikolaos D. Katopodes, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p478-489.

Accuracy of a 3D Hydrodynamic Model Verification due to the Relative Magnitude of Forcing Functions, Bernard B. Hsieh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3452-3457.

Channel Junction Effects in Channel Network Flow Simulation, Gye-Woon Choi, Keun-Heung Kim and Sang-Jin Ahn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

CSO Planning Model Development and Verification Strategy, Edward H. Burgess, Thomas Day, James T. Smullen and Larry A. Roesner, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1230-1235.

Ensuring Consistency of Groundwater Modeling Results with Indirect Evidence, S. Vomvoris, A. Scholtis and P. Vinard, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p133-134.

Evaluation and Validation of the Mild Slope Evolution Equation Model Using Field Data, Suzana Ilić and Andrew Chadwick, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p149-160.

An Evaluation of Tidal Predictions in the Yellow and East China Seas, Cheryl Ann Blain, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p429-441.

Field Data Collection and Analysis for Verification of Estu-arine Models, W. H. McAnally, T. C. Pratt, G. T. Stevens and T. M. Parchure, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p204-214.

Flow Investigation for Landfill Leachate (FILL), Reza M. Khanbilvardi, Shabbir Ahmed and Phillip J. Gleason, EE

Khanbilvardi, Shabbir Ahmed and Phillip J. Gleason, EE Jan. 95, p45-57.
Intended Validation in the Swedish Program for Spent Nuclear Fuel, Bjorn Cronhjort and Grant Sheng, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p67-69.
Microplane Model for Concrete: II: Data Delocalization and Verification, Zdenek P. Bažant, Yuyin Xiang, Mark D. Adley, Pere C. Prat and Stephen A. Akers, EM Mar. 96, p255-262.

96, p255-262.

A Network Transfer Function Model with a Markovian Prior for Tracer Tests Evaluation, Nels Zavaljevski and Alvin Shapiro, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p70-72.

A Norm-Based Approach to the Quantification of Model Uncertainty, E. Zio and G. E. Apostolakis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p252-254.

On Calibration of the UZ Site-Scale Model of Yucca Mountain, Y. S. Wu, T. M. Bandurraga, C. F. Ahlers, S. Finsterle, G. Chen, C. Haukwa, G. S. Bodvarsson, E. Kwicklis, J. Rousseau and L. Flint, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p73-75.

Predicting the Concentration of Trace Metals in Natural

Predicting the Concentration of Trace Metals in Natural Waters: Application of Co-Precipitation and Co-Dissolution Models, Jordi Bruno and Lara Duro, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p64-66.

grain Committee, 1996), p64-66.

Predicting THM Formation with Artificial Neural Networks, Paul H. Hutton, Nicky Sandhu and Francis I. Chung, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3551-3556.

Reducing Model Study Time and Improving Reliability, Ralph Finch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4341-4346.

Simulation of Pesticide Transport for Verification of the DWRDSM, Christopher Enright and Paul Hutton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3563-3568. A System Approach for Identifying and Improving Hydraulic Numerical Modeling Reliability, Bernard B. Hsieh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2225, 2336

Validation of a Model for Cross-Shore Sediment Transport, Irene Katopodi and Nikos Kitou, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p806-817.

1970), pouc-817.
1970), pouc-817.
1971), pouc-817.
1972), pouc-817.
1973), pouc-817.
1974), pouc-817.
1974), pouc-817.
1975), pouc-817.
1975), pouc-817.
1976), pouc-817.
1976), pouc-817.
1976), pouc-817.
1977), pouc-817.
197

Verification of the Bruun Rule for the Estimation of Shoreline Retreat Caused by Sea-Level Rise, Nobuo Mimura and Hisamichi Nobuoka, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

AD & 4D CAD Modeling on Commercial Design-Build Projects, Frank Vaugn, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996). p390-396.

Accidental Pollution Simulation System and Pollutant Transboundary Transport Problems for Tura River, N. N. Shagalova, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p714.

ACPSS—Animated Construction Process Simulation System, Liang Y. Liu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), Jorge Van p397-403.

MODELING

Adaptive Self-Tuning Control of Excavators, A. J. Koivo and Allen D. Nease, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p220-226.

Analysis of Bivariate Censored Low Flows, Ship Jye-Chyi Lu and Cemal Unal, HY Feb. 96, p97-103.

Analysis of Client-Satisfaction Factors in Construction Industry, Syed M. Ahmed and Roozbeh Kangari, ME Mar/Apr. 95, p36-44.

Analytical Modelling of Damage Based on an Improved Percolation Model, A. Delaplace, S. Roux and G. Pijau-dier-Cabot, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), pl 171-1174.

ANSWERS-2000: Runoff and Sediment Transport Model, Faycal Bouraoui and Theo A. Dillaha, EE June 96,

p493-502.

Application of Artificial Neural Network to Guideway De-Application of Artificial Neural Network to Guideway De-mand Modeling, Young-Kyun Lee and Federico Frigerio, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p214-219.Application of Artificial Neural Networks to the Sacramen-to-San Joaquin Delta, Nicky Sandhu and Ralph Finch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding

and Ralph T. Cheng, 1996), p490-504.

Application of Circulation and Sediment Transport Modeling within San Diego Bay, Thomas L. Johnson and Clau-

dio Fassardi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p596-607.

Approaches to Simulating Organizational Behavior of Con-current Design Teams, Yan Jin and Raymond E. Levitt, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p281-287.

Approximate Riemann Solvers in FVM for 2D Hydraulic Shock Wave Modeling, D. H. Zhao, H. W. Shen, J. S. Lai and G. Q. Tabios, III, HY Dec. 96, p692-702.

Beach and Nearshore Profile Evolution at Different Ter Deach and realismore frome Evolution at Different Temporal Scales: The Case of Duck, North Carolina, U.S.A. Michele Capobianco, Rina Basana and Riccardo Pesaresi, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p629-638.

Bentley's Brave New World, CE Oct. 96, p22,24.

Boolean Modeling and Analysis of Smart Material Proper-ties, S. Dobson, M. Noori and A. Crespo, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p838-841.

Buckling of Laminated Composite Beams, Carol Shield and Tim Morey, (Engineering Mechanics, Y. K. Lin and

and LIII Morey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1010-1013.

Characterization of a Nonlinear Polymer-Based Composite Material System, R. M. Hackett and P. I. Rodriguez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p771-780.

1990), p7/1-780.
Civil Engineering Applications of Genetic Algorithms, Weng-Tat Chan and David K. H. Chua, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1072-1078.
Co-Evolution of Design Specifications and Design Solution, Mary Lou Maher and Josiah Poon, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p77-83.
Combustion Processes and Applications in Reduced Cravical Combustion Processes, and Applications in Reduced Cravical Combustions.

Combustion Processes and Applications in Reduced Gravity, Howard D. Ross, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p527-532.

poz1-532.

Comparison of Multi-Layer Perceptron and Radial Basis Function Network as Tools for Flood Forecasting, A. W. Jayawardena and D. A. K. Fernando, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p457-458.

Computational Modeling of Fluid Dynamics in Aortopulmonary Shunts: Comparison to In Vitro Studies, Kevin K. Whitehead, Theresa A. Tacy and Edward G. Cape, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), n334

(Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p334.
A Computational Organizational Approach to Modeling an Engineering Design Team, Jan Thomsen, Yul J. Kwon, John C. Kunz and Raymond E. Levitt, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p275-280.
Computer Model Aids Seismic Improvements, CE Mar. 96, p12.

Computer Modelling for a Discrete Particle System, Kofi B. Acheampong, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p731-734.

A Conceptual Model for Construction Clients' Requirements Processing, Chimay J. Anumba and Nosa F. O. Evbuomwan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p431-437.

Constitutive Modeling of Composites in Opto-Mechatronics, Tau C. Fan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p632-636.

Contributions to the Momentum Balance in the Surf Zone, Marien Boers and Jan van de Graaff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p257-268. Creep Behavior of FRP-Reinforced Wood Members, Niko-

laos Plevris and Thanasis C. Triantafillou, ST Feb. 95,

p1/4-180.
Critical State Model at Finite Strains, Ronaldo I. Borja and Claudio Tamagnini, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p148-151.
Curbside Collection of Yard Waste: I. Estimating Route Time. Jess W. Everett and Shiv Shahi, EE Feb. 96,

p107-114.

Curbside Collection of Yard Waste: II. Simulation and Application, Jess W. Everett and Shiv Shahi, EE Feb. 96,

A Data Management Model for Change Control in Collaborative Design Environments, Karthik Krishnamurthy and Kincho H. Law, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p536-543.

DBMS Implementation of a Linear Referencing Model, Nancy K. Wiegand, Teresa M. Adams and Alan P. Vonderohe, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p179-185.

Depth-Averaged Equations for Free Surface Flows, Guohong Duan and Guixian Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p213-218.

Development of Remediation Technologies Simulators, Mark S. Dortch and Christian J. McGrath, (North American Water and Environment Congress & Destructive

Water, Chenchayya Bathala, ed., 1996), p2583-2588.
Different Travel Patterns: Interzonal, Intrazonal, and External Trips, Ahmed Hamdy Ghareib, TE Jan./Feb. 96,

Dilution of Dense Bottom Plumes, Ole Petersen and Torben Larsen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p906-909.

Disaggregation Modeling Process for Climatic Time Series, Susan Firor, Brad A. Finney, Robert Willis and John A. Dracup, WR May/June 96, p205-212.

Distributed Parameter Hydrologic Modeling and NEX-RAD for River Forecasting: Scale Issues Facing the Na-tional Weather Service, Michael Smith, Dong Jun Seo, Bryce Finnerty and Victor Koren, (North American Water and Environment Congress & Destructive Water. Chenchayya Bathala, ed., 1996), p140-145.

Domain Modeling in Generic Parametric Architectures: Issues in Concurrent Representation and Inference, Hossam El-Bibany, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p522-528.

A Domain Specific Equation Solver for Bridge Analysis, Gary Consolazio, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996). p321-327

Dynamic Brittle Material Response Based on a Nonlocal Damage Model, E. P. Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p580-583

Dynamic Response of Compliant Offshore Structures, R. Adrezin, P. Bar-Avi and H. Benaroya, AS Oct. 96,

Editorial, Kincho H. Law, CP July 96, p173.

Effective Stiffness Model for Reinforced Concrete Slabs,

Effective Stiffness Model for Reinforced Concrete Slabs, Maria Anna Polak, ST Sept. 96, p1025-1030. Elastic Moduli of a Bond Model for Reinforced Concrete, James V. Cox, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p84-87. Elasto-Plasticity of Sand Deformation, Eqramul Hoque and Furnio Tatsuoka, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p547-550.

Electronic Modeling of Underground Piping Systems, Har-old G. Thayne, Jr. and Joseph A. Bohinsky, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p825-831.Evaluation of Modelling Needs for Central Valley Project Operations, John Burke and Donald Frevert, (North

Operations, John Burke and Donald Trevert, (von-American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p806-811. Evolving Design Genes as well as Design Solutions, John S. Gero, Vladimir A. Kazakov and Thorsten Schnier, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p84-90.

An Experimental Study on the Use of Constructed Wetfor Stormwater Management, Shih-long Liao, ianus for Stormwater Management, sinh-long Liao, Shaw L. Yu and Stephen J. Long, (North American Water and Environment Congress & Destructive Water, Chenchayya Bahala, ed., 1996), p2462-2467. An Extended Relaxation Technique for Unsteady Flows in Networks, J. M. Lewis, D. L. Fread and Ming Jin, (North

American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p195-200. Extracting Watershed Characteristics from Spatial Digital Data Using GIS, A Case Study of the Great Miami River

Basin, Maged Hussein and Franklin W. Schwartz, (Com

Basil, Mageu Husseli and Frankini W. Schwartz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p515-521.

Feasibility of Modeling Phosphorus Dynamics in Stormwater Wetlands, Karina T. Lopez Ivich, William James, Isobel W. Heathcote and John Fitzgibbon, (North American Watter and Engineering Computing States). Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p524-529.

Finite Element Analysis of Precast Concrete Box Culverts, K. M. Tarhini, G. R. Frederick and M. Mabsout, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p677-682.

Finite Element Computer Models for Analysis of Cold-Formed Steel Members, K. S. Sivakumaran and Nabil

Formed Steel Hembers, K. S. Svakumaran and Nabel-Abdel-Rahman, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p690-696. Finite Element Modelling of Deep Rolled Wide Flange Beam Subject to Localized Edge Loading - A Case Study, M. Arif Fazil and Celal N. Kostem, (Computing

in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p874-880. Fracture Mechanics Modeling with Fracture Surface Image Data, Anne B. Abell and David A. Lange, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p741-

750

Fundamental Modeling of Chloride Diffusion in Concrete, Pankaj. Arora, B. N. Popov and R. E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p203-212.

Pundamental Thermal Mechanical Modeling of Gas-Filled Porous Composites, N. J. Salamon and Ramnath Gane-san, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p52-55.

Fuzzy Arithmetic for Ecological Risk Management, Jacques Ganoulis, Iraklis Bimbas, Lucien Duckstein and Istvan Bogardi, (Risk-Based Decision Making in Water Istvan Bogardi, (Risk-Based Decisson Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p401-415.
Fuzzy Rule-Based Modeling of Reservoir Operation, Bi-jaya P. Shrestha, Lucien Duckstein and Eugene Z. Stakhiv, WR July/Aug. 96, p262-269.
Granular Flow Based on Non-Newtonian Fluid Mechanics.

Sergio A. Elaskar, Luis A. Godoy and Alejandro T. Brewer, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p394-397.

A Graphical Environment for Multi-Dimensional Surface Water Modeling, Alan K. Zundel and Norman L. Jones, (North American Water and Environment Congress &

Destructive Water, Chenchayya Bathala, ed., 1996),

Groundwater Remediation Design When Pretty Good is Good Enough, J. Wayland Eheart, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p848-853.

Higher Moments of Weighted Integrals of Non-Gaussian Fields, Gunnar Mohr, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p254-257.

Hydraulic Residence Time of CSTRs under Unsteady-State

rryuraunic residence 1 me of C51 Rs under Unsteady-State Condition, Jian Peng, EE Nov/Dec. 94, p1446-1458. Hydrodynamic Model and Sensitivity Analysis for San Juan Bay, P. R. Lisa J. Wolf and Gavin Gong, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p505-517.

Hydrodynamic Modeling for Assessing Engineering Alternatives for Elevating the Kennedy Causeway, Corpus Christi, Texas, Cheryl A. Brown, Nicholas C. Kraus and Adele Militello, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p681-601.

Hydrologic Risk, Robert C. Patev, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996),

p416-418

Implications of Tendon Modeling on Nonlinear Response of TLP, Basim B. Mekha, C. Philip Johnson and Jose M.

Roesset, ST Feb. 96, p142-149.

Improved Analysis Techniques for the Capacity and Fa-tigue Assessment of TFG Railway Bridges, Terrence W. Philbrick, Jr. and Scott D. Schiff, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p199-206.

Improving Input Wave Data for Use with Shoreline Change Models, Kevin R. Bodge, Christopher G. Creed and Andrew W. Raichle, WW Sept./Oct. 96, p259-263.

Improving Robustness of Algorithms to Implement HiSS models in FEM, G. W. Wathugala and S. Pal, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p144-147.

Information Technology for Better Management of Change, Cost and Schedule in Construction Projects, Feniosky Peña-Mora and Hong Chen, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p613-619.

Instability Analysis of an Inclined Tower in Waves, Subrata K. Chakrabarti, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p836-839.

Integrated GIS Based Watershed Management Modeling System, L. E. Gomez, C. L. Chen and J. Herr, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p508-514.

Integration of a Design Concept Learning Scheme Within a Knowledge-Based Design Support System, Ming Xi Tang, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p852-858.

Interactive AD-CAD, Kathleen McKinney, Jennifer Kim, Martin Fischer and Craig Howard, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p383-389.

International Space Station Traffic Model Development, Clare T. Kingsford and Neil W. Lemmons, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p443-449.

Interport Modelling with State Automata, Maurizio Mazzucchelli, Valerio Recagno and Giuseppe Sciutto, (Appli-cations of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p104-108.

Issues of Landing on Near Earth Asteroids, D. J. Scheeres, S. J. Ostro and R. S. Hudson, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed.,

1996), p54-60.

Key Sources of Uncertainty in QUAL2E Model of Passaic River, Charles S. Melching and Chun G. Yoon, WR Mar./Apr. 96, p105-113.

A Knowledge Based Information Model for Components in the Process Industry, James Andrew Arnold and Paul Teicholz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p586-592.

Laboratory Experiments on Density Current Over a Sloping Bottom in Rotating Fluid, Dieter Etling and Gabriel Cha-bert d'Hicres, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p923-926.

Loss of Contaminants from Soil During Runoff Events, A Parr, S. Zou and B. McEnroe, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p70-81.

Magnetic Fluid Dynamics of Blood Flow, Yousef Haik, Magnetic Fund Dynamics of Brook Flow, Yousel Hair, Ching Jen Chen and Vinay Pai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p458-461. Maximum Structural Response Using Convex Models, Yakov Ben-Haim, Genda Chen and T. T. Soong, EM

Apr. 96, p325-333.

Mechanical Stress in Pediatric Heart Disease: Computational Modeling of Associated Defects in Subaortic Stenosis, Michael D. VanAuker, Pedro del Nido, Theresa A. Tacy, Gunnlaugur Sigfusson and Edward G. Cape, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p470.

Micromechanical Modelling for Granular Materials, Ching S. Chang, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p551-554.

Model to Incorporate Architectural Walls in Structural Analyses, H. Allison Smith and Vicki L. Vance, ST Apr.

Analyses, H. Altison Smith and Vicki L. Vance, 51 Apr. 96, p431-438.
Modeling and Debugging Engineering Decision Procedures with Machine Learning, Yoram Reich, Miguel Medina, Tung-Ying Shieh and Timothy Jacobs, CP Apr. 96, p157-166.

Modeling Aspects Associated with Time Dependent Be-havior of Soils, Toshihisa Adachi, Fusao Oka and Mamoru Mimura, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Victor N. Kaliakin, ed., 1996), p61-95. Sheahan, ed. and

Modeling Climate Change Impacts on Water Resources, Brian Hurd, Paul Kirshen and Mac Callaway. (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1834-1839.

Modeling Coliform Mortality in Waste Stabilization Ponds, Aloice W. Mayo, EE Feb. 95, p140-152.

Aloice W. Mayo, EE Feb. 95, p140-152.
Modeling Concentration-Polarization in Reverse Osmosis
Spiral-Wound Elements, Benito J. Mariñas and Richard
I. Urama, EE Apr. 96, p292-298.
Modeling Contaminated Sediments, Robert K. Simons and
Daryl B. Simons, CE Sept. 96, p73-75.
Modeling Damage to Rigid Pavements Caused by Subgrade
Pumping, M. Asghar Bhatti, Jeffery A. Barlow and
James W. Stoner, TE Jan./Feb. 96, p12-21.
Modeline Dry. Weather Flow in Sewer Net-

Modeling Dry Weather Wastewater Flow in Sewer Networks, D. Butler and N. J. D. Graham, EE Feb. 95, p161-173.

Modeling for Moment-Rotation Characteristics for End-Plate Connections, Y. J. Shi, S. L. Chan and Y. L. Wong,

ST Nov. 96, p1300-1306.

Modeling Groundwater Contaminant by Unstructured FVM, Jinglian J. Liu, Bharat K. Soni and Victor L. Zitta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2212-2217.

Modeling Kinetics of Illuminated and Dark Advanced Oxidation Processes, Andrew Hong, Mark E. Zappi, Chiang Hai Kuo and Donald Hill, EE Jan. 96, p58-62

Modeling Non-Uniform-Sediment Fluvial Process by Characteristics Method, Keh-Chia Yeh, Shian-Jang Li and Wen-Lin Chen, HY Feb. 95, p159-170.

Modeling of Contaminant Transport in Groundwater in Areas of Discontinuous Permafrost, Ron Johnson, Doug Kane, Larry Hinzman, Greg Light and Ann Farris, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p82-93.

Modeling of NOM-Facilitated PAH Transport Through Low-f_{nc} Sediment, William P. Johnson, Gary L. Amy and Steven C. Chapra, EE June 95, p438-446.

Modeling of the Oscillatory Response of Electrorheological Fluids, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p894-897.

Modeling Overfalls Using Vertically Averaged and Mo-ment Equations, Abdul A. Khan and Peter M. Steffler, HY July 96, p397-402.

Modeling Rail Fatigue Behavior with Multiple Hazards, Feng-Yeu Shyr and Moshe Ben-Akiva, IS June 96, p73-

Modeling Rotation of Principal Load Axes in Brittle Solids with Damage, S. Karnawat and S. Yazdani, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p596-599.

Modeling Seasonal Furrow Irrigation, N. S. Raghuwanshi and W. W. Wallender, IR July/Aug. 96, p235-242.

Modeling SSO's Resulting from Peak Conditions, Marc P. Walch, Kathleen S. Leo, Stephanie L. Ross and William M. Brant, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1777-1782.

Modeling the Dynamic Nonlinear Response of Single Piles, Deepak Badoni and Nicos Makris, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1091-1098.

Modeling the Ecological Impacts of Flaming Gorge Dam Operations, S. C. L. Yin, K. E. LaGory, J. W. Hayse, I. Hilohowskyi, R. A. Van Lonkhuyzen and H. E. Cho, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Modeling the Effect of Reduced Nitrogen Loading on Water Quality, Y. Peter Sheng, Eduardo A. Yassuda and Changlu Yang, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p644-

Modeling the Lake Decatur Watershed in Illinois to Evaluate Effects of Best Management Practices on Nitrate Loading, Deva Borah, Misganaw Demissie and Laura Keefer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1681-1686.

Modeling the Response of ER Damper: Phenomenology and Emulation, Scott A. Burton, Nicos Makris, I. Konstantopoulos and P. J. Antsaklis, EM Sept. 96, p897-906.

Modeling Transport of Bromide in Furrow-Irrigated Field, Behzad Izadi, Bradley King, Dale Westermann and Ian McCann, IR Mar/Apr. 96, p90-96.

MCCann, IK Mar/Apr. 96, p90-96.
Modeling Uncertainty in Prediction of Pier Scour, Peggy A. Johnson and Bilal M. Ayyub, HY Feb. 96, p66-72.
Modeling Unsteady Open-Channel Flows Having Longitudinally Varied Fluid Density, Chintu Lai and Tsan-Wen Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1906. 1910. 1996), p1905-1910.

Modelling of a Heater Experiment in a Saturated Granite with Thermoporoelastic Source Singularities, Emmanuel Detournay and Ilya Berchenko, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p44-47.

Modelling of Thermal-Hydrological-Mechanical Processes in a Discrete Joint, T. S. Nguyen, A. P. S. Selvadurai and P. Flavelle, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p60-63.

Multidisciplinary Product Modeling of Buildings, W. P. S. Dias, CP Jan. 96, p78-86.

Nearshore Hydrodynamic and Water Quality Modeling for Water Intake Evaluation and Design, Kwang K. Lee, Bing Shen and Chung Shyan Wu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2456-2461.

Neptune--An Integrated Approach to Determining NW Eu-ropean Coastal Extremes, Jerzy Graff and Witold Cieślikiewicz, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1035-1046.

A New Software Architecture for Finite Element Analysis Graham Archer, Christopher Thewalt and Gregory L. Fenves, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed. 1996), p683-689. Newtonian Fluid Mechanics Treatment of Debris Flows

and Avalanches, Bruce Hunt, HY Dec. 94, p1350-1363.

Nonlinear Identification of Semi-Active Control Devices, B. F. Spencer, Jr., S. J. Dyke, M. K. Sain and J. D. Carlson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p164-167.

Nonlinear Systems with Poisson White Noise, Mircea Grigoriu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p120-123.

Nonurbanized Public Transportation Needs Assessment, M. Moussavi, M. Al-Turk and J. Albeck, TE Nov./Dec. 96, p447-453.

Numerical Analysis of Damage in Lattices and Consequences on Continuum Modelling, Gilles Pijaudier-Cabot, A. Delaplace and S. Roux, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1034-1037.

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Oblique Wave Interaction with Vertical Wall Structures, Xugui Ren and Keh-Han Wang, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p507-510.

On Moment Stability of Markov Dynamical Systems, Lambros Katafygiotis and Yevgeny Tsarkov, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p546-549.

One-Dimensional Clarifier Model with Sludge Blanket Heights, Randall W. Watts, Spyros A. Svoronos and Ben Koopman, EE Dec. 96, p1094-1100.

Optimal Dispersed Ground-Water Contaminant Management: MODCON Method, R. C. Peralta, J. Solaimanian and G. R. Musharrafieh, WR Nov./Dec. 95, p490-498.

Optimal Polynomial Control of a Duffing System, Anil K Agrawal and Jann N. Yang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p890-893.

Optimal Regional Scheduling of Solid Waste Systems. I: Model Development, Jess W. Everett and Abhijit R. Modak, EE Sept. 96, p785-792.

Optimal Regional Scheduling of Solid Waste Systems. II: Model Solutions, Abhijit R. Modak and Jess W. Everett, EE Sept. 96, p793-799.

Optimization of Graphical Models, Jeanine Graf, (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p97-103.

Overview of DoD Research in Groundwater Modeling, J. P. Holland, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2565-2570.

Peak-Load Method for Fracture Parameters of Two-Parameter Fracture Model, Tianxi Tang, Chengsheng Ouyang and Surendra P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p584-587.

Preparation of Notification Models Using Continuous Modeling Techniques, Mark TenBroek, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2474-2479.

Process Modeling for Design-Build Project Management, Yan Jin, Tore Christiansen, Raymond E. Levitt and Paul Teicholz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p642-648.

Process Models in Enterprise Engineering - Tools for En-hancing Process Description, Lars Chr. Christensen, Tore R. Christiansen and Yan Jin, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p634-641.

Program for Estimating the Remaining Fatigue Life of Steel Railway Bridges, Vinaya Sharma and John Choros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p223-229.

Project Modeling in Construction Applications, Thomas Froese, Kevin Yu and Syed Shahid, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p572-578.

Project Object, Richard M. Shane, Edith A. Zagona, Dave McIntosh, Terrance J. Fulp and H. Morgan Goranflo, CE Jan. 96, p61-63.

Project-Network Analysis Using Fuzzy Sets Theory, Pasit Lorterapong and Osama Moselhi, CO Dec. 96, p308-318.

Rainfall-Runoff Modeling for Watershed Stormwater Management, Yuan Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2066-2071.

Rational Design and Operation of Packed Bed Adsorption Reactors, Federico G. A. Vagliasindi and David W. Hen-dricks, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p553-558.

Regression and Inverse Analyses in Regional Ground-Water Modeling, Andrew R. Piggott, A. Ghosh Bobba and Kent S. Novakowski, WR Jan/Feb. 96, pl-10.

Reliability of the Navigation Channel of the Upper Mississippi River, Vijay Tulsiani, James H. Lambert, Yacov Y. Haimes and S. K. Nanda, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p142-153.

The Role of Petri Nets Modelling in the Safety Assessment Process for Guided Transport Systems, G. Cosuich, P. Firpo, S. Savio and G. Sciutto, (Applications of Advanced Technologies in Transportation Formation of Processing Transportation of Technologies in Transportation Formation (Inc.) vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p558-562.

Runoff Curve Number: Has It Reached Maturity? Victor M. Ponce and Richard H. Hawkins, HE Jan. 96, p11-19.

Sanitary Sewer System Modeling Model Comparison Racine, Wisconsin, Robert W. Carr and Thomas J. Bunker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996). p1760-1764.

Scientific Visualization Techniques for Wave Transforma-tion Models, David A. Leenknecht and Wayne W. Tan-ner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p704-710.

Sediment Transport Modeling for the Glen-Colusa Irriga-tion District Fish Screen Modifications, Cassie Klumpp, Mark Sailer, Arthur Glickman and Brent Mefford, (North

Mark Saller, Armur Girkman and Brent Microru, Quorin American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1027-1032.Seismic Evaluation and Retrofitting of U.S. Long-Span Suspension Bridges-Issues and Solutions, Subcommittee on Seismic Performance of Bridges, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p56-90.

Signatures of Coastal Change at Mesoscales, Timothy W. Kana, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p987-997.

Smooth Modelling of Oblique Contact with Friction of Tur-bine Blades: Behaviour Analysis Under Random Excita-tion, Erick Tournu, Sergio Bellizzi and Béatrice Costa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p760-763.

p100-103.
A Software Architecture for Concurrent Lifecycle Design and Construction, Nosa F. O. Evbuomwan and Chimay J. Anumba, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p424-430.
Sound Absorption of Dry Porous Media with Single and Double Porosity, C. Boutin, P. Royer and J. L. Auriault, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p796-799.

p796-799

Spatial Spring Runoff Modeling in a River Basin for Purpose of Forecasting, M. Sosedko and V. Manukalo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Stability of Beams in an Elastic Foundation, Fady F. Barsoum and William F. Carroll, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1143-1146.

State-of-the-Art Review of Modeling Transport and Fate of Oil Spills, ASCE Task Committee on Modeling of Oil Spills of the Water Resources Engineering Division, HY Nov. 96, p594-609.

Statistical Analyses of Acoustical Wave Velocity in Porous Seafloor, M. Badiey, A. H-D. Cheng and Y. Mu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), 800-803

STEP and the Building Construction Core Model, Thomas Froese, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p445-451.

Stochastic Response of Systems with Linear Hysteretic Damping, B. F. Spencer, Jr. and L. A. Bergman, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Storm Surge Frequency Computations for Long Island, NY: A Comparison of Methodologies, Norman W. Scheffner and H. Lee Butler, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p80-

Stress-Strain Modeling of Sands Using Artificial Neural Networks, G. W. Ellis, C. Yao, R. Zhao and D. Penuma-du, GT May 95, p429-435.

Structural Analysis Model for Mat Foundations, Gin-Show Liou and S. C. Lai, ST Sept. 96, p1114-1117.

Studying Mixed Granular Flows by Image Analysis, Len-nart Gustafsson and Peter Gustafsson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p100-103.

Subcatchment Parameterization for Runoff Modeling Using Digital Elevation Models, Jurgen Garbrecht, Lawrence W. Martz and David C. Goodrich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2689-2694.

Surf-Zone Modeling, Ib A. Svendsen and Uday Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p13-32.

Thermo-Micromechanical Damage Modeling of Airfield Concrete Pavement, J. W. Ju and Y. Zhang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p727-730.

Translation Methods for Integrated Building Engineering, Taha Khedro, Charles Eastman, Richard Junge and Thomas Liebich, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p579-585.

Travel Modeling with and without Feedback to Trip Distri-bution, Robert A. Johnston and Raju Ceerla, TE Jan/ Feb. 96, p83-86.

Trip Characteristics of Travelers without Vehicles, V. Thamizh Arasan, V. R. Rengaraju and K. V. Krishna Rao, TE Jan./Feb. 96, p76-81.

Turbulent Line Momentum Puffs, Joseph H. W. Lee, Wolfgang Rodi and C. F. Wong, EM Jan. 96, p19-29.

Uncertainty Modeling for Preliminary Design of Structures, Yung-Ching Shen and Larry J. Feeser, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p565-571.

Update on Aguas Argentinas, CE July 96, p22,24.

Upscaled Soil-Water Retention Using van Genuchten's Function, Timothy R. Green, James E. Constantz and David L. Freyberg, HE July 96, p123-130.

Use of Geographic Information Systems in Ground-Water Flow Modeling, D. W. Watkins, D. C. McKinney, D. R. Maidment and Min-Der Lin, WR Mar/Apr. 96, p88-96.

Use of OMT in a Transport Human Engineering Prospect, T. Bellet and H. Tattegrain-Veste, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p363-367.

Vibration Control of Cable-Stayed Bridges: Analytical Development, Armin G. Schemmann and H. Allison Smith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p898-901.

The Virtual Design Team (VDT): Concurrent Design of Fa-cility Products, Processes and Organizations, Raymond E. Levitt, Tore R. Christiansen, Geoff Cohen, Yan Jin and John C. Kunz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p268-274.

Virtual Reality Modeling for Bridge Construction, Tsung-chieh Tsay, Fabian C. Hadipriono and Richard E. Larew, (Computing in Civil Engineering, Jorge Vanegas, ed. and

Paul Chinowsky, ed., 1996), p63-69.

Viscoelastic Modeling of Paper, Edmond P. Saliklis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p246-249.

Visual-Based Scheduling: 4D Modeling on the San Mateo County Health Center, Eric Collier and Martin Fischer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p800-805.

Visualizing Global Force Distributions in Finite Element Models, Kirk Martini, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p697-703.

- Water Quality Modeling of the Rouge River Watershed, Philip N. Brink, Gary Mercer and Richard Wagner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),
- Watershed Modeling and Flood Routing for Safety Assess-ment of an Existing Dam, C. F. Lee, WR Sept./Oct. 96,
- Wave Motion in Vegetated and Non-Vegetated Coastal Zones, Stanislław R. Massel, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1-12.
- Web Tour: Antonio Baptista, ET June/July 96, p10-11.

Wellhead Protection Area Predictions and Implications for the Biscayne Aquifer in Miami, Florida, Hector R. Fuentes, Vassilios A. Tsihrintzis and Jose H. Olivo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p960-965.

Models

3-D Graphical Simulation for Temporary Facility Planning using Object-Oriented Building Product Model, Kenji Ito, Yuji Kano, Jun Ueda and Shinichi Setoguchi, (Com-puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p49-55.

Active Vibration Control of Double Wall Composite Shells to Random Inputs, Chen-Ying Wang and Rimas Vaicaitis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p842-845.

An Advanced Comprehensive Model for the Statistical Analysis of S-N Data, C. L. Shen, P. H. Wirsching and G. T. Cashman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p462-465.

Age, Deformation, and Temperature Effects of Viscoelastic Materials Under Large Deformations, Ashok Gurjar, Tianxi Tang, Dan Zollinger and Kenneth Slavick, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p1398-1407.

Alachlor Transport in Laboratory Soil Columns, Mutasem El-Fadel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1999-2004.

Analysis of Bivariate Censored Low Flows, Shiping Liu, Jye-Chyi Lu and Cemal Unal, HY Feb. 96, p97-103.

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, p2288-2309.

Analytical Model for Heterogeneous Reactions in Mixed Porous Media, K. Hatfield, D. R. Burris and N. L. Wolfe, EE Aug. 96, p676-684.

Analytical Modeling of Composite Reinforced Concrete-Steel Systems, Joseph M. Bracci, Sashi K. Kunnath and Ali O. Atahan, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), 9379-380.

Analyzing Drought with a Simplified Climate Model, Mi-chael L. Anderson and M. Levent Kavvas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1075-1080.

Animation Techniques for Visualizing Coastal Flow Dy-namics, Brian King, Patrick Collins, Duncan Galloway and Eric Wolanski, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Annual Delivery Decisions in the Simulation of the California State Water Project and Federal Central Valley Pro-ject using DWRSIM, Robert T. Leaf and Sushil K. Arora, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p812-817

Application of a Hydrodynamic Model in Design of the Kingman Lake Wetland Restoration Project, Karen M. Nook and William G. Grosskopf, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p58-63.

Applications of Space Technology to Aid in Identification of Seismic Hazards, Ronald Blom, Robert Crippen, Andrea Donnellan, Gilles Peltzer and Paul Rosen, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p305-306.

An Architecture Integrating Symbolic and Connectionist Models for Traffic Management Center Decision Support, Martin Molina, Filippo Logi, Stephen G. Ritchie and Jose Cuena, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephenedes, ed. and Francesco Filippi, ed., 1996), p320-324.

Area-average Wind Pressures on a Low-rise Building, Russ D. Leffler and Jack E. Cermak, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, p1037-1044.

Bayesian Assessment and Selection of Models for Structural Reliability Analysis, Philippe Geyskens and Armen Der Kiureghian, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p566-569.

Bayesian Liquefaction Resistance Analysis, Wilson H. Tang and Mauricio Angulo, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.

Roth, ed., 1996), p1195-1209.

Rotth, ed., 1990), p. 1132-1243.

A Boussinesy Model for Inshore Zone Sediment Transport Using an Energetics Approach, Theofanis V. Karambas, Howard N. Southgate and Christopher Koutitas, (Coastal Dynamics '93, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p841-849.

Zeidler, ed., 1990, post-oss.

Breaking Waves in Surfzones, Ke Yu and lb A. Svendsen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p329-340.

Ayasaw D. Zeider, ed., 1990), p329-340.

Bridge Deck Performance and Rehabilitation: A Reliability-Based Analysis, Paul D. DeStefano and Dimitri A. Grivas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1072-1081.

Building Process Metals for Decime Management

Building Process Models for Design Management, David

G. Platt, CP July 96, p194-203.

Building Seismic Safety Council Project '97, James E. Beavers and R. Joe Hunt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p335-336.

Calibration of Sediment Transport Model for the Upper End of Elephant Butte Reservoir, Mohammed A. Samad, Drew C. Baird and Frank P. Montoya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2288-2293.

Calibration Procedures for Rational and USSCS Design Flood Methods, G. W. Titmarsh, I. Cordery and D. H. Pilgrim, HY Jan. 95, p61-70.

Cape Girardeau Bridge Over the Mississippi River, Steven T. Hague, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p952-959.

Channel Routing with Flow Losses, Ming Jin and Danny L.

Fread, HY Oct. 96, p580-582.

Characterization of Canal Operations under Ideal Anticipatory Control, E. Bautista, A. J. Clemmens and T. S. Strel-koff, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1887-1892.

Characterization of Turbulent Scales in Atmospheric Wind by Orthonormal Wavelets, M. R. Hajj, H. W. Tieleman and M. Bikdash, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p971-974.

Choice of Input Fields in Stochastic Finite Elements, Ove Ditlevsen and Niels Jacob Tarp-Johansen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p820-837.

Class of Masing Models for Plastic Hysteresis in Structures, James L. Beck and Paramsothy Jayakumar, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1083-1090.

Coast, T. M. Peck, R. J. M. Sweet, H. N. Southgate, S. Boxall, A. Matthews, R. Nash, J. Aiken, H. Bottrell and R. Wilson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1024-1034.

Coastal Engineering Laboratory and Field Measurements: Some Uncertainties in Measurement, Frederic Raichlen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1139-1143.

Cohesive Crack Model with Rate-Dependence and Visco-elasticity, Zdeněk P. Bažant and Yuan-Neng Li, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

Communication Strategies for Distributed Traffic Systems, Communication Stategies for Distributed Trains: Systems, Norman Hunt, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p256-270.

Company and Project Evaluation Model for Privately Promoted Infrastructure Projects, Antonio Dias, Jr. and Phosical Company (1996), p. 1866-271.

tios G. Ioannou, CO Mar. 96, p71-82.

Comparisons of Site Characterization Methods Using Mixed Data, Donna M. Rizzo, Theodore P. Lillys and David E. Dougherty, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p167-179.

Complete Hydrodynamic Border-Strip Irrigation Model, Vivekanand Singh and S. Murty Bhallamudi, IR July/ Aug. 96, p189-197.

Comprehensive Fate Model for Metals in Municipal Wastewater Treatment, Wayne J. Parker, Hugh D. Monteith, John P. Bell, Henryk Melcer and P. Mac Berthouex, EE Sept./Oct. 94, p1266-1283.

Computation of Shallow Recirculating Flow Dominated by Friction, S. Babarutsi, M. Nassiri and V. H. Chu, HY July 96, p367-372.

Computational Experiments with a Combined Traffic As-signment and Control Model with Asymmetric Cost Functions, Claudio Meneguzzer, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p609-614.

Computational Tools for Subsurface Conceptualization, Earl V. Edris and Eileen Poeter, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2577-2582.

Considering Uncertainty in Earthquake Response Spectra, Sara Wadia-Fascetti and Burcu Vuran Gunes, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p211-212.

Constitutive Behavior of Granular Media Using a Lattice Type Model, S. Ramakrishnan, Muniram Budhu and George Frantziskonis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p713-716.

Constitutive Relations for Compressible Elastic Porous Solids, J. Bluhm, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1090-1093.

Control Systems Governing Gravity-Dependent Plant Growth, C. Duran, D. Flores, J. D. Smith and G. W. Morgenthaler, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1095-1101.

A Corotational Total Lagrangian Finite Element Analysis with Application to the Aircraft Tire, James M. Greer, Jr. and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1108-1114.

Costs of Treatment for Wastewater Reclamation and Dis-posal: A Preliminary Assessment, Pamela Doughman, Stephen Lyon, Lydia Chiu and Charles Gunnerson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Coupled Processes of Gas Hydrates Dissociation and Fluid Filtration in Saturated Porous Media, Alexey Maksimov, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Crop Growth and Water Use Model for Lettuce, M. Gallardo, R. L. Snyder, K. Schulbach and L. E. Jackson, IR Nov./Dec. 96, p354-359.

CSFs in Competitive Tendering and Negotiation Model for BOT Projects, Robert L. K. Tiong, CO Sept. 96, p205-

Cyclic Axial Loading of Drilled Shafts in Cohesive Soil, Kevin J. McManus and Fred H. Kulhawy, GT Sept. 94, p1481-1497.

Damage Analysis of a Water Distribution System Subject to Natural Hazards, James Bates, Matthew J. Cassaro and Michael A. Cassaro, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p357-358.

A Damage Simulation Model for Buildings and Contents in a Hurricane Environment, N. Stubbs and D. C. Perry, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., gineers, 6. 1996), p989-996.

A Decision Support System for Dynamic Pre-Trip Route Planning, Nagui M. Rouphail, S. Ranji Ranjithan, Wael El Dessouki, Timothy Smith and E. Downey Brill, (Ap-El Dessoudi, Inhody Sinth and E. Dowley bill, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p325-329.

Density and Conditioning Characteristics of Motorway Vehicular Traffic Flow, V. Torrieri, D. Gattuso, G. Musolino and A. Vitetta, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), and Prancesco Filippi.

p198-202.

Design Model Bias Factors for Driven Piles from Experi-ments at NGES-UH, Gil L. Yoon and Michael W. O'Neill, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p759-

Design of Vibration Control System for High-Rise Residential Buildings in Consideration of Wind-Induced Response, Yukio Tamura, Kiyoshi Uesu and Takeshi Ohkuma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1244-1251.

Design Rationale for Computer-Supported Conflict Mitiga-

tion, Feniosky Peña-Mora, Duvvuru Sriram and Robert Logcher, CP Jan. 95, p57-72. Designers Use Analysis Software for Planned Zimbabwe

Dam, CE Feb. 96, p83.

Determination of Reaeration Coefficients: Whole-Lake Approach, Rakesh K. Gelda, Martin T. Auer, Steven W. Effler, Steven C. Chapra and Michelle L. Storey, EE Apr. 96, p269-275.

Development and Application of a Dual Drainage Model for the Wethersfield Area of the City of Hartford, Connecticut, Michael E. Hulley, C. Neil Geldof, William W. S. Gray and A. Charles Rowney, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1242-1248.

Development of a Large-Scale Tidal Circulation Model for the Mediterranean, Adriatic and Aegean Seas, D.J. Mark and N. W. Scheffner, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Development of a Miter Gate Reliability Model, D. B. Cleary, C. J. Hookham and J. W. Waller, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p862-865.

Development of Performance Models for PMS, Kathryn A. Zimmerman and Margaret R. Broten, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p254-262.

Diffusion Wave Modeling of Distributed Catchment Dy-namics, Stefano Orlandini and Renzo Rosso, HE July 96, p103-113.

Dormant Season Evaporation: Challenges to the Current Models, Jerry L. Hatfield and John H. Prueger, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p219-224.

Dynamic Analysis of Multi-Pool Irrigation Canal, V. M. Ruiz-C., Jorge Castillo and B. de León-M., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p818-823.

Dynamic Behavior of Glued Laminated Timber Girder Bridges, Terry J. Wipf, Michael A. Ritter and Douglas L. Wood, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p260-267.

Dynamic Modeling and Response of Soil-Wall Systems, Anestis S. Veletsos and Adel H. Younan, GT Dec. 94,

Dynamic Processes on a Ridge and Runnel Beach, David Simmonds, George Voulgaris and David Huntley, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p868-878.

Dynamic Response Analysis of Slab-Type Bridges, Jag-mohan L. Humar and Ahmed H. Kashif, ST Jan. 95. p48-62.

Dynamic Service Actions for Floor Systems - Human Activity, Per-Erik Eriksson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p413-419.

Dynamic Stiffness Analysis of Lattice Structure, Eldad Levy and Moshe Eisenberger, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p526-533.

Earthquake Destructuress Potential Factor and Permanent

Earthquake Destructiveness Potential Factor and Permanent Displacements of Gravity Retaining Walls, Teresa Crespellani, Claudia Madiai and Giovanni Vannucchi, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p124-133.

Earthquakes, Statistical Practices, Earthquake Fault Rupture Propagation Through Soil, Jonathan D. Bray, Raymond B. Seed, Lloyd S. Cluff and H. Bolton Seed, GT Mar. 94, p543-561.

Eastern San Joaquin County Groundwater Resource Plan-ning Model Development and Calibration, Najmus Sa-quib, Young Yoon and Mike Cornelius, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3509-3514.

Eastern San Joaquin County Groundwater Resource Plan-ning Alternative Analysis, Najmus Saquib, Alex Chen, Umesh Lalwani, Mike Cornelius, Jeff Kishel, Gary Nuss and Mark Williamson, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3515-3520.

Battala, ed., 1920, 19319-320. Effect of Concrete Workmanship on Strength Reliability of R/C Beams, E. H. Khor, D. V. Rosowsky and M. G. Stewart, (Probabilistic Mechanics & Structural Reliabili-ty, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p238-241.

1990), p239-241.
Effect of Divergent Flow on Mass Conservation in Eulerian-Lagrangian Transport Schemes. Ling Tang and E. Eric Adams, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p106-115.

Effects of Spatial Data Resolution and Subarea Size on a Distributed Runoff Model, Thomas A. Seybert and Chin Y. Kuo, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2701-2706.

effects of Testing, Inspection and Repair on the Reliability of Offshore Structures, Guoyang Jiao and Oddvar I. Eide, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p154-157.

Enhanced Trichloroethene Desorption from Long-Term Contaminated Soil Using Triton X-100 and pH Increases, Dipak Sahoo, James A. Smith, Thomas E. Imbrigiotta and Heather M. McLellan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p215-1220.

Entity-Relationship Modeling of Composite Materials Data, Lisa K. Spainhour and William J. Rasdorf, CP July 96,

p226-235.

Estimation of the Probable Maximum Rainfall and Snowmelt Floods Via Physically Based Model of River Runoff Generation, L. S. Kuchment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1337.

Evaluation of Dynamic Analysis Results using Full-Scale Lattice Tower Tests, Markus Ostendorp, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p518-

Evaluation of Equivalent Linear Analysis Methods of Bridge Isolation, J. S. Hwang, ST Aug. 96, p972-976. Exterior Reflections in Elliptic Harbor Wave Models, Bin-

gyi Xu, Vijay Panchang and Zeki Demirbilek, May/June 96, p118-126.

Fatigue Model of Asphalt Concrete, Jian Zhou and Robert Y. Liang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p563-567.

Su, 1990), p503-567.
 Fatigue-Load Models for Girder Bridges, Jeffrey A. Laman and Andrzej S. Nowak, ST July 96, p726-733.
 Field Validation and Application of a Coastal Profile Model, J. A. Roelvink, Th. J. G. P. Meijer, K. Houwman, R. Bakker and R. Spanhoff, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

Finite Element Analysis of Fracture Behavior of ECC Shear Beams, Petr Kabele and Hideyuki Horii, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

als for the New Millennium, Ren F. Chong, ed., 1920, p409-418.

A Finite Element Model for the Aeroelasticity Analysis of Hypersonic Panels, Part II: Determination of Flutter Boundary, Ji Y. Shen and Lonnie Sharpe, Jr., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p148-1154.

Flexible Boundary for Discrete Element Simulation of Granular Assemblies, Runing Zhang and Stein Sture, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Flow-Induced Dynamic Response of Olmsted Physical Models, Mostafiz R. Chowdhury and Robert L. Hall, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p840-843. Flushing and Recharge of Inlet Channel for an Ephemeral Coastal River, Howard H. Chang and Daniel Pearson, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p659-668.

Forcing Function and Climate Change, Bijaya P. Shrestha, Lucien Duckstein and Eugene Z. Stakhiv, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2151-2156.

A Fracture Machanics Model for Shrinkage Cracking Ring.

A Fracture Mechanics Model for Shrinkage Cracking Ring, C. Ouyang, W. Yang and S. P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p861-864.

Free Vibration of Stiffened Composite Laminates, Meiwen Guo and Issam E. Harik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1163-1166. Fuzzy Drivers Make Good Models, Monica Maldonado, ET

June/July 96, p1,9.

June/July 96, p1,9.

A General Framework for Approaching Mobility Problems in Urban Areas, Walter Ukovich, Davide Tercelli, Nicola Campanella and Marco Crasnich, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p166-170.

GIGO: Spreadsheet-Based Simulation for MSW Systems, Robert P. Anex, Renée A. Lawver, Jay R. Lund and George Tchobanoglous, EE Apr. 96, p259-262.

Gradient Damage and Size Effects, Jan Carmeliet, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1175-1178.

Guidelines and Commentary for the Seismic Rehabilitation of Buildings (ATC - 33), L. D. Reaveley, D. Shapiro, J. Mochle, T. Atkinson, C. Rojahn and W. Holmes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1123-1130.

p1123-1130.
HERMES: An Integrated Environment for the Design of On-Line Decision Support Systems, Franco Arcieri and Ettore Apolloni, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p315-319.
A Heuristic Model for Particle Entrainment into Suspension, Yarko Niño and Marcelo García, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p812-815.
High-Conedit Bus Systems Bassed on Transit Centres and

High-Capacity Bus Systems Based on Transit Centres and Convoying, P. Delle Site and F. Filippi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p1-5. HPFRCC - E

PPRCC - Extruded Pipes, Henrik Stang and Carsten Pedersen, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p261-270.

Hydraulic Studies for a Large Wetland, Stephane Asselin, Phillip R. Mineart and Pierre-Yves Saugy, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p512-517.

Water, Chenchaya Bathata, ed., 1990), p512-517.

Hysteretic Response and Structural Reliability, Ricardo O.

Foschi and Hong Li, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p882-885.

Impact of Point and Nonpoint Discharges on the Water

Quality of a Reach of the Red River of the North, Anil

Peggerla and G. Padmanabhan, (North American Water and Environment Congress & Destructive Water, Cher-chayya Bathala, ed., 1996), p2504-2509.

Implicit Scheme for Estuarine Water-Quality Models, Byung-Gi Hwang and Wu-Seng Lung, EE Jan. 96, p63-

Improving the Ductility of High Performance Concrete Through Mortar-Aggregate Interfaces, Oral Büyüköztürk and Brian Hearing, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1337-1346.

Inappropriate Parameterization in Biofilm-Process Design Curves, C. S. P. Ojha and Rajnish Shrivastava, EE Jan. 96, p67-70.

Influence of Short and Long Waves Coupling on Sand Suspending, Sergey Yu. Kuznetsov and Nikolay V. Pykhov, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p720-727.

Inhomogeneous Interfacial Transition Zone Model for the Elastic Moduli of Concrete, Melanie P. Lutz, Paulo J. M. Monteiro and Robert W. Zimmerman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1246-1255.

Insight into the Inelastic Response to a Fully Nonstationary Earthquake Ground Motion Model, Bor-Feng Peng and Joel P. Conte, (Engineering Mechanics, Y. K. Lin and T.

C. Su, 1996), p269-272.

c. 3a, 1990, p.209-212.
Integrated Hydrological/Ecological/Economic Modeling for Examining the Vulnerability of Water Resources to Climate Change, John P. Kochendorfer and Jorge A. Ramirez, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2157-2162.

Integrated Planning Decision Support System (IPDS) Application: Glenwood Springs, Colorado, Mario Mejfa-Navarro and Luis A. García, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p386-387.

The Integration of Receiving Water Impacts in the Evaluation Process of Alternative Designs for CSO Abatement in Providence, RI, J. Craig Swanson, Joseph Grgin and Peter von Zweck, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1537-1542.

Investigating the Non-Convexity of the Groundwater Quali-ty Management Response Function, David P. Ahlfeld and Mary Palumbo, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p854-856.

Investigation into the Possibilities of Using Bristol Channel Models for Tidal Predictions, M. Amin and R. A. Flather, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p41-52.

A Layer-Wise Formulation for Progressive Failure Analysis of Laminated Composite Beams, Julio F. Davalos and Youngchan Kim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1150-1159.

Ken F. Chong, etc., 1920, p1130-1132.
Load Testing and Strength Evaluation of a Non-Composite Steel Plate Girder Bridge, Y. Edward Zhou, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p884-

A Log-Linear Model for Path Flow Estimation, Michael G. H. Bell and Caroline M. Shield, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p695-699.

Long Term Scenarios for Europe in Space, Klaus Pseiner, Angelo Atzei and David Raitt, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p145-154.

Major New Seismic Provisions Proposed for the 1997 UBC, Robert Bachman, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p333-334.

Measuring Flutter Derivatives for Bridge Sectional Models in Water Channel, Q. C. Li, EM Jan. 95, p90-101.

Mechanism Study of Landslides, Dagang Zhang and Mos-tafa A. Foda, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p258-261.

Meteoroid Hazards in the Lunar Environment, Frank J. Rooney and John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p653-662.

A Method for Structural Reliability Analysis of Marine Method for Structural Reliability Analysis of Marine Structures Using Combined Plate and Frame Structure Models, Hiroo Okada, Koji Masaoka, Yoshisada Murotsu, Shigeyuki Hibi and Wataru Kiyokawa, (Probabilistic Mechanics & Structural Reliability, Dan M. Fransopol, ed. and Mircea D. Grigoriu, ed., 1996), p150-153.

A Micromechanical Model for Asphalt Materials, C. A. Plaxico, W. Uddin and R. M. Hackett, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p761-770.

Micromechanics Based Design of Optical Fiber Crack Sensor, Christopher K. Y. Leung and Neill Elvin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p236-239.

Minimum-Time Design of a Slewing Flexible Beam, Xiao-jian Liu and David W. Begg, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1205-1214.

A Model for Bed Surface Shear Stress Fluctuations, César Mendoza, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p669-672.

Model for Efficiency of Soil Flushing Using PVD-Enhanced System, M. A. Gabr, J. Wang and J. J. Bowders, GT Nov. 96, p914-919.

Model Formulations for Numerical Creep Calculations for Concrete, Akihiko Kawano and Robert F. Warner, ST Mar. 96, p284-290.

Model of Electrodialysis Process Associated with Organic Adsorption, Thawach Chatchupong and Robert J. Mur-phy, EE Feb. 96, p154-161.

Model of Shear Wave Speed as a Function of Depth in Water-Saturated Sand, Nicholas P. Chotiros and Adrienne M. Mautner, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p804-807.

A Model of the Juncture Vortex, Elie Monnier and M. R. Dhanak, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1126.

Model Studies of Effects on Lunar Soil of Chemical Explo-sions, Chaun-Ping Lin, Deborah J. Goodings, Leonhard E. Bernold, Richard D. Dick and William L. Fourney, GT Oct. 94, p1684-1703.

Model Uncertainty in Anchorage Design for Anchored Bulkheads, Anurag Varde, Thomas C. Sandford and Habib J. Dagher, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p727-745.

Model-Centered World Wide Web Coach, Renate Fruchter and Kurt Reiner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1-7.

Modeling and Control of Excavator Dynamics during Dig-ging Operation, A. J. Koivo, M. Thoma, E. Kocaoglan and J. Andrade-Cetto, AS Jan. 96, p10-18.

Modeling Changing Freshwater Delivery to Apalachicola Bay, FL, W. K. Jones and Wenrui Huang, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p116-127.

Modeling Sediment in Gravel-Bedded Streams Using HEC-6, Robert N. Havis, Carlos V. Alonso and John G. King, HY Oct. 96, p559-564.

Modeling Stress-Strain Response of Clay Using Neural Nets, Yacoub M. Najjar, Imad A. Basheer and Hossam A. Ali, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p697-700.

Models of Construction Process Information, Thomas Froese, CP July 96, p183-193.

Modulated Waves in Porous Media Saturated by Liquid and Gas, Inna Edelman, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p653-656.

A Morphology Model to Predict Erosion Near a Seawall, K. A. Rakha and J. W. Kamphuis, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p879-890.

Multiphase Distribution of Cohesive Sediments and Heavy Metals in Estuarine Systems, Parmeshwar L. Shrestha and Gerald T. Orlob, EE Aug. 96, p730-740.

Neural Network Constitutive Models Determined from Structural Tests, Jamshid Ghaboussi, David A. Pecknold, Ming-Fu Zhang and Rami M. HajAli, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p701-704. A Neural Network Impedance Learning Control Model for a Robotic Excavator, Xiaodong Huang, Leonhard Ber-nold and Gordon Lee, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p213-219. Nevada Test Site on Track, CE Mar. 96, p20-21. A New Model of Risk Allocation for Construction Con-tracts based on Fair Liabilities between Parties, Harkunti

P. Rahayu and David G. Carmichael, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p35-41. on-Linear Models for Resilient Modulus Characterization

Non-Faneal Wooders for Resimer Wordung Canadeen Zauon of Granular Soils, Anand J. Puppala, Louay N. Moham-mad and Aaron Allen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p559-562.
Numerical Morphodynamic Modelling of Keta Lagoon,

Tim J. Chesher, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p927-938.

Observation and Conditional Stochastic FEM, M. Hoshiya

Observation and Conditional Stochastic FEM, M. Hoshiya and I. Yoshida, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p178-181.

On a Conceptual Model for Turbulent Skin Friction, Chao Si and Manhar Dhanak, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p293-296.

On Estimating the Effect of Passivating Inhibitors on the Time for Corrosion Initiation of Steel in Concrete. A. A.

Time for Corrosion Initiation of Steel in Concrete, A. A. Sagüés, S. C. Kranc and R. G. Powers, (Materials for the

Sagues, S. C., Aranca and R. G. Prowers, (Internats for New Millennium, Ken P. Chong, ed., 1996), p1522-1530.

A One-Dimensional Cross-Shore Transport Model, J. Nicholson and B. A. O'Connor, (Castad Dynamics' 95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996). 1996), p795-805.

Optimal Fitting of a Model to Observations of Sediment

Concentration in the Irish Sea, J. N. Aldridge, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph

T. Cheng, 1996), p416-428.

Optimum Storage Reallocation and Gate Operation in Multipurpose Reservoirs, Abbass Afshar and Hamid Morad-Khani, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1962-1967.

Outage Probability in Mobile Radio Communications in a Three-Dimensional Space, Silvano Pupolin, Luciano Tomba and Michele Zorzi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p271-275.

An Overview of Field Experiments on a Low-Rise Building, Douglas A. Smith, Kishor C. Mehta and Praveen Sandri, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Moham-

madi, ed., 1996), p1029-1036.

An Overview of Techniques for Analyzing a System Mod-elled as a Duffing Oscillator Driven by Deterministic and Stochastic Excitations, M. A. Tognarelli and A. Kareen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Parameterisation of Triad Interactions in Wave Energy Models, Y. Eldeberky and J. A. Battjes, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p140-148.

Passive Control Systems for Mitigation of Near-Field Earthquake Ground Motions, Peter W. Clark and James M. Kelly, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p217-218. Path-Storing Equilibration Algorithms for Several Traffic Assignment Models, Fabien Leurent, (Applications of

Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p633-638.

Physically Based Hydraulic Jump Model for Depth-Averaged Computations, Abdul A. Khan and Peter M. Steffler, HY Oct. 96, p540-548.

Steiner, HT (Cr. 90, p540-248.)

File Driving Records Reanalyzed Using Neural Networks, Anthony T. C. Goh, GT June 96, p492-495.
Plans for Embassy Appear in Show, CE Nov. 96, p23.
Pollutant Transport Across Porous Stream Beds, C. Mendoza and D. Zhou, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1581-1586.

Potential Flow Instability Theory and Bed Forms, Stephen E. Coleman and John D. Fenton, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p442-447.

A Practical Approach to Uncertainty Modeling in Geotechrical Engineering, C. Hsein Juang and David J. Elton, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1269-1283.

son, ed. ann Mary J. S. Koth, ed., 1990), p1269-1283.
Prediction of Cavitation Damage for Spillways, Wenping Lee and John A. Hoopes, HY Sept. 96, p481-488.
Probabilistic Fatigue Models for Bridge Evaluation, Jeffrey A. Laman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p286-289.
Onlitty of Cround Water (ALSP No. 28)

Quality of Ground Water (M&R No. 85), Committee on Ground Water Quality of the Environmental Engineering Division of the American Society of Civil Engineers, (Sayed M. Sayed, chmn.), 1996, 0-7844-0137-3, 200pp. Real-Time Traffic Control for Alternative Route Guidance

Systems Based on the Dynamic Assignment Model, Reinhart D. Kühne, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Reduction of Structural Response by Energy Dissipation Devices Modelled on Shape Memory Materials, C. W. S. To and J. M. Kelly, (Engineering Mechanics, Y. K. Lin

and T. C. Su, 1996), p491-494. Reductive Pyrolysis for the Destruction of Chloromethane: A Reaction Pathway Model Based on Thermodynamic and Thermokinetic Considerations, Varadarajan Ravin-dran, Massoud Pirbazari, Badri N. Badriyha and Sidney W. Benson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1367-1372.

ed., 1990), p130/-1372. Reliability Analysis of Beam with Initial Deflection by En-tropy Model, Yoshiro Kohama, Toyofumi Takada and Atsunori Miyamura, (Probabilistic Mechanics & Sruc-tural Reliability, Dan M. Frangopol, ed. and Mircea D.

urai Retuoruty, Dan M. Frangopot, ed. and Mircea D. Grigoriu, ed., 1996, p652-655.

The Research of the Relationship Between Earthquakes and the 30 Years of Intensive Geological Surveys in Xin Feng River, China, Ru- Qi Lu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p388.

Research to Application: Network Models to Simulate Flow and Transport in Heterogeneous Media, John F. Peters and Stacy E. Howington, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2571-2576.

Researchers Plan First Test of Automatic Highways, CE

Nov. 96, p24.

Nov. 96, p24.

Resistance Factors for High Strength Blind Bolts, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p784-787.

1996), p784-787.

Response to Arbitrarily Time-Varying Forces Using Convex Model, Chris P. Pantelides and Shyh-Rong Tzan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1252-1258.

Risk Assessment of Vapors in Cold Regions, Robert A. Perkins, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p360-371.

Risk Management for Response Planning, Roozbeh Kangari and Jacob Kovel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p42-48.

Role of Vegetation in Hydraulics of Channel Restoration.

Role of Vegetation in Hydraulics of Channel Restoration, Marcelo H. García, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2607-2612.

la, ed., 1996), p2607-2612.
Runoff Forecasting Using a Local Approximation Method,
A. W. Jayawardena, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2535.
Safety Evaluation of Current Concrete Slab Formwork Practices, Saeed Karshenas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p656-659.

Salt Transport Characteristics of Pak Phanang Estuary, Somboon Pornpinatepong and Malcolm L. Spaulding, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p92-105.

Scaling-Up of Small-Scale Granular Sediment Transport Laws, J. Raghuraman and P. K. Haff, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p262-264.

Scheduling with Computer-Interpretable Construction Method Models, Martin A. Fischer and Florian Aalami, CO Dec. 96, p337-347.

Search for Physically Based Runoff Model—A Hydrologic El Dorado, David A. Woolhiser, HY Mar. 96, p122-129.

Sediment Transport Fluxes as Determined from Wave Breaker Induced Suspended Sediment and Flow Fields, G. Smith, G. Mocke and L. Engelbrecht, (Coastal Dy-namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p783-794.

Sediment Transport in a Thermally Stratified Bay, Kai-Ping Wang, Zenitha Chroneer and Wilbert Lick, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), 9466-477.

Seismic Motion Incoherency Effects on Dynamic Response, Dan M. Ghiocel, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p624-627.

Seismic Pressures Against Rigid Walls, Guoxi Wu and W. D. Liam Finn, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed.,

1996), pl-18.

Sequence Control for Integrated Structural Design Models, Chang-Ho Lee and Richard Sause, CP July 96, p213-

Service Load Test of 1:3 Scale Shell Bridge Model, F. S. Fanous, F. W. Klaiber and W. G. Wassef, ST Feb. 96, p210-216.

A Short Term Forecasting Model for Freeway Traffic Mon-itoring, and Control, R. Camus, G. Longo and F. San-torini, (Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p418-422.

Simulations of the Maine Coastal Current, Monica J. Holboke and Daniel R. Lynch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng,

1996), p156-167.

Smeared Crack Approaches—Material Modeling, Marco Petrangeli and Joško Ožbolt, EM June 96, p545-554.

SoilRisk: Risk Assessment Model for Organic Contam nants in Soil, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE May 96, p388-398.

Sources and Circulation of Salt in the San Joaquin River Basin, Leslie F. Grober, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p649-654.

Spatiotemporal Stochastic Open-Channel Flow. I: Model and Its Parameter Data, Timothy K. Gates and Muham-mad A. Al-Zahrani, HY Nov. 96, p641-651.

Stability Analysis of a Geometrically Imperfect Structure Using a Random Field Model, York Schorling and Chris-tian Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p604-607.

Statistical Characteristics of Strength and Load Random Variables of Ship Structures, Khaled Atua, Ibrahim Assakkaf and Bilal M. Ayyub, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p106-109.

Statistical Model for Sand Compaction Under Cyclic Shear Strain, R. Ghanem and M. El-Mestkawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p722.

Statistical System Identification of Structures Using ARMA Models, Joel P. Conte and Satyendra Kumar, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p142-145.

Stochastic Snow Load Process Model from Daily Climatological Data, Kenneth J. Fridley, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p210-213. A Strategy for Urban Transit Route Selection, Stefano Carrese and Stefano Gori, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p144-148.

Streamflows Prediction Models for the Colombian Generation System Considering El Niño Effect, Oscar J. Mesa, Ricardo A. Smith, Pedro J. Restrepo, José E. Salazar, Luis F. Carvajal and Juan D. Velásquez, (North American Water and Environment Congress & Destructive

Water, Chenchayya Bathala, ed., 1996), p1477-1482.
Structural Control with Electrorheological Dampers: Visco plastic Behavior and Anticipation, Scott A. Burton and Nicos Makris, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1261-1268.

Structural Load Modeling and Combination for Perform ance and Safety Evaluation by Y.-K. Wen, T. Igusa, EM

Feb. 96, p183-184.

A Study on the Link between Damage Mechanics and Frac-ture Mechanics, Zhen Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p739-742.

System Downstream Control for On-Demand Irrigation Canals, Zihui Lin and David H. Manz, (North American Water and Environment Congress & Destructive Water,

System Identification Study of a 1:10 Scale Steel Model using Earthquake Simulator, Satish Nagarajatah and Xiaojiang Ma, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p764-767.

Systems for Forecasting Flows and Their Uncertainty, Kon-stantine P. Georgakakos, Alexandre K. Guetter and Jason A. Sperfslage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2360-2365.

Toward a Unified Nomenclature for Reinforced-Concrete Theory, Thomas T. C. Hsu, ST Mar. 96, p275-283.

Trip Mode Recommendation Using Travel Time Predic-tion, Michael Cremer, Carsten Holtmann and Stefan Schrieber, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p330-334.

Uncertainty in Back Analysis of Slopes, Robert B. Gilbert, Stephen G. Wright and Eric Liedtke, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J.

S. Roth, ed., 1996), p494-517.

A Unified Description of Soil Behavior, Juan M. Pestana, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p281-284.

Use of Geologic Information in Site Characterization, Tien H. Wu, Mohamed A. Abdel-Latif, Michael A. Nuhfer and B. Brandon Curry, (Uncertainty in the Geologic Environment: From Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p76-90.
Use of Risk Models to Mitigate Financial Impacts from

Catastrophic Natural Events, Auguste Boissonnade, Peter Ulrich and Richard D. Wales, (Natural Disaster Reduc-

Ulrich and Richard D. Wales, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p199-200.
Use of SID Method for Site Characterization, P. W. Jayawickrama, K. G. K. Jayakody and K. A. Rainwater, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p897-911.
An Ilser Behaviour Analysis in Signalized Itrhan Intersection.

Sun, ed. and Mary J. S. Roth, ed., 1996), p897-911.

An User Behaviour Analysis in Signalized Urban Intersections by Artificial Neural Network, Lorenzo Mussone,
Giuseppe Reitani and Savino Rinelli, (Applications of
Advanced Technologies in Transportation Engineering,
Yorgos J. Stephanedes, ed. and Francesco Filippi, ed.,
1996), p208-212.

User Models in Search and Navigation Systems on the In-ternet, Per Christiansson, Robert Lagerstedt and Uno Engborg, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p21-27.

gas, et. and rau Cmnowsky, etc., 1999), p2+21. Vibration Control of Cable-Stayed Bridges: Control System Development and Experimental Results, Rahmat A. Shoureshi and Mark J. Bell, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p902-905.

VOCs in Fixed Film Processes. II: Model Studies, Wayne J. Parker, Hugh D. Monteith and Henryk Melcer, EE July

Watershed Characteristics and Hydrological Parameters vs. Sediment Yield - Northern Regions of Pakistan, Muham-mad Ashiq, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1669-1674.

Waves with Two-peaked Spectrum in the Gdańsk Bay, Bar-bara Paplińska, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p33-44.

Wind Tunnel Modeling of Atmospheric Dispersion in the Vicinity of Buildings, P. Saathoff, H. Wu and T. Stathooulos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1131-1134.

A Windstorm Damage Model for the Identification of Insurance and Reinsurance Risk, Brian E. Lee and David R. Whiting, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p197-198.

World-Wide Command and Control: Operating the Interna-tional Space Station, Michael J. See, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p458-466.

WQMAP in a Windows Environment, Daniel Mendelsohn, Eoin Howlett and J. Craig Swanson, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p555-569.

Modular structures

(DM)2: A Modular Mobile Manipulator, Christopher Lee and Yangsheng Xu, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p107-113.

An Integrated Intelligent Planning Approach for Modular Construction, Nashwan Dawood, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p410-416.

Modulus of elasticity

Design Considerations for the Use of Plastic Lumber in Structural Applications, Richard G. Lampo, Thomas J. Nosker and Richard W. Renfree, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1492-1500.

Finite Element Analysis with Fuzzy Variables, Ru-Jen Chao and Bilal M. Ayyub, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p643-650

Investigation of Structural Properties of Used Formwork Stringers, Saeed Karshenas and Eyad Mizian, MT Feb. 96, p51-56.

Moisture

Geotextile-Reinforced Surface for Rapid Construction of Low-Volume Pavements, Reed B. Freeman and Randy C. Ahlrich, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p298-307.

Moisture Conditions and Control in Buildings in Fairbanks, Alaska, Ross Adkins, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p372-383.

Moisture Penetration of Concrete Floor Slabs, Basement Walls, and Flat Slab Ceilings, Robert W. Day, SC Nov.

96, p104-107.

Moisture Removal from the Repository by Ventilation and Impacts on Design, Parviz Montazer and Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p423-425.

Moisture-Induced Pressures in Concrete Airfield Pavements, C. A. Kodres, MT Feb. 96, p41-50.

Natural Ventilation of an Exothermic Waste Repository, George Danko and Steven Saterlie, (High Level Radioac tive Waste Management, Technical Program Committee, 1996), p426-428.

Retail-Grocery-Floor Failure, Raymond S. Rollings, CF May 95, p137-145.

Thermal and Vapor Performance of Insulated Assemblies Axel R. Carlson, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p384-397. Moisture content

Assessing the Significance of Subgrade Variability on Test Section Performance. Maureen A. Kestler. (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p685-694.

The Effect of Moisture on Spalling of Normal and High Strength Concretes, N. Khoylou and G. L. England, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

p559-570.

Performance Monitoring of Three Stress-Laminated Timber Bridges in Leon County, Nur Yazdani and Joy Orlando Kadnar, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p268-275.

Moisture uptake
Heat and Moisture Absorption Effects in Composites; Theory and Experiments, A. Szekeres and R. A. Heller, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p63-72.

Northern Climate Weathering Tests on Sealed Concrete, Luh-Maan Chang, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p141-152

Girder Moments in Continuous Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE Feb. 96, p37-45.

Bridge-Column Footings: An Improved Design Procedure, Lian Duan, SC Feb. 96, p20-24.

Cumulants-Based Analysis of Concentration Data from Soil-Column Studies for System Identification, Rao S. Govindaraju, Bhabani S. Das and Gerard J. Kluitenberg, HE Jan. 96, p41-48.

Forces on a Vertical Wall due to Long Waves, Bores, and Dry-Bed Surges, Jerald D. Ramsden, WW May/June 96,

p134-141.

PI33-191. Higher Moments of Weighted Integrals of Non-Gaussian Fields, Gunnar Mohr, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p254-257.

Modeling for Moment-Rotation Characteristics for End-Plate Connections, Y. J. Shi, S. L. Chan and Y. L. Wong,

ST Nov. 96, p1300-1306.

Moment Analysis of Tracer Experiments, Charles N. Haas, EE Dec. 96, p1121-1123.

Moment Equations for Linear Systems Subjected to Poly-nomials of Filtered Poisson Processes, M. Grigoriu and F. Waisman, (Probabilistic Mechanics & Structural Reli-ability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p262-265.

Moment Lyapunov Exponent and Stability Index for Linear Stochastic Systems with Small Diffusion, Nikolai Mosh-chuk and Rafail Khasminskii, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and

& Structural Reliability, Dan M. Frangopoi, ed. and Mircea D. Grigoriu, ed., 1996), p538-541.
On Moment Stability of Markov Dynamical Systems, Lambros Katafygiotis and Yevgeny Tsarkov, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopoi, ed. and Mircea D. Grigoriu, ed., 1996), p546-549.

On Translation Processes and Upcrossing Probabilities, Mi-chael Macke and Christian Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed.

and Mircea D. Grigoriu, ed., 1996), p608-611.
Physically Based Hydraulic Jump Model for Depth-Averaged Computations, Abdul A. Khan and Peter M.

Steffler, HY Oct. 96, p540-548.

A Program for the Reduction of Seismic Hazards Posed by Welded Steel Moment Frame Structures, Stephen A. Mahin, Ronald O. Hamburger and James O. Malley,

(Natural Disaster Reduction, George W. Houser, ed. and Riley M. Chung, ed., 1997), p157-158.

Random Response of Nonlinear System to PERPM Model, Y. Wang, Z. Hou, M. Dimemberg, M. Noori and Y. Zhou, (Probabilistic Mechanics & Structural Reliability, Dec.) Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p954-957. Response Cumulants of Nonlinear Systems Subject to External and Multiplicative Excitations, C. Papadimitriou, L. S. Katafygiotis and L. D. Lutes, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p744-747.

Role of Moment Exponent in Stochastic Bifurcation, S. T. Ariaratnam, (Probabilistic Mechanics & Structural Reli-ability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p554-557.

Seismic Solutions for Steel Frame Buildings, Virginia Fairweather, CE Mar. 96, p40-43.

Spotlight on Steel Moment Frames, W. F. Chen and E. Yamaguchi, CE Mar. 96, p44-46.

Statistical Moments of Principal Stress-Related Quantities in Random Vibration Analysis, Ronald S. Harichandran and Mu-Tsang Chen, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p962-965.

Steel Moment Frames with Welded Connections, Helmut Krawinkler, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

Mohammadi, ed., 1996), p1115-1122.

Vertically Averaged and Moment Equations Model for Flow over Curved Beds, Abdul A. Khan and Peter M. Steffler, HY Jan. 96, p3-9.

Welded Steel Moment Frame Joint Testing Programs, Thomas A. Sabol and Michael D. Engelhardt, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1228-1235.

Momentum transfer

Channel Junction Effects in Channel Network Flow Simulation, Gye-Woon Choi, Keun-Heung Kim and Sang-Jin Ahn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1899-1904.

Contributions to the Momentum Balance in the Surf Zone, Marien Boers and Jan van de Graaff, (Coastal Dynamics 95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p257-268.

On the Relationship between Net-Momentum Fluxes and Wall-Normal Velocity Fluctuations, Fabián López and Marcelo García, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p661-664.

The 1995 Flood in Southeastern Norway - Operational Forecasting, Warning, and Monitoring of a 200-year Flood, K. Repp, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2537.

Accidental Situations: Application of Surface-Water Monitoring Data, P. Berg and T. Vasiljeva, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1338-1339.

Acoustic Emission Monitoring of Pultruded Bridge Members, Arup K. Maji, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p963-966.

Analysing Road Traffic Movement Patterns by Image Analysis Using an Array of Transputers, X. Zhang, R. E. Allsop and M. R. B. Forshaw, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p109-113.

Application of the Hydrocarbon Spill Screening Model to Field Sites, James W. Weaver, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p788-

Artificial Recharge of a Buried Glacial Aquifer in South Dakota, Vernon R. Schaefer and Delvin E. DeBoer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Assessing Water Quality Impacts of Stormwater Runoff, G. Fred Lee and Anne Jones-Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3103-3108.

The Balanced Indigenous Population (BIP) and Statistical Process Control (SPC) in Marine Pollution Ecology, George Robertson, Mike Mengel, Don Maurer and Irwin Haydock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1431-1436.

Beach Nourishment: Planform Considerations, Robert G. Dean, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p533-546.

Bridge Monitoring Using An Optical Fibers Sensor System, R. L. Idriss and M. B. Kodindouma, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p238-244

Chance-Constrained Optimal Monitoring Network Design for Pollutants in Ground Water, Bithin Datta and Sanjay D. Dhiman, WR May/June 96, p180-188.

COASTMAP: An Integrated System for Environmental Monitoring, Modeling and Management, Thomas Op-ishinski, Malcolm L. Spaulding and Craig Swanson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2528-2532.

Comparison of Algorithms for Nonlinear Integer Optimiza-tion: Application to Monitoring Network Design, Yuh-Ming Lee and J. Hugh Ellis, EE June 96, p524-531. Critical Issues in the Monitoring and Control of Toxic Air Contaminants at POTWs, Federico G. A. Vagliasindi and Vincenzo Belgiorno, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p81-86.

Culvert Composite Sampler: A Cost-Effective Storm-Water Monitoring Device, Stephen J. Dowling and Brian W. Mar, WR July/Aug. 96, p280-286. Damage Assessment of Reinforced Concrete Structures

- through Acoustic Emission Monitoring, Christian C. Steputat and Sashi K. Kunnath, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p837-844.
- and Jamshid Monammadi, ed., 1996), ps.37-844.
 Detecting Damage in Highway Bridges from Vehicle Induced Girder Strains, Leon L-Y Lai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p.1122-1125.
 Detecting Leaks Electronically (Available only in Geo/Environmental Engineering Special Issue), Rita Robison, CE New 66-2164.
- CE Nov. 96, p16A.
- CE Nov. 96, prior.

 Development of a Wireless Global Bridge Evaluation and Monitoring System (WGBEMS), Kenneth Maser, Robert Egri, Abba Lichtenstein and Steven Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p734-
- Development of an Expert System for Daily Drought Moni-toring, T. J. Chang, H. Zheng, X. A. Kleopa and C. B. Teoh, CP Jan. 96, p20-24.
- Environmental Planning for Water Resources Develop-ment, Cuatro Cienegas Region, Coahuila, Mexico, James Kunkel and Dario Rodríguez-Bejarano, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1249-1254.

Evaluation of Selected Instruments for Monitoring Scour at Bridges in New York, Gerard K. Butch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4164-4171. Field Evaluation of a Wireless Global Bridge Evaluation

- and Monitoring System (WGBEMS), Kenneth Maser, Robert Egri, Abba Lichtenstein and Steven Chase, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p955-958.
- A Field Test of NAPL Removal by High Molecular Weight Alcohol Injection, Ronald W. Falta, Scott E. Brame, Cin-dy M. Lee, John T. Coates, Charles Wright, Sarah Price, Patrick Haskell and Eberhard Roeder, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p257-268.
- A Flexible Machine-Vision System for Traffic Monitoring Applications, James F. Alves, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p171-175.

Ground Water Variability at Sanitary Landfills—Causes and Solutions, John Oneacre and Debbie Figueras, (Uncertainty in the Geologic Environment; from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p965-987.

Groundwater Monitoring For a Tunneling Project, James C. Burton and John e. Shamma, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p691-696.

Groundwater Monitoring System Design Using a Probabi-listic Observation Method for Site Characterization, Mauricio Angulo and Wilson H. Tang, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p797-812.

Groundwater Remediation Design When Pretty Good is Good Enough, J. Wayland Eheart, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p848-853.

Health Monitoring Studies on Composite Structures for Aerospace Applications, George James, Dennis Roach, Bruce Hansche, Raul Meza and Nikki Robinson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1127-1133.

A Hybrid Data Model for Structural Health Monitoring, Sungkon Kim and Stuart S. Chen, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p286-297

Image Monitoring on Motorway: Pedestrian Detection
Using Image Processing, Salah Bouzar, Roland Glachet,
Jean-Marc Blosseville and François Lenoir, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p124-128.

Instrumentation for Field Measurement of Abutment Scour, J. D. Schall, G. R. Price and G. A. Fisher, (North Ameri-J. D. Schall, G. K. Price and C. A. Fisher, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p931-939.

Intelligent Bridge Monitoring System, Pet-Ling Liu, Yun-Fu Luo and Shyh-Jang Sun, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p608-611.

Intelligent On-Line Monitoring of Machine Health for Robots in Critical Environments, John P. H. Steele, Michelle Archuleta, Galen D. Brown, Tom Drouillard, Dirk Schlief and Tim D. Seifert, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p262-

Intensity, Duration, and Frequency of Residential Water Demands, Steven G. Buchberger and Greg J. Wells, WR

- Jan.Feb. 96, p11-19.

 Interferometric Imaging for Deep Space Asset Monitoring, Gary C. Loos, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p214-
- Issues Related to Intelligent Bridge Monitoring, A. Emin Aktan, Arthur J. Helmicki and Victor J. Hunt, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p750-757
- Laboratory Evaluation of a Conductivity Probe for Scour Monitoring, David S. Mueller and Mark N. Landers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4154-4163.
- A Log-Linear Model for Path Flow Estimation, Michael G. H. Bell and Caroline M. Shield, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p695-699.
- Long-Term Deflection Control in Cantilever Prestressed Concrete Bridges. I: Control Method and Algorithm, Hui-Sheng Chiu, Jenn-Chuan Chern and Kuo-Chun Chang, EM June 96, p489-494.
- Long-Term Deflection Control in Cantilever Prestressed Concrete Bridges. II: Experimental Verification, Huisheng Chiu, Jenn-Chuan Chern and Kuo-Chun Chang, EM June 96, p495-501.
- Modal Filter Based On-Line Monitoring of Uncertain Structural Systems, E. A. Johnson, L. A. Bergman, P. G. Voulgaris and L. C. Freudinger, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p156-159.

Monitor Well Design, Installation, and Documentation at Hazardous and/or Toxic Waste Sites, U.S. Army Corps of Engineers, 1996, 0-7844-0150-0, 51pp. Monitoring Prestressed Structures, Jack F. Elliott, CE July

96, p61-63.

Monitoring Results of a Nearshore Disposal Berm, Emre N. Olay, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p547-558.

Monitoring Scour at Bridge Piers in Snohomish Co., WA, Anthony P. Nahajski, (North American Water and Envi-Antinony F. Nanajski, (vorth American water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1156-1161.

A Monitoring System for High-Clearance Scaffold Systems

during Construction, Y. L. Huang, T. Yen and W. F. Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p719-726.

Monitoring Systems on Historic Buildings: The Brunelle-schi Dome, Gianni Bartoli, Andrea Chiarugi and Vittorio Gusella, ST June 96, p663-673.

Neural Network Approach to Detection of Changes in Structural Parameters, S. F. Masri, M. Nakamura, A. G. Chassiakos and T. K. Caughey, EM Apr. 96, p350-360. Notes on Prestressed Structures, Morris Schupack, CE Nov.

96, p30.

An Observational Approach to Removing LNAPL, Richard Haimann, Kathleen Schoen, Hooshang Nezafati and Jim Hartley, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p719-730.

Operational Aspects of Warning, D. D. Nurbaev and N. S. Gavrilova, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1552.

Prototype Monitoring Study of Wave Climate and Beach Profile in the Surfzone, Joachim Grüne, (Coastal Dynam-ics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p559-570.

Rapid Slope Monitoring, William F. Kane and Timothy J. Beck, CE June 96, p56-58.

Beck, CE June 96, pob-58.
Remote Monitoring and Technical Support for Drinking Water Systems in Remote Communities, Daniel W. Smith, Stephen J. Stanley and Dennis S. Prince, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p545-557.

Saving Scotland's Busiest Bridge, Rita Robison, CE Jan.

96, p48-51. Scour Monitoring at Johns Pass and Nassau Sound, Florida, J. D. Schall, G. A. Fisher and G. R. Price, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1990-1998.

Water, Chenchayya Bathala, ed., 1996), p1990-1998.
A Short Term Forecasting Model for Freeway Traffic Monitoring, and Control, R. Camus, G. Longo and F. Santorini, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p418-422.
Tenneco's Risk Management Approach to Pipeline Crossings, J. S. Street and J. C. Bowles, (Pipeline Crossings, 1996, Lawrence F. Catalano, ed., 1996), p14-21.
Time Effects on Pile Skip Resistance, June M. Autorene.

Time Effects on Pile Skin Resistance, Juan M. Antorena and G. Thomas McDaniel, (Building an Internation Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p582-589.

The Use of Monitoring of Russian Water Objects for the Decrease of Disaster Consequences, G. M. Barenboim and G. M. Ostrovski, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1341.

Westbay/MOSDAX Instrumentation of UE-25 ONC #1 and USW NRG-4 at Yucca Mountain, Nevada, Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p163-165.

'96 Extraordinary Flood in the Middle Reach of the Yangtze River, Xuewu Ji, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p377-378.

Bridge Over the River Karnali, George Gesner and Selva Selvaratnam, CE Apr. 96, p48-51.

Extraordinary Flood Disaster in Tai Lake Basin of China in 1991, Ruiju Liang, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p48-

Flash Floods and Their Control in the Indian Arid Zone, K.
D. Sharma, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2539.

438

Studentifying Trends from Streamflow Records--A Case Study, Joseph A. Van Mullem, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1675-1680.

Monte Carlo method

Application of a Reliability-Based Fatigue Life Model to a Gas Turbine Engine Structure, Robert G. Tryon, Thomas A. Cruse and Sankaran Mahadevan, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p636-639.

Bayesian Decision Analysis for Contaminant Travel Time, Marian W. Kemblowski and Hewa A. Wijedasa, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p207-218.

Calibration and Simulation of Non-Gaussian Translation Processes, M. Grigoriu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p804-807.

A Comparative Analysis of FORM/SORM and Polynomial Chaos Expansions for Highly Nonlinear Systems, R. Ghanem and D. Ghiocel, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p535-538.

Detection of Outliers in Pearson Type III Data, Colleen S. Spencer and Richard H. McCuen, HE Jan. 96, p2-10.

Development of a Miter Gate Reliability Model, D. B. Cleary, C. J. Hookham and J. W. Waller, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p862-865.

Efficient Monte Carlo Technique for Locating Critical Slip Surface, Venanzio R. Greco, GT July 96, p517-525. Finite Element Modeling of Settlements on Spatially Ran-dom Soil, G. M. Paice, D. V. Griffiths and G. A. Fenton,

GT Sept. 96, p777-779.

First Exit Times in Non-Linear Dynamical Systems by Advanced Monte Carlo Simulation, H. J. Pradlwarter and W. Kliemann, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p523-526.

Hybrid Stochastic Finite Elements and Generalized Monte Carlo Simulation, R. Ghanem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p182-185.

Implementation and Application of Parallel Processing Computer Methods for Probabilistic Analysis, Harry R. Millwater, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p266-269.

Implementation of Variance Reduction Techniques Using Monte Carlo Stratified Sampling in the COMPROMIS Code Version 2, Emmanuel Ardillon, Patrice Pitner and Bernard Lapeyre, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p692-695.

Influence of Spatial Variability of Soil Properties on Seismically Induced Soil Liquefaction, Radu Popescu, Jean H.

Prevost and George Deodatis, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.

Roth, ed., 1996), p1098-1112. Limit State Design Method of Structural System Using Reliability-Based Optimization and Efficient Monte-Carlo Simulation Technique, Wataru Shiraki, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p635-

Mode Search Algorithm for System Reliability under Earthquake Load, Hideki Idota and Tetsuro Ono, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p978-981. 439

Monte Carlo Simulation to Evaluate Slope Stability, Douglas Scott Chandler, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p474-493.

Nonlinear SDOF System Subject to Poisson-Distributed Pulse Process, Sau-Lon James Hu, George Tsiatas and Shuang Jin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p680-683.

On the Development of a Selective Algorithm in Advanced Monte Carlo Simulation, Helmut J. Pradlwarter, Napat Hampornchai and Gerhart I. Schuëller, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p14-17.

Practical Probabilistic Approach Using Spreadsheet, B. K. Low, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1284

Probabilistic Analysis of Foundation Settlement, Gordon A. Fenton, G. M. Paice and D. V. Griffiths, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p651-665.

Probabilistic Simulation of Decomposition of Liquid Pro-pellant, N. R. Moore, N. W. Ferraro, D. H. Ebbeler, L. E. Newlin, J. Blandino, R. A. Beaudet, C. M. Moran and S. H. Moore, (*Probabilistic Mechanics & Structural Re*liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p640-643.

Random Elastic Response Characteristics of Bar Structures by Monte Carlo Simulation, Michael Koutsoukis and Ed-mund S. Melerski, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p812-815.

Reliability Evaluation of Slender HSC Columns, Sofia M. C. Diniz and Dan M. Frangopol, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p242-245.

Reliability of Code Provisions for Wind-Induced Discomfort, Rwey-Hua Cherng, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p494-497.

Reliability of High-Streagth Concrete Columns, Sofia M. C. Diniz and Dan M. Frangopol, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p213-222.

Reliability-Based Exit Gradient Design of Water Retaining Structures, D. V. Griffiths, Gordon A. Fenton and G. M. Paice, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p518-

Risk Based Analysis of Major Rehabilitation of Hydraulic Structures Using REPAIR, David Moser, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2498-2503.

Simulation of Multi-Dimensional, Multi-Variate, Non-Gaussian, Homogeneous Stochastic Fields with Applications to Soil Liquefaction, Radu Popescu, George Deodatis and Jean H. Prevost, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p808-811.

Simulation-Based Reliability Assessment for Structural En-gineers by Pavel Marek, Milan Gustar, and Thalia Anag-no, James T. P. Yao, ST July 96, p841.

Smooth Modelling of Oblique Contact with Friction of Tur-bine Blades: Behaviour Analysis Under Random Excita-tion, Erick Tournu, Sergio Bellizzi and Béatrice Costa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p760-763

Spatiotemporal Stochastic Open-Channel Flow. II: Simulation Experiments, Timothy K. Gates and Muhammad A. Al-Zahrani, HY Nov. 96, p652-661.

SpatioTemporal Stochastic Open-Dhannel Flow, Timothy K. Gates and Muhammad A. Al-Zahrani, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p346-351.

Statistical Moments of Principal Stress-Related Quantities and the state of t

Statistics of Free Surface Flow through Stochastic Earth Dam, Gordon A. Fenton and D. V. Griffiths, GT June 96,

p427-436.

Stochastic Dynamics of Non-Linear Systems Excited by Parametric Delta Correlated Processes, Mario Di Paola and Antonina Pirrotta, (*Probabilistic Mechanics & Struc-tural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p930-933.

Stochastic Response of a Hysteretic System Under Nonstationary Excitations, Ismail I. Orabi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p392-395.

Theoretical Joist-Rupture Sequences in Wood-Floor Sys-tem Model, Timothy A. Philpot and David V. Rosowsky, ST Oct. 96, p1225-1233.

Uncertainty in Comparative Analysis with Continuous Nonpoint Source Pollution Models, Dipmani Kumar and Conrad D. Heatwole, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1705-1710.

Aontmorillonite

Reaction Products Formed in Lime-Stabilized Marine Clays, S. Narasimha Rao and G. Rajasekaran, GT May

96, p329-336.

Soil Type Effect on NAPL Removal by Surfactant, Olubun-mi M. Ogunsola and Mark A. Tumeo, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Asand Remediation, Lakshmi N. Reddi, ed., 1996), p281-291.

Civil Engineering Education: An Historical Perspective, Lawrence P. Grayson, (Civil Engineering History: Engi-neers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p44-52.

Extending the Legacy: Planning America's Capital for the 21st Century, Reginald W. Griffith, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p25-33.

(DM)²: A Modular Mobile Manipulator, Christopher Lee and Yangsheng Xu, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p107-113.

Analyses of Lunar Membrane Structures for Potential Failure Scenarios, James Day and Phil Richter, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1052-1058.

Architectural Considerations in Design of Lunar-Based As-tronomical Observatories, Stewart W. Johnson, Koon Meng Chua, Milton Schwartz and Jack O. Burns, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p871-880.

Architecture on the Moon: The Importance of Human Fac-

tors Considerations in the Design of a Lunar Base, John Bergquist, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1038-1044.

Astrophysical Cosmology Using a Lunar Ligo, Thomas L. Wilson, Hans-Joachim Blome and Norman LaFave, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p861-863.

BootStrapping Space Resource Utilization with Tethers, Regolith Rockets and Micro Rovers, Bruce A. Mackenzie, (Engineering, Construction, and Operation, Space, Stewart W. Johnson, ed., 1996), p321-327. and Operations in

Building on the Moon, CE Oct. 96, p11.

Carbon Reduction of Iron Oxides in Lunar Simulants, Scott Hayes, Heather Hamlett and Roberta Bustin, (Engineer-ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p734-740.

Challenges in the Construction of a Lunar Base, Roy Sargent and Keith Hampson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p881-888.

ty, Howard D. Ross, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p527-532. Combustion Processes and Applications in Reduced Gravi-

Commercial Mining Activities for the Space Frontier, David M. Neil, Russell J. Miller, David S. McKay and Brad R. Blair, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p800-

Concept for a Permanent Lunar Utilities System, David G. Schrunk, Bonnie L. Cooper and Burt L. Sharpe, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p935-941.

W. Johnson, ed., 1996), p935-941.
Conceptual Design of a Crater Lunar Base, Alice Eichold, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p920-927.
Concrete — A Practical Construction Material for Mars, David S. McKay and Carlton C. Allen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p566-570.
Concrete Space Station Construction in Lunar Orbit, Don J. Wade, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p578-584.
Considerations for Realistic Lunar Excavation, Michael J. Lally, Scott P. Mackey and Laurie R. Gaskins, (Engineering, Construction, and Operations in Space, Stewart

neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p896-902.

Construction System for Lunar Base, Shinji Matsumoto,

Nobuo Isome, Koji Oishi, Hiroshi Kanamori, Kenji Takagi, Yoshiro Kai, Michiya Suzuki and Satoru Suzuki, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p140-144.

Continuing Data Needs for Lunar Radiation Protection, Richard R. Roll, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p646-652

Design and Operation of the Sub-Orbital Lunar Explorer, Walter Collins, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p949-

Digital Image Analysis of Two-Dimensional Fluidized Beds at Lunar Gravity, D. J. Brueneman, L. L. Sorge, M. A. Gibson, C. W. Knudsen and H. Kanamori, (Engineer

ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p769-775.

The Effect of the Lunar Surface Environment upon Machinery, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), e520-645. p639-645.

Po. Pacilities for the Earth-Moon Test Range, Robert C. Wigand, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p956-962.

Space, Stewart W. Jonnson, ed., 1996), p356-962. Fluidized Drilling for Lunar Mining Applications, Brad R. Blair, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p813-820. Flywheels for Energy Storage in Space Using Superconducting Bearings, T. L. Wilson, W. K. Chu, K. Ma and

ducting Bearings, T. L. Wilson, W. K. Chu, K. Ma and H. Xia, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p355-359. A Framing System for a Lunar/Martian Inflatable Structure, Jenine E. Abarbanel, Ted A. Bateman, Marvin E. Cris-well and Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p1069-1075. HPS: A Space Fission Power System Suitable for Near Term, Low-Cost Lunar and Planetary Bases, Michael G. Houts, David I. Poston and William A. Ranken, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p973-983.

Inflatable Habitat Option for a Human Lunar Return Mission, Kriss J. Kennedy, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1076-1082.

novative Radiation Shields for Lunar Surface Operation Milton Schwartz and Raymond S. Leonard, (Enginee. ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p349-354.

Controlled Ecosystem, Willy Z. Sadeh, (Engineering, Controlled Ecosystem, Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1083-1089.

Location of a Lunar Base: A Site Selection Strategy, Lawrence A. Taylor and Dong-Hwa S. Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p741-755.

Lunar Base Development Stages, Willy Z. Sadeh and Marvin E. Criswell, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p912-

Lunar Base Scenario for Middle School with RC Rover, Louise Fayette, Ruth M. Fruland and Carolyn Evans McDonald, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p317-322.

Lunar Concrete Made with the Dry-Mix/Steam-Injection Method, T. D. Lin, Liang Tseng and Sam Chou, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p592-599.

Lunar Excavating Research, Walter W. Boles and John F. Connolly, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p699-705.

Lunar Neighborhoods: Architecture for Extreme Environ ments, Milton Schwartz, Jeffrey Schwartz, John Bergquist, Carsten Keller, Preston Kelsey and Todd Stringer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1027-1031.

Lunar Regolith, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p630-638.

Lunar Sample Return: A Near-Term Marketing Opportuni-ty? Brad R. Blair, (Engineering, Construction, and Oper-ations in Space, Stewart W. Johnson, ed., 1996), p194-

Lunar Settlement Foundation: A Private Community, Dallas G. Bienhoff, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p942-

Lunar Textile Method for the Shield Wall on the Lunar Sur-face, Mikiya Okumura, Takao Ueno and Yasuhiro Ohashi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p889-895.

Mechanical and Load-Settlement Characteristics of Two Lunar Soil Simulants, Steven W. Perkins and Craig R. Madson, AS Jan. 96, p1-9.

Mechanical Properties of JSC-1 Lunar Regolith Simulant, J. Ledlie Klosky, Stein Sture, Hon-Yim Ko and Frank Barnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p680-688.

Meteoroid Hazards in the Lunar Environment, Frank J. Rooney and John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p653-662.

Model Studies of Effects on Lunar Soil of Chemical Explosions, Chaun-Ping Lin, Deborah J. Goodings, Leonhard E. Bernold, Richard D. Dick and William L. Fourney, GT Oct. 94, p1684-1703.

The Moon Within Our Grasp: A Strategy for Renewing Human Exploration of the Moon, Andrew Petro, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p133-139.

Observational Cosmology from the Moon, Thomas L. Wilson and Hans-Joachim Blome, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p864–870.

Optical Waveguide Solar Energy System for Lunar Materials Processing, T. Nakamura, J. A. Case and C. L. Senior, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p783-790.

Planning an International Moon Mission: Lessons Learned, Joan Johnson-Freese, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Plant Growth Experiments in Johnson Space Center's Advanced Life Support System Program, John E. Gruener, Douglas W. Ming, Daniel J. Barta and Donald L. Henninger, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1090-1094.

A Preliminary Design of a Pilot Plant for the Production of Lunar Oxygen, W. E. F. L. Moulford, A. R. Martin, P. W. Cains, P. D. Martin and G. Tan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p762-768.

- Process Research in Support of the Human Exploration and Development of Space: Issues in Program Development, Bradley M. Carpenter, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p509-515.
- Protection of and from the Lunar Environment, Anthony M. Wachinski, Tony Rachwal and Colin Waters, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p668-672.
- REGA (Regolith Evolved Gas Analyzer), David S. McKay and Carlton C. Allen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p673-679.
- Scale Effects of Shallow Foundations on Lunar Regolith, Steven W. Perkins and Craig R. Madson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p963-972.
- Solar Power Satellites as an Alternative Energy Source, Wendy Shefelbine, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),
- The Space Exploration Initiative: Its Failure and Lessons for the Future, Matthew Fisk Marshall, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl 16-125.
- Standpipe Solids Transfer Behavior in a Lunar Gravity Fluidized Bed, Les L. Sorge, David J. Brueneman, J. Dale Ortego, Jr., Michael A. Gibson, Christian W. Knudsen, Hiroshi Kanamori and B. Kent Joosten, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p776-782.
- Study on Lunar Cement Production Using Hokkaido Anorthite and Hokkaido Space Development Activities, T. Horiguchi, N. Saeki, T. Yoneda, T. Hoshi and T. D. Lin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p621-629.
- Surface Cleanliness Effects on Lunar Regolith Shear Strength, Howard A. Perko, John D. Nelson and Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p689-698.
- Technology for Mining of Building Materials at First Stages of Moon Development, Oleg V. Nagovicin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p830-839.
- Use of Lunar Type Soil for Concrete Construction, Jay N. Meegoda, Hsin-Yu Shan, Jing-Fu Huang, Jia-Wen Tseng and Su-Hwa Cheng, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),
- Use of Radio Frequency Spectrum in Lunar Environment, Shayla E. Davidson and Robert M. Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p847-853.
- Using Ultra High Solar Flux in the Lunar Environment: Production of Cement and Other Applications, Joseph J. O'Gallagher, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p571-
- Vibratory Excavation and Anchoring Tools for the Lunar Surface, J. Ledlie Klosky, Stein Sture, Hon-Yim Ko and Frank Barnes, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p803-
- olcanic Glass -- Oxygen Ore on the Moon, Carlton C. Allen, John M. Woodell and David S. McKay, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p756-761.
- World and Lunar Solar Power Systems Costs, David R. Criswell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p293-301.

Probabilistic Analysis of Complex Nonlinear Motions Obabilistic Analysis of Complex Combined Periodic and Random Excitations, Huan Lin and Solomon C. S. Yim, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p2-5.

- Random Vibrations of an Isochronous SDOF Bilinear Sys-tem with Secondary Structure, Mikhail Dimentherg and Philip Muller, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p958-961.
- Response Statistics of Moored Floating Structures Subjected to General Nonlinear Random Wave Forces, Shunji Kato and Takashi Okasaki, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p158-161.

- Analysis of Masonry Structures with Elastic/Viscoplastic Models, Teymour Manzouri, P. Benson Shing and Bernard Amadei, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p61-71.
- ASR Behavior of Class C Fly Ash Modified Cement, Anil Misra, H. P. Niu, Bryan R. Becker and Jinshi Liu, (Mate-rials for the New Millennium, Ken P. Chong, ed., 1996), p348-355.
- Behavior of Fresh Mortar in a Vacuum and Microstructure of Mortar Hardened in a Vacuum, L. J. Powers-Couche and T. D. Lin, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p608-613.
- Computer Vision and Fracture Process in Cement-Based Materials, Sokhwan Choi and Surendra P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p967-970.
- Constitutive Relationships of Mortar-Aggregate Interfaces in High Performance Concrete, Oral Büyüköztürk and Brian Hearing, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p452-461.
- Effect of Inclusion Strength and Geometry on Mortar Frac-ture, Mohsen A. Issa, A. B. Shafiq and A. Chudnovsky, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1038-1041.
- Effect of Transition Zone on the Pre-Peak Mechanical Be-havior of Mortar, G. Ramesh, E. D. Sotelino and W. F. Chen, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1238-1245.
- Experimental Observation of Microstructural Behavior of Concrete, Ahmed M. Farahat, Masashi Kawakami and Tada-aki Tanabe, MT May 95, p87-95.
- Fiber Sensors for Damage Detection on Large Structures and for Assessment of Deformation Behavior of Cemen titious Materials, W. R. Habel, D. Hofmann, B. Hillemeier and F. Basedau, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p355-358.
- Fracture Mechanics Modeling with Fracture Surface Image Data, Anne B. Abell and David A. Lange, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p741-
- Improving the Ductility of High Performance Concrete Through Mortar-Aggregate Interfaces, Oral Büyüköztürk and Brian Hearing, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1337-1346.
- Interfacial Shrinkage in Mortars, K. Sujata, Yunping Xi and Hamlin M. Jennings, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1669-1676.
- Micromechanics Based Design of FRCC Components, Christopher K. Y. Leung and Y. Philip Geng, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p419-425.
- Minimum Thermal Protection for Cold Weather Masonry, C. J. Korhonen, E. R. Cortez and R. D. Thomas, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p128-140.
- Observations of Internal Crack Growth in Mortar Using X-Ray Microtomography, Eric N. Landis, Edwin N. Nagy, Denis T. Keane and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1330-1336.
- Response of Lime Mortar Joint Arches to Moving Loads, Barry T. Rosson, Thomas E. Boothby and Ketil Søyland, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p223-232.

Sorption of Water in Mortars and Concrete, Nicos S. Martys and Chiara F. Ferraris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1129-1138.

num, Ken P. Chong, ett., 1990), p1129-1138.
Strength Properties of Polyester Mortar Using PET and Fly Ash Wastes, Karim S. Rebeiz, Julia W. Rosett and Andrew P. Craft, EY Apr. 96, p10-20.
Stress Due to Alkali-Silica Reactions in Mortars, C. F. Ferraris, E. J. Garboczi, F. L. Davis and J. R. Clifton, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1379-1387

Use of Fibers to Improve Cracking Characteristics of Concrete, P. Balaguru, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p183-192.

Motion

Adaptive Self-Tuning Control of Excavators, A. J. Koivo and Allen D. Nease, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p220-226.

Graphic-Based Interactive Path Planning for Large-Scale Bridge Maintenance Cranes, Sungwoo Moon and Leonhard E. Bernold, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p79-85.

Integration of CAD Drawings and Construction Robot Mo-tion Controllers, Jaeho Son and Miroslaw J. Skibniewski, (Robotics for Challenging Environments, Laura A. Dem-setz, ed., 1996), p71-78.

Measuring Coherency of Human-Induced Rhythmic Loads Using Force Plates, A. Ebrahimpour and L. L. Fitts, ST July 96, p829-831.

Motion Planning of a Robotic Arm on a Wheeled Vehicle on a Rugged Terrain, Yong K. Hwang, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p8-14.

On-Line Motion Planning for the Three-Link Revolute Arm in an Unknown Three-Dimensional Environment, Sanjay Tiwari and Brandon Kroupa, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p1-7.

Particle Spinning Motion during Saltating Process, Hong-Yuan Lee and In-Song Hsu, HY Oct. 96, p587-590.

Probabilistic Analysis of Complex Nonlinear Motions Under Combined Periodic and Random Excitations, Huan Lin and Solomon C. S. Yim, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p2-5.

Research on Semiactive Dampers Makes Headway, Monica Maldonado, ET Aug./Sept. 96, p6-7.

Saving Scotland's Busiest Bridge, Rita Robison, CE Jan. 96, p48-51.

Visual Mosaicking of the Ocean Floor and its Relation to Three-Dimensional Occlusions, Sanjay Tiwari, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p29-35.

Motion effects

Space Sickness, Thienga Nguyen, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1303-1306.

Assessing ESOPs, Ed Carberry, ME Sept./Oct. 96, p17-19. Fear Not: The Art of Risk Communication, Christine Barr, ME Jan./Feb. 96, p18-22.

Human Resources Strategies for Successful Consulting En-gineering Firms, Patricia A. Hecker, ME Sept./Oct. 96, p32-36.

Make Employees Feel Special, Harvey Mackay, ME Nov./ Dec. 96, p7.

Rules of Thumb, Nancy Gibson and John Whittaker, ME Nov./Dec. 96, p34-39

Water-Price Effect on Residential and Apartment Low-Flow Fixtures, Donald E. Agthe and R. Bruce Billings, WR Jan./Feb. 96, p20-23.

Motivation research

Feedback Letter, Dameron H. Williams, ME Nov./Dec. 96, p5.

Motor vehicles

The Car as a Wind Shelter for Mobile Home Residents, Thomas W. Schmidlin and Paul S. King, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p137-138.

Probabilistic Cervical Spine Injury Analysis Methods, Ben H. Thacker, Y.-T. (Justin) Wu, Daniel P. Nicolella and Ronald C. Anderson, (*Probabilistic Mechanics & Struc-tural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p270-273.

Mountain systems
Design Modification of Water Supply Intakes in Mountainous Regions, Adnan Alsaffar, Yifan Zheng and Karim
Khalifa, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4046-4051.

Mountains

How High Is That Mountain? Tom Buchanan, CE Oct. 96,

terdisciplinary Research of Mountainous Areas: Past, Present, and Future, Robert D. Jarrett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2445. Modeling the Blue Ridge, CE Aug. 96, p20,22.

Movable bed models

Design of a Laboratory Facility for Longshore Sediment Transport Research, Julie D. Rosati, David G. Hamilton, Jimmy E. Fowler and Jane M. Smith, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p771-782.

Physical and Numerical Study of Wave Induced Currents in Wave Basins of Various Sizes, Peyman Badiei and J. William Kamphuis, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p377-388.

Application of Circulation and Sediment Transport Modeling within San Diego Bay, Thomas L. Johnson and Clau-

dio Fassardi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p596-607. Aspects of River House Cleaning During Floods, Parviz Monadjemi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2192.

Experiments on Resuspension of Fluid Mud Using an Os-cillating-Grid Tank, Panagiotis D. Scarlatos, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p808-811.

Field Measurements of Erosion across a Shallow Water Es-tuarine Mudflat, M. C. Christie, K. R. Dyer, M. J. Fen-nessy and D. A. Huntley, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p759-770.

Floodplain Management in Los Angeles County, Allen Ma, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p4131-4135.

ps 131-4153.
Gravity Current of Fluid Mud on Sloping Bed, Thijs van Kessel and C. Kranenburg, HY Dec. 96, p710-717.
Mitigation Measures for Eroding Muddy Shores, Ashish J. Mehta and Robert Kirby, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3728-3733.

Nailing A Landslide (Available only in the Geo/ Environmental Special Issue), Al Colarusso, CE Nov. 96,

Operational Aspects of Warning, D. D. Nurbaev and N. S. Gavrilova, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1552.

Settling and Erosion Characteristics of Mud/Sand Mixtures, Hilde Torfs, Helen Williamson and Heidi Huysentruyt, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p749-758.

Multi-port diffuser

Buoyant Plumes from Multiport Diffuser Discharge in Deep Coflowing Water, María M. Méndez-Díaz and Gerhard H. Jirka, HY Aug. 96, p428-435.

Architectural Anatomy: Interdisciplinary Multimedia Tools for Building Analysis and Design, Anthony Webster (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p753-759.

An Automated Design and Review Assistant: SEDAR, Michael C. Fu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p118-125.

CELL - A Vertically Integrated Learning Resource, Mi-chael Bertz and Nelson C. Baker, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p348-354.

Collecting, Abstracting, and Compiling Review Comments: the Reviewer's Assistant and the Lessons-Learned Gen-erator, Michael C. Fu and E. William East, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p104-111.

Computer-Based Undergraduate Integrated Civil Engineer-ing Curricula at WPI, Guillermo F. Salazar, Leonard D. ing Curricula at WPI, Guillermo F. Salazar, Leonard D. Albano, Roberto Pietroforte and P. Jayachandran, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p140-146.

De Architectura-Hypermedia On-line Architecture, Builde Architectura—rypermedia On-line Architecture, Building & Construction Bookshelf: The First Step Toward an Hypermedial Approach to Computer Aided Architectural Design, Alfredo M. Ronchi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p746-752.

Design/Construction Integration through Multimedia Animation, Bob McCullouch, Duley Abraham and Phillip Knickrehm, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p760-766.

Development of a Knowledge-Driven Interactive Contracevelopment of a Knowledge-Driven interactive Contactual Agreement Preparation Program using Multimedia, Thomas F. Harrington, Cheryl L. Ruf and Guillermo F. Salazar, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p649-655.

Model, Michael H. Woo, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p767-773. Development of an Interactive Multimedia and Database

Editor's Letter, Bob McCullouch, ME July/Aug. 96, p3-4. Engineering Education Goes Digital with World Wide Web

Database, CE Jan. 96, p16,18.

Global Project Documentation and Communications Using HTML on the World Wide Web, L. Y. Liu, A. L. Stumpf and S. Y. Chin, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p15-20.

Harnessing the Internet for Civil Engineering Course Delivery, Rafael G. Quimpo, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996). Jorge Van p355-361.

ICeD: An Interdisciplinary Conceptual Design Environ-ment, Paul S. Chinowsky, (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Model-Centered World Wide Web Coach, Renate Fruchter and Kurt Reiner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1-7.

A Multi-Media Information System for Construction Delay Management, Osama Abudayyeh, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p593-599.

Multi-Site Cross-Disciplinary A/E/C Project Based Learning, Renate Fruchter, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996). p126-132.

Multimedia Data Management in a Highway Information System. Kelvin C. P. Wang and Xuyang Li, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p607-612.

Multimedia Development Software: Object-Oriented Inter-face-Based Simulation, Hossam El-Bibany, CP Oct. 96,

A Multimedia Expert System for Slurry Wall Construction, Nie-Jia Yau and Chien-Hong Lu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p600-606.

Networked Multimedia Tools for Architectural Engineering, Anthony C. Webster, AE Mar. 96, p11-19

Perfecting Bridge Inspecting, Albert Leung, CE Mar. 96, p59-61.

Quicktime VR and Interactive CD-ROM Applications for Communicating Project Alternatives, Douglas D. Eberhard, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p806-811. A System for the Institution of Effective Repairs to Con-crete Structures, Chimay J. Anumba and John Bowron, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p160-166.

Technology Potential and Limitations in a Vitual Design Studio, Mary Lou Maher, (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

p8-14.

Trial Applications of Multimedia Instructional Aids in a Building Construction Curriculum, David R. Riley and Clark Pace, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p362-368.

User Models in Search and Navigation Systems on the Internet, Per Christiansson, Robert Lagerstedt and Uno Engborg, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p21-27.

Utilizing Information Technologies to Better Educate Engineers of Tomorrow, Abbas Aminmansour, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p965-971.

WWW and Multimedia in Undergraduate Civil Engineering, Randy Dymond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Multiple objective analysis

Designing Instream Flows to Satisfy Fish and Human Water Needs, Hal Cardwell, Henriette I. Jager and Michael J. Sale, WR Sept./Oct. 96, p356-363.

Experiment with Simulation Models in Water-Resources Negotiations, René Reitsma, Ilze Zigurs, Clayton Lewis, Vance Wilson and Anthony Sloane, WR Jan./Feb. 96,

Integration of Water Resources Planning and Environmen-tal Regulation, William Whipple, Jr., WR May/June 96, p189-196.

Methodology for Optimizing Design of Integrated Tank Irrigation System, R. C. Srivastava, WR Nov./Dec. 96,

Multicriterion Design of Long-Term Water Supply in Southern France, Oscar Cordeiro Netto, Eric Parent and Lucien Duckstein, WR Nov./Dec. 96, p403-413.

Multiple purpose projects

An Economy and Risk Analysis of Installed Capacity Ex-pansion at the Three Gorges Power Plant, Liping Wang, pansion at the Three Gorges Power Frant, Lipsing Sup-Nianhua Xue and Changming Ji, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3874–3879.

The Pre-Planning Phase and the Use of Multipurpose Con-struction Equipment in Pipeline Crossings, V. L. Kha-zanet, (Pipeline Crossings 1996, Lawrence F. Catalano,

ed., 1996), p494-501.

Reclaiming Denver's Central South Platte River, Nick Skifalides, Leo Eisel, Brian Kolstad and Ben Urbonas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3527-3532.

Multiple purpose structures

All-Around Arenas (Available only in Structures special issue), Lawrence G. Griffis, P.E., CE Sept. 96, p6A-11A.

Integrating Drainage, Water Quality, Wetlands, and Habitat in a Planned Community Development, Michael R. Galuzzi and John M. Pflaum, UP Sept. 96, p101-108.

Multiple regression models

Water Use "Recession" in San Diego Region, James Zhou, Kenneth A. Steele and Richard C. Pyle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2958-2963.

Multiple regressions

Discharge Coefficient of Rectangular Side Weirs, R. Singh, D. Manivannan and T. Satyanarayana, IR July/Aug. 94, p814-819.

Multiple use

Conjunctive Water Use Transforms a California Desert, Tom Levy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2672-2678. The NASA Reusable Launch Vehicle Technology Program, Delma C. Freeman, Theodore A. Talay and Robert E. Austin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p385-391.

Multistory buildings

Applications of High-Performance Concrete in Columns and Piers, S. K. Ghosh, (Worldwide Advances in Struc-tural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p385-395.

Damage Estimation Using Substructural Identification in Time Domain, Chung-Bang Yun and Hyeong-Jin Lee, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Effects of Non-Structural Elements on the Acceleration Response of Tall Multi-Story Buildings Under Wind Excitation, Cindy X. Qiu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p974-977.

Inelastic Behavior of Asymmetric Multistory Buildings, Juan C. De la Llera and Anil K. Chopra, ST June 96,

p597-606.

Inelastic Behavior of Steel Frames with Added Viscoelastic Dampers, K. C. Chang, S. J. Chen and M. L. Lai, ST Oct. 96, p1178-1186.

Space Planning Tools for Multi-Story Construction, David R. Riley and Iris D. Tommelein, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p718-724.

System Risk for Multi-Storey Reinforced Concrete Building Construction, Deepthi Epnarachchi, Mark G. Stewart and David V. Rosowsky, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-

cea D. Grigoriu, ed., 1996), p230-233.

Ten Year Performance of a High Performance Concrete
Used to Build Two Experimental Columns, Eric Dallaire,
Michel Lessard and Pierre-Claude Aïtcin, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p375-384.

Municipal engineering

Controlling the Impacts of Development on Storm Water Quality through Proper Site Planning and Design, Jill C. Bicknell and Lisa Horowitz McCann, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3097-3102.

GIS-T Design for its Applications, Edmond Chin-Ping Chang, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p174-178.

Waste Not in Wisconsin, David A. Rudig, CE June 96, p68-70.

Municipal government

City Rejects Bid, CE Jan. 96, p26.

Life-Cycle Costing in Municipal Construction Projects, David A. Arditi and Hany M. Messiha, IS Mar. 96, p5-

Municipal wastes

An Appropriate Technology to Treat Domestic Sewage, S. A. Mohsin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2748-2753.

Building a Landfill on Mud(Available only in Geo/ Environmental Special Issue), Michael J. Byle and Anne

M. Germain, CE July 96, p12A-16A.

Comprehensive Fate Model for Metals in Municipal Waste-water Treatment, Wayne J. Parker, Hugh D. Monteith, John P. Bell, Henryk Melcer and P. Mac Berthouex, EE Sept/Oct. 94, p1266-1283.

Constructed Wetlands for Metals Removal, Charles R. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1184-1189.

Curbside Collection of Yard Waste: I. Estimating Route Time, Jess W. Everett and Shiv Shahi, EE Feb. 96, p107-114.

Curbside Collection of Yard Waste: II. Simulation and Ap plication, Jess W. Everett and Shiv Shahi, EE Feb. 96. p115-121.

Environmental Linkages between Urban Form and Munici-pal Solid Waste Management Infrastructure, Tony Di Nino and Brian W. Baetz, UP Sept. 96, p83-100.

Evaluation of Lead-Bearing Phases in Municipal Waste Combustor Fly Ash, J. F. Sandell, G. R. Dewey, L. L. Sutter and J. A. Willemin, EE Jan. 96, p34-40.

GIGO: Spreadsheet-Based Simulation for MSW Systems, Robert P. Anex, Renée A. Lawver, Jay R. Lund and George Tchobanoglous, EE Apr. 96, p259-262.

Ground Water Variability at Sanitary Landfills-Causes and Solutions, John Oneacre and Debbie Figueras, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p965-987.

IAC Network for Composition of Waste-Incineration Facil-ity, Jehng-Jung Kao and Yu-Ying Liao, CP Apr. 96, p168-171.

Landfill Siting Using Geographic Information Systems: A Demonstration, Muhammad Z. Siddiqui, Jess W. Everett and Baxter E. Vieux, EE June 96, p515-523.

Municipal Solid Waste Characterization in a Cold Remote Region, Abigail A. Ogbe and Christina Behr-Andres, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p780-791.

Network Expert Geographic Information System for Landfill Siting, Jehng-Jung Kao, Wei-Yea Chen, Hung-Yue Lin and Show-Jyi Guo, CP Oct. 96, p307-317.

Optimizing Municipal Wastewater Treatment in Cold Cli-mates: Scale, Process and Benefits, Isobel W. Heathcote and William J. Jewell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1419-1424.

Pyrolysis Kinetics of Uncoated Printing and Writing Paper of MSW, Ching-Yuan Chang, Chao-Hsiung Wu, Jiann-Yuan Hwang, Jyh-Ping Lin, Wan-Fa Yang, Shin-Min Shih, Leo-Wang Chen and Feng-Wen Chang, EE Apr. 96, p299-305.

Waste Not in Wisconsin, David A. Rudig, CE June 96, p68-70.

Municipal water

Development and Implementation of a Capital Improvement Program for a Small Water Utility, Benito Avalos, Jorge Garcia, Louis Grijalva and Antonia M. Romero, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3236-3240.

Identification of Regional (Third Party) Impacts Associated with the Truckee River Operating Agreement, Charles Borda, Tom MacDiarmid, Rangessan Narayanan, Thomas Harris, Karl MacArthur and Shawn Stoddard, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4036-4041.

Intensity, Duration, and Frequency of Residential Water Demands, Steven G. Buchberger and Greg J. Wells, WR

Jan./Feb. 96, p11-19.

Interruptible Option Contracts, John F. Scott, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3569-3573.

Simulation of Unsaturated Zone Virus Transport Adjacent to Municipal Wells, D. D. Adelman and M. A. Tabidian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Solving Collection Problems to Increase Revenue: The Houston Experience, Karen Philippi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4282-4287.

Nailed Tubular Connections under Axial Loading, Jeffrey A. Packer, ST Aug. 96, p867-872.

Roof Sheathing Uplift Resistance for Hurricanes, Edward Sutt, Kallem Muralidhar and Timothy Reinhold, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p974-981.

System Effects and Uplift Capacity of Roof Sheathing Fas-teners, S. Murphy, S. Schiff, D. Rosowsky and S. Pye, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p765-770.

Acquisition of Subsurface Comet Samples, Richard Welch, Donald Sevilla, Don Noon and Albert Delgadillo, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p129-135.

Architectural Considerations in Design of Lunar-Based Astronomical Observatories, Stewart W. Johnson, Koon Meng Chua, Milton Schwartz and Jack O. Burns, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p871-880.

Building on the Moon, CE Oct. 96, p11.

Control of Legged Robots, S. T. Venkataraman, (Robotics for Challenging Environments, Laura A. Demsetz, ed.,

1996), p100-106.

Control Systems Governing Gravity-Dependent Plant Growth, C. Duran, D. Flores, J. D. Smith and G. W. Morgenthaler, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1095-

Dynamic Effects from the Space Shuttle Liftoff, Fady F. Barsoum and William F. Carroll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1190-1196.

The Economics of Space Solar Power, Carissa Bryce Chris-tensen, Douglas A. Comstock and John C. Mankins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p260-268.

Flight Crew Equipment Development and Integration with the International Partners, Rod Jones, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p467-472.

High Frequency Access to Low Gravity Experimentation in Organic Crystal Growth from Solutions, Michael G. Sportiello, Paul Todd, Ching-Yuan Lee, Craig E. Kun-drot, Steve C. Schultz, Louis S. Stodieck and John M. Cassanto, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p378-384.

Inflatable Habitat Option for a Human Lunar Return Mission, Kriss J. Kennedy, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

p1076-1082.

International Space Station Traffic Model Development, Clare T. Kingsford and Neil W. Lemmons, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p443-449.

Johnson Space Center Crew Return Vehicle Activities, Charles H. Campbell, B. Kent Joosten and Robert E. Meyerson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p392-398.

Mechanical Properties of JSC-1 Lunar Regolith Simulant, J. Ledlie Klosky, Stein Sture, Hon-Yim Ko and Frank Barnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p680-688.

The NASA Reusable Launch Vehicle Technology Program, Delma C. Freeman, Theodore A. Talay and Robert E. Austin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p385-391.

Overview of International Space Station Extra Vehicular Robotics, Amin Rezapour, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p490-496.

Overview of the International Space Station Extra Vehicular Robotics Verification, Corrie Hunt, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p502-508.

Johnson, ed., 1990, 1902-300.
Plant Growth Experiments in Johnson Space Center's Advanced Life Support System Program, John E. Gruener, Douglas W. Ming, Daniel J. Barta and Donald L. Henninger, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1090-1094.

Solar Power Satellites, Rebecca Kluck, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1281-1284.

Spheres of Influence: Federalism, Politics, and Engineering Design, Todd Shallat, (Civil Engineering History: Engi-neers Make History, Jerry R. Rogers, ed., Donald Ken-non, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p136-143.
Whose Fault Was It? Alice C. Dillard, (Engineering, Con-

struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1274-1277.

World-Wide Command and Control: Operating the International Space Station, Michael J. See, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p458-466.

Fifteen Years of Commercial Space in Retrospect", M. Brian Barnett, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p162-169.

National Oceanic and Atmospheric Administration

Advanced Hydrologic Forecasting Products for Flood and Drought Mitigation, John J. Ingram, Edwin Welles and

Drought Mitigation, John J. Ingram, Edwin Welles and Dean T. Braatz, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p227-228. Southern Boundary Experimental Forecasts with the NOAA East Coast Ocean Model, Richard A. Schmalz, Jr., (*Estuarine and Coastal Modeling*, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p442-453.

National Research Council

Initial EPRI Reaction to the NAS Yucca Mountain Standards Recommendations, John H. Kessler, (High Level Radioactive Waste Management, Technical Program

Committee, 1996), p282-284.

NAS Recommendations and Current Legislative Proposals: Implications for U.S. NRC's Regulatory Program, J. P. Kotra, M. V. Federline, T. J. McCartin, N. A. Eisenberg and J. H. Austin, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p269-

National Research Council Report:"Technical Bases for Yucca Mountain Standards"—A State of Nevada View, Carl A. Johnson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p285-

National Science Foundation

1997 Budget, Casey Dinges, CE May 96, p98 CERF Aids NSF in Revising Program That Reflects Needs of Construction Industry, NE July 96, p15. New Faces in Familiar Places, NE Nov. 96, p15.

Talk Needed for Research Application, Neil S. Grigg, CE

Two Federal Legislators Named ASCE Honorary Fellows during Society's National Policy Week, NE Apr. 96, p2.

National Weather Service

National Weather Service
Distributed Parameter Hydrologic Modeling and NEXRAD for River Forecasting: Scale Issues Facing the National Weather Service, Michael Smith, Dong Jun Seo,
Bryce Finnerty and Victor Korea, (North American
Water and Environment Congress & Destructive Water,
Chenchayya Bathala, ed., 1996), p140-145.
The Great USA flood of 1993, Lee W. Larson, (North
American Water and Environment Congress & Destructive Water Congress & Destructive Water and Congress & Destructive Water and Environment Congress & Destructive Water Congress & Destructive Water and Environment Congress & Destructive Water Congress & Destructive Water and Environment Congress & Destructive Water Congress & Destructive Water Congress & Destructive Water Congress & Most Congress & Destructive Water Con

American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996), p2. An LPI Numerical Implicit Solution for Unsteady Mixed-Flow Simulation, D. L. Fread, Ming Jin and Janice M. Lewis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3222-327.

Probabilistic Flood Forecast-Warning System, Roman Krzysztofowicz, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p231-232

Native Americans

Climate Variability Impact on the Water Resources of Ancient Andean Civilizations, Kenneth R. Wright, John A. Dracup and Jonathan M. Kelly, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1840-1845.

Environmental Justice: An Issue for States, Linda K. Mu-rakami, Sia Davis and Deb Starkey, (High Level Radio-active Waste Management, Technical Program Commit-tee, 1996), p480-482.

Two Social Concerns of an ASCE Subcommittee, Mario Salvadori, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p30-34.

Natural frequency
Analysis of Effect of Dead Loads on Natural Frequencies
of Beams Using Finite-Element Techniques, Shi-Jun
Zhou and Xi Zhu, ST May 96, p512-516.

Analysis of Free Vibrations of Tall Buildings, Qiusheng Li, Hong Cao and Guiqing Li, EM Sept. 94, p1861-1876. Dynamic Analysis of Prestressed Concrete Beams with

Openings, Hany Abdalla and John B. Kennedy, ST July 95, p1058-1068.

Dynamic Behaviour of Masonry Church Bell Towers, Alan R. Selby and John M. Wilson, (Worldwide Advances in S. Schy and John M. Whosony, A. E. Schultz, ed. and S. L. McCabe, ed., 1996, p.188-199. Measuring Absorbed Cyclic Energy in Reinforced Concrete Beams, Ken Gaver and Sophia Hassiotis, ST Sept. 96,

p1110-1113.

Nonlinear Dynamics of Unidirectional, Fiber-Reinforced Tori, Raouf A. Raouf and Anthony N. Palazotto, EM Mar. 96, p271-276.

Performance of Multiple Mass Dampers Under Random Loading, Ahsan Kareem and Samuel Kline, ST Feb. 95, p348-361. Practical Formulas for Estimation of Cable Tension by Vi-bration Method, Hiroshi Zui, Tohru Shinke and Yoshio

oration Methods, Hrosin 2at, Tohru Shime and Yoshio Namita, ST June 96, p651-656. Simplified Analysis of Rectangular Plates with Stepped Thickness, Hideo Takabatake, Takayuki Imaizumi and Kunihiro Okatomi, ST Jan. 95, p28-38.

Vibration Analysis of Horizontally Curved Beams with Warping Using DQM, Kijun Kang, Charles W. Bert and Alfred G. Striz, ST June 96, p657-662.

Natural gas Aerial Pipeline Crossings - Inspection and Rehabilitation Thomas Spoth, (Pipeline Crossings 1996, Lawrence F.

Thomas Spotin, (**Ppeline Crossings 1996, Lawrence F. Catalano, ed., 1996), 298-305.
Application of a Reliability-Based Fatigue Life Model to a Gas Turbine Engine Structure, Robert G. Tryon, Thomas A. Cruse and Sankaran Mahadevan, (**Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p636-639. California Unveils Fuel Cell Plant, CE Nov. 96, p20-21.

Crossing the Cape Cod Canal; A Natural Gas Pipeline Interconnection, Charles A. Pickering, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p48-55.

Development of Caltrans Guidelines for Natural Gas Pipelines on Highway Bridges, Anthony Gugino, Chih-Hung Lee, Richard Gailing, Philip Constantine and David Resistetter, (*Pipeline Crossings 1996*, Lawrence F. Ca-talano, ed., 1996), p245-253.

Environmental Permitting for the Canal Electric Project, Gene F. Crouch, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p237-244.

Mapping History, Rebecca Balcom, CE Oct. 96, p54-56. Transportation of Alaska North Slope Natural Gas to Mar-ket, Donald A. Lannom, David O. Ogbe, Akanni S. Lawal and F. Lawrence Bennett, (Cold Regions Engineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p226-237.

Big Tunnel Talk, CE Jan. 96, p8.

Critical Evaluation of Risk Assessment: A Look from the Inside Out, Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p419-421.

Environmental Goal Needs Definition, David M. Herring, P.E., CE Dec. 96, p27-28.

Environmental Improvement in Southern Africa, Daniel P. Miller, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1069-1074.

Infrastructure Planning and Sustainable Development, David W. Wright, UP Dec. 96, p111-117. Nominations Due for Resources Awards for 1996, CE May

96, p72.

Readers Respond to Thomey Letter, Norm Hoffman, P.E., James S. Pol, Jim Coppock, P.E., J. Frank Brennan, P.E., John A. Mundell, P.E. and F. Weston Starratt, P.E., CE Aug. 96, p28-29.

Sustainability: Another New Paradigm, Larry Quinn, P.E., CE Oct. 96, p6.

Sustainable Development Amendm Code of Ethics, NE June 96, p3. nent Amendments Proposed for ASCE

Wisconsin Engineer Designs Irrigation System in the Phil-ippines, NE June 96, p9.

Navier-Stokes equations

An Implementation of Finite Element Method on Distribut-ed Workstations, Eduardo De Santiago and Kincho H. Law, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p188-199.

Interactive RANS/Laplace Method for Nonlinear Free Sur-face Flows, Hamn-Ching Chen and Sing-Kwan Lee, EM

Feb. 96, p153-162.

Numerical Modeling of Wind-Structure Interactions, Da-hai Yu and Ahsan Kareem, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1005-1012.

Numerical Simulation of Hydraulic Jump, Anand Ramar and M. Hanif Chaudhry, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4052-4057.

A Stabilized Formulation of the Navier-Stokes Equations, Arif Masud, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1135-1138.

Navigation

A Constructive Act, CE Dec. 96, p13.

Distributions of Return Flow in Navigable Waterways, Ta Wei Soong, Renjie Xia and Nani Bhownik, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2855-2860.

Environmental Restoration Measures on the Tennessee-Tombigbee Waterway (TENN-TOM), Nathaniel D. McClure, IV and Norman L. Connell, Sr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3326-3331.

Evaluation of Reliability of Pile-Supported Structures, William M. Isenhower and Reed L. Mosher, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p666-684.

Hydrodynamic Changes Associated with Navigation Traffic on the Upper Mississippi River System, Nani G. Bhowmik, Ta-Wei David Soong and Renjie Xia, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2849-2854.

Impacts of Reservoir Sedimentation on Decommissioning of Dams, George W. Annandale, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2114-2119.

The Influence of Peak-Regulation of the Three Gorges Power Plant on Navigation, Xinhua Yu, Xiang Fu and Changming Ji, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3863-3868.

Loading Cycles for Fatigue Reliability Assessment of Miter Gates at Navigation Locks on the Upper Mississippi River, Bilal M. Ayyub, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p854-857.

A Marine Geophysical Investigation to Determine the Cause for Failure of the Yaquina Bay Jetty, Newport, Orgon, Richard E. Sylwester, Ion L. Dasler and Terry C. Sullivan, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p42-55.

Motion Planning of a Robotic Arm on a Wheeled Vehicle on a Rugged Terrain, Yong K. Hwang, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p8-14.

Navigation Lock Improvements, Mary K. Spence, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3129-3134.

Probabilistic Assessment of Miter Gates, Nathan M. Kathir, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

p866-869

p800-809.

Reliability of the Navigation Channel of the Upper Mississippi River, Vijay Tulsiani, James H. Lambert, Yacov Y. Haimes and S. K. Nanda, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p142-153.

Risk-Based Spatial Decision Support System for Mainte-nance Dredging of Navigation Channels, Samuel J. Ra-tick and Holly Morehouse Garriga, IS Mar. 96, p15-22.

Studies in Guidance, Navigation and Control for an Articulated-Body Mars Rover Testbed, Songjae Lee and Gordon K. Lee, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p157-163.

Turbulence Model for Depth-Averaged Flows in Naviga-tion Installations, Hector R. Bravo and Forrest M. Holly,

Jr., HY Dec. 96, p718-727.

Upper Mississippi River System Environmental Manage-ment Program (EMP), Doyle W. McCully, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3320-3325.

Using Fuzzy Logic in Aircraft Navigation Systems, A. Lopes Pereira, A. K. Achaibou and F. Mora-Camino, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p99-103.

Water Quality Impacts of Dredging and Disposal Opera-tions in Boston Harbor, J. Craig Swanson and Daniel Mendelsohn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2642-2647.

Navigation dams

A 21st Century Dam, CE Nov. 96, p22-23.

Entrainment of Eggs and Larval Fish Into Propeller Jets, Stephen T. Maynord, (North American Water and Envi-Stephen T. Maynord, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3147-3152.
Flow-Induced Dynamic Response of Olmsted Physical Models, Mostafiz R. Chowdhury and Robert L. Hall, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), ep 26.943.

p840-843.

McAlpine Intake Model Study for Innovative Lock Design, John E. Hite, Jr. and Larry Dalton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3135-3140.

Navigation Lock Improvements, Mary K. Spence, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3129-3134.

Composite Applications in the Navy Waterfront Infrastruc-ture, L. J. Malvar, G. E. Warren and C. M. Inaba, (Mate-rials for the New Millennium, Ken P. Chong, ed., 1996),

p1179-1188.

Development of a Large-Scale Tidal Circulation Model for the Mediterranean, Adriatic and Aegean Seas, D.J. Mark and N. W. Scheffner, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p168-179.

Environmentally Acceptable Piling for Use in Navy Pier Fender Systems, David Hoy, George Warren and Duane Davis, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1189-1198.

Prefabricated Epoxy-Coated Rebar for the U.S. Navy, Douglas F. Burke, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1199-1208.

Seismic Design Criteria for Navy Wharves, J. M. Ferritto and C. S. Putcha, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p353-

Nearshore circulation

The 'Dynamics of Beaches' Project, P. Prinos, A. S. Arcilla, N. Christiansen, J. van de Graaf, M. Hogedal, A. Lewis, B. O'Connor, F. Rivero and J. de Rouck, (Coastal Dynamics' 95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582.

2D Velocity Distributions in Nearshore Currents, Marek Szmytkiewicz, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p366-376.

Anticyclonic Upper Layer Residual Circulation and Estua rine Circulation in Osaka Bay, Keiji Nakatsuji and Tateki Fujiwara, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p128-142.

Application of the Q-3D SHORECIRC Model to Surfbeat, A. R. Van Dongeren, I. A. Svendsen and F. E. Sancho, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p233-244.

Beach and Nearshore Profile Evolution at Different Temporal Scales: The Case of Duck, North Carolina, U.S.A. Michele Capobianco, Rina Basana and Riccardo Pesaresi, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p629-638.

Combined Refraction-Diffraction - Wave-Current Interaction Over a Complex Nearshore Bathymetry, B. A. O'Connor, P. B. Sayers and N. J. MacDonald, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p173-184.

Comparison of Computed Three-Dimensional Wave-Driven Currents with Measurements, Philippe Pechon and Arnaud Desitter, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p513-520.

Development of a Large-Scale Tidal Circulation Model for the Mediterranean, Adriatic and Aegean Seas, D.J. Mark and N. W. Scheffner, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Dynamic Processes on a Ridge and Runnel Beach, David Simmonds, George Voulgaris and David Huntley, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p868-878.

Finite Amplitude Shear Wave Instabilities, H. Tuba Özkan and James T. Kirby, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p465-476.

Interaction Between Nearshore Natural Processes on Macro-Tidal Beaches. Case Study Along the Capricorn Coast, Australia, Jerzy Piorewicz and Paul Boswood, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p489-500.

Longshore Nonuniformities of Nearshore Currents, F. E. Sancho, I. A. Svendsen, A. R. Van Dongeren and U. Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed., 1996), p425-436.

Monitoring Results of a Nearshore Disposal Berm, Emre N. Otay, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p547-558.

Nearshore Hydrodynamic and Water Quality Modeling for Water Intake Evaluation and Design, Kwang K. Lee, Bing Shen and Chung Shyan Wu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2456-2461.

On the Origin of Infragravity Waves in the Surf Zone of a Dissipative Multiple Bar System, B. G. Ruessink, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed., 1996), p93-104.

Physical and Numerical Study of Wave Induced Currents in Wave Basins of Various Sizes, Peyman Badiei and J. William Kamphuis, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p377-388.

A Quantitative Skill Assessment of Numerical Hydrody-namic Models of Coastal Currents, Timothy R. Keen and Scott M. Glenn, (Estuarine and Coastal Modeling, Mal-colm L. Spaulding and Ralph T. Cheng, 1996), p26-40.

A Quasi-3D Model of Longshore Currents, A. F. Garcez Faria, E. Thornton and T. Stanton, (Coastal Dynamics 95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p389-400.

Simulations of the Maine Coastal Current, Monica J. Holboke and Daniel R. Lynch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p156-167.

Southern Boundary Experimental Forecasts with the NOAA East Coast Ocean Model, Richard A. Schmalz, Jr., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p442-453.

Spatial and Temporal Fluctuations of Nearshore Currents Induced by Directional Random Waves, Yoshimi Goda and Tetsuva Mizusawa, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p269-

Spingat, Frank, Hans-H. Dette and Karsten Peters, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p477-488.

Zeidler, ed., 1996), p477-488. Surf-Zone Modeling, Ib A. Svendsen and Uday Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p13-32. Three-Dimensional Modeling of Wind-Driven Upwelling of Anoxic Bottom Water 'A-oshio' in Tokyo Bay, Keiji Nakatsuji, Jong Sung Yoon and Koji Muraoka, (Estua-rine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p618-631.

Ralph I. Cheng, 1990), pol8-0-31.
Vertical Profiles of Longshore Currents and Bed Shear Stress, E. B. Thornton, C. M. C. V. Soares and T. P. Stanton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p449-459.
Vorticity and Eddies in the Surf Zone, D. Howell Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p460-464.
Wave Induced Nearshore Circulation in the Ebro Delta, A. Sanchez-Arcilla, F. Collado, M. G. Coussirat and A. Ro-

ave induced Nearshore Circulation in the Eoro Della, A. Sánchez-Arcilla, F. Collado, M. G. Coussirat and A. Rodriguez, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p437-448.

Wave Motion in Vegetated and Non-Vegetated Coastal Zones, Stanisllaw R. Massel, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1-12.

Wave Stress and Longshore Current on Barred Profiles, T. C. Lippmann, E. B. Thornton and A. J. H. M. Reniers, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p401-412.

Nebraska

Developing a Rating Table for the Central Diversion Dam Radial Gates, Michael A. Drain, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3598-3603.

Nonurbanized Public Transportation Needs Assessment, M. Moussavi, M. Al-Turk and J. Albeck, TE Nov./Dec. 96,

Simulation of Unsaturated Zone Virus Transport Adjacent to Municipal Wells, D. D. Adelman and M. A. Tabidian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1742-1747.

Negative skin friction

Field Investigation of Potential Contamination by Bitu-men-Coated Piles, Albert T. Yeung, Rajan Viswanathan and Jean-Louis Briaud, GT Sept. 96, p736-744.

Negative Skin Friction on Piles in Layered Soil Deposits, K. S. Wong and C. I. Teh, GT June 95, p457-465.

Cannot Indemnify for Own Negligence, CE Oct. 96, p30. Contract Waived Rights to Recovery of Loss, CE Aug. 96,

Contractor Responsible for Own Negligence, CE Jan. 96, p26.

Design-Build Limitations of Liability Are Successful, Mi-chael C. Loulakis and William L. Cregger, CE Jan. 96,

Expert Testimony Can Prove Negligence, CE June 96, p24. Indemnity Not Valid, CE Jan. 96, p26.
No Subcontractor Indemnity for Contractor's Negligence,

CE Sept. 96, p28.

Statute of Limitations on Negligence, CE Nov. 96, p28. Subcontractor Beware, CE July 96, p27.

Negotiations

The Case for Water Markets as the Best Means for Effective Water Allocation, Ronald G. Cummings and R. Peter Terrebonne, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2921-2926.

CSFs in Competitive Tendering and Negotiation Model for BOT Projects, Robert L. K. Tiong, CO Sept. 96, p205-

Design Rationale for Computer-Supported Conflict Mitigation, Feniosky Peña-Mora, Duvvuru Sriram and Robert Logcher, CP Jan. 95, p57-72.

Experiment with Simulation Models in Water-Resources Negotiations, René Reitsma, Ilze Zigurs, Clayton Lewis, Vance Wilson and Anthony Sloane, WR Jan./Feb. 96, p64-70.

Theoretical Foundations for Computer-Supported Negotia-tion, Feniosky Peña-Mora and James Kennedy, (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p186-192.

Bridge Over the River Karnali, George Gesner and Selva Selvaratnam, CE Apr. 96, p48-51.

Servasaniani, Glacial Lakes Before They Burst, Richard Kattelmann and Teiji Watanabe, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1978.

Reducing Glacial-Lake Outburst Hazards in the Khumbu Himal, Richard Kattelmann and Teiji Watanabe, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p258-259.

Netherlands

The 1995 Floods of Rhine and Meuse - How Predictable are Water Levels in the Netherlands, Bart Parmet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p249-250.

Flood Management Strategies for the Rhine and Mass Riv-ers in the Netherlands, Jos Dijkman and Rob Klomp, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3021-3022

History and Heritage in Coastal Engineering in The Netherlands, Eco W. Bijker, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p390-412.

How to Manage Floodwaves in the Dutch Meuse: Future Measures to Reduce the Inconvenience of Inundations, J. H. Gerretsen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3271-3272.

Influence of Flooding Events on Suspended Matter Quality of the Meuse River (The Netherlands), J. J. G. Zwolsman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996). p3273-3274.

Protection Against Flooding: A New Delta Plan in the Netherlands, Frank P. Hallie and Richard E. Jorissen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3019-3020.

Nets

Saved by the Net, CE Sept. 96, p22.

Getting to Know ArcView by Environmental Systems Re-search Institute, Wayne Sarasua, TE Sept. Oct. 96, p409.

Chance-Constrained Optimal Monitoring Network Design for Pollutants in Ground Water, Bithin Datta and Sanjay D. Dhiman, WR May/June 96, p180-188.

Comparison of Algorithms for Nonlinear Integer Optimiza-tion: Application to Monitoring Network Design, Yuh-Ming Lee and J. Hugh Ellis, EE June 96, p524-531.

Design of Branched-Water-Supply Network on Uneven Terrain, Brian Young, EE July/Aug. 94, p974-980.

Network reliability

Communication Breakdown, Felix S. Wong and Jeremy Isenberg, CE Jan. 96, p52-54.

Reliability Tester for Water-Distribution Networks, D. Khomsi, G. A. Walters, A. R. D. Thorley and D. Ouazar, CP Jan. 96, p10-19.

Water Distribution Network Reliability: Connectivity Analysis, Shu-li Yang, Nien-Sheng Hsu, Peter W. F. Louie and William W-G. Yeh, IS June 96, p54-64.

Water Distribution Network Reliability: Stochastic Simulation, Shu-li Yang, Nien-Sheng Hsu, Peter W. F. Louie and William W-G. Yeh, IS June 96, p65-72.

Comparison of Methods for Predicting Deficient-Network Performance, Raiesh Gupta and Pramod R. Bhave, WR

May/June 96, p214-217.

Equilibrium Network Traffic Signal Setting under Condi-tions of Queuing and Congestion, Hai Yang, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p578-582.

Flow Propagation Description in Dynamic Network Load-ing Models, Vittorio Astarita, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

GPS High Accuracy Geodetic Networks in Mexico, Tomás Soler, Gabriel Álvarez-García, Antonio Hernández-Navarro and Richard H. Foote, SU May 96, p80-94.

Networked Multimedia Tools for Architectural Engineer-ing, Anthony C. Webster, AE Mar. 96, p11-19.

ing, Anthony C. Websiel, A. Man. 20, p. 17-17.

Representation of Compacted Clay Minifabric Using Random Networks, Lakshmi N. Reddi and S. Thangavadivelu, GT Nov. 96, p906-913.

Stochastic Parallel-Brittle Networks for Modeling Materials, D. A. Gasparini, P. Bonacuse, L. Powers and A. Romeo, EM Feb. 96, p130-137.

WLS Method for Parameter Estimation in Water Distribu-tion Networks, P. V. Niranjan Reddy, K. Sridharan and P. V. Rao, WR May/June 96, p157-164.

Actuator Dynamics and Delay Compensation Using Neuro-controllers, Khashayar Nikzad, Jamshid Ghaboussi and Stanley L. Paul, EM Oct. 96, p966-975.

An Al Agent Construct for Space and Planetary Science Applications, Lee Plansky and Nancy Linarez-Royce, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p341-348.

The Applicability of Neural Network Systems for Structur-al Damage Diagnosis, Chatmongkol Peetathawatchai and Jerome J. Connor, Jr., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p68-71.

Application of Artificial Neural Network to Guideway Demand Modeling, Young-Kyun Lee and Federico Frigerio, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p214-219.

Application of Artificial Neural Networks to the Sacramento-San Joaquin Delta, Nicky Sandhu and Ralph Finch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p490-504.

anu raujii 1. Cheng. 1990, ps/90-304. Application of Neural Networks for the Performance Eval-uation of Bridges, Augusto V. Molina and Karen C. Chou. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p298-301.

Applications of Case-Based Reasoning in Construction Engineering and Management, Jyh-Bin Yang and Nie-Jia Yau, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p663-669.

eti. anu Faul Chinowsky, etc., 1990), post-occ. Artificial Neural Networks and Durability of Sphinx Lime-stone, Jayanta K. Bandyopadhyay, Srinivas S. Yerrapra-gada and K. Lal Gauri, MT Aug. 95, p174-177.

gada and K. Lai Gauri, M.I. Aug. 23, p.176-177.
Automated Optimal Structural Design Synthesis using Machine Generated Rule Base and Artificial Neural Networks, J. M. Deshpande, M. J. Skibniewski and K. Lueprasert, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p867-873. Vaniegas, ed. and Faul Chimowsky, ed., 1990, pol7-673.
Average and Peak Traffic Volumes: Neural Nets, Regression, Factor Approaches, Pawan Lingras and Mario Adamo, CP Oct. 96, p300-306.

Characterization of Granular Material by Low Strain Dy-namic Excitation and ANN, Salome Romero and Sibel Pamukcu, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1134-1148.

Comparison of Multi-Layer Perceptron and Radial Basis Function Network as Tools for Flood Forecasting, A. W. Jayawardena and D. A. K. Fernando, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p457-458. Conceptual Design Optimization of Structural Systems, Donald E. Grierson, (Analysis and Computation, Frank-lin Y. Cheng, ed., 1996), p99-110.

Deriving a General Operating Policy for Reservoirs Using Neural Network, H. Raman and V. Chandramouli, WR

Sept./Oct. 96, p342-347. A Domain Specific Equation Solver for Bridge Analysis,

Gary Consolazio, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p321-327.

Emulation of DWRDSM using Artificial Neural Networks and Estimation of Sacramento River Flow from Salinity, Nicky Sandhu and Ralph Finch, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4335-4340. Estimating Trenching Productivity Using Neural Networks, Simaan AbouRizk, Brenda McCabe and Wissam Saadi,

(Computing in Civil Engineering, 19rge Vanegas, ed. and Paul Chinowsky, ed., 1996), p220-226. Forecasting House Rental Levels: Analytical Rent Model versus Neural Network, Heng Li and Vera Li, UP Dec. 96, p118-127.

Geophysical Log Interpretation Using Neural Network, S. Pezeshk, C. V. Camp and S. Karprapu, CP Apr. 96, p136-142

IAC Network for Composition of Waste-Incineration Facility, Jehng-Jung Kao and Yu-Ying Liao, CP Apr. 96,

Improved Path Selection in Congested Networks by AI Techniques, Amaranto Lopes Pereira and Félix Mora-Techniques, Amaranto Lopes Pereira and Pelix Mora-Camino, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p639-643. Intelligent Bridge Monitoring System, Pei-Ling Liu, Yun-Fu Luo and Shyh-Jang Sun, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p608-611.

earning and Shaping in Emergent Hierarchical Control Systems, Bruce L. Digney, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p114-121. Mobility Forecast in an Urban Area through the Use of Neural Networks, Maria Nadia Postorino and Giuseppe

Neural Networks, Maria Nadia Postorino and Giuseppe M. L. Sarnè, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p213-217.

Modeling Stress-Strain Response of Clay Using Neural Nets, Yacoub M. Najjar, Imad A. Basheer and Hossam A. Ali, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p697-700.

Modeling the Response of ER. Damper, Pleasomentology.

1996), p697-700.
Modeling the Response of ER Damper: Phenomenology and Emulation, Scott A. Burton, Nicos Makris, I. Konstantopoulos and P. J. Antsaklis, EM Sept. 96, p897-90.
Neural Net for Determining DEM-Based Model Drainage Pattern, Jehng-Jung Kao, IR Mar/Apr. 96, p112-121.
A Neural NetWork Approach for Site Characterization and Uncertainty Prediction, Yacoub M. Najjar and Imad A. Basheer, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p134-148.

Neural Network Approach to Detection of Changes i Structural Parameters, S. F. Masri, M. Nakamura, A. C Chassiakos and T. K. Caughey, EM Apr. 96, p350-360. Neural Network Constitutive Models Determined fror

Structural Tests, Jamshid Ghaboussi, David A. Pecknold, Ming-Fu Zhang and Rami M. HajAli, (Engineering Me chanics, Y. K. Lin and T. C. Su, 1996), p701-704.

Neural Network Control for Accurate Rebar Bending, Phil-lip S. Dunston, S. (Ranji) Ranjithan and Leonhard E. Bernold, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p492-501.

ed., 1990), p492-301.

A Neural Network Impedance Learning Control Model for a Robotic Excavator, Xiaodong Huang, Leonhard Bernold and Gordon Lee, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p213-219.

Neural Networks and AASHO Road Test, M. R. Banan and W. D. Highested, TE, Sear (2016) 63-358, 266-

K. D. Hjelmstad, TE Sept./Oct. 96, p358-366.
Neural Networks for the Identification and Control of Quantity Variance in Construction Projects, Hashern Al-Tabtabai, Nabil Kartam and Alex P. Alex, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p227-232.

Neural Networks Predict Pesticide Leaching, Steven K. Starrett, Shelli K. Starrett, Yacoub M. Najjar and Judy C. Hill. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1693-1698.

Neural-Network Modeling of CPT Seismic Liquefaction Data, Anthony T. C. Goh, GT Jan. 96, p70-73.

New Algorithm for Active Structural Control, Yu Tang, ST Sept. 96, p1081-1088.

Sept. 90, P104-1106.
On-Board Neural Network Control of Kinetic Energy Projectiles for NEO Exploration, R. E. Vance, M. V. Spangler, Z. Qian, C. Cho and K. A. Prisbrey, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1183-1189.

Optimal Reliability-Based Design of Check Dam Structure, Satoshi Katsuki, Nobutaka Ishikawa and Kazuo Itoh, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p91-98.

Performance of a Virtual Runoff Hydrograph System, Pa-trick Carriere, Shahab Mohaghegh and Razi Gaskari,

WR Nov./Dec. 96, p421-427. Pile Driving Records Reanalyzed Using Neural Networks, Anthony T. C. Goh, GT June 96, p492-495.

Predicting Dynamic Response of Adsorption Columns with Neural Nets, Imad A. Basheer and Yacoub M. Najjar, CP

Jan. 96, p31-39.

Predicting THM Formation with Artificial Neural Networks, Paul H. Hutton, Nicky Sandhu and Francis I. Chung, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3551-3556.

Prediction of Buckling Load of Columns Using Artificial Neural Networks, A. Mukherjee, J. M. Deshpande and J. Anmala, ST Nov. 96, p1385-1387.

Preliminary Design of 2-Story Buildings Using a Hybrid System, Hyeong-Tack Kang, C. John Yoon and Feng-Bao Lin, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p335-340.

Seismic Liquefaction Potential Assessed by Neural Net-works, Anthony T. C. Goh, GT Sept. 94, p1467-1480.

Simulation of Nonlinear Structures with Artificial Neural Networks, Thomas L. Paez, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p72-75.

Stress-Strain Modeling of Sands Using Artificial Neural Networks, G. W. Ellis, C. Yao, R. Zhao and D. Penuma-du, GT May 95, p429-435.

A. Study of Traffic Estimation Using Neural Networks, Masafumi Iwata, Shirou Hikita and Kiyotoshi Komaya, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p203-207.

Use of Artificial Neural Networks for Agricultural Chemi-cal Assessment of Rural Private Wells, Chittaranjan Ray and Kristopher K. Klindworth, (North American Water and Kristopher K. Killindwitth, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1687-1692.

The Use of Artificial Neural Networks in Advanced Travelre un refuncial neural neurons in Advanced Travel-er Information and Traffic Management Systems, Gae-tano Fusco and Stefano Gori, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p341-345.

Use of Neural Networks for Fluid Resistance Prediction, Jonathan T. Su, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1139-1142.

Vehicle Detection Using Radial Basis Neural Network, Suryanarayana Mantri and Darcy Bullock, (Applications of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p188-192.

Addressing Uncertainty in Rock Properties through Geo-statistical Simulation, Sean A. McKenna, Marc V. Cromer, Christopher A. Rautman and William P. Zelinski, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p297-311. Crossing of MacDonald Ranch Wash in Southern Nevada, Roger Beieler, Alvin R. Anderson, Russ Snow and Carol Tate, (Pipeline Crossings 1996, Lawrence F. Catalano,

Tate, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p282-289.
An Iterative, Probabilistic Environmental Decision Analysis Approach, Erik K. Webb, Stephen H. Conrad and Theresa J. Brown, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p249-264.
Threshold Precipitation Events and Potential Ground-Water Recharge, Richard H. French, Roger L. Jacobson and Brad F. Lyles, HY Oct. 96, p573-578.

iew England

Pipeline Crossings and the Corps Regulatory Process in New England, Karen Kirk Adams and David H. Killoy, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p409-417.

New Hampshire Mitigation Wetland Losses for a Major Transportation Immigation wettaind Losses for a Major I analysis of the provement Project in New Hampshire, Craig A. Wood, William J. Barry, Albert S. Garlo and William Arcieri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p982-987.

New Jersey
Design Guidelines for Bioengineered Bank Stabilization,
Dale E. Miller, (North American Water and Environmental Bathala Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3085-3090.

Foundation Design Considerations for Construction on Marshlands, A. Rhett Whitlock and Shahzad S. Moosa, CF Feb. 96, p15-22.

New Jersey Nearshore Hypoxia During the Summer 1976, Ross W. Hall and Mark S. Dortch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng. 1996), p608-617.

New Mexico

New Mexico
Dormant Season Alfalfa Water Balance on the NIIP, Brian Boman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p231-236.
Forcing Function and Climate Change, Bijaya P. Shrestha, Lucien Duckstein and Eugene Z. Stakhiv, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2151-2156.

New York City

Another Times Square Attraction (Available only in Struc-tures Special Issue), Howard Shin, CE May 96, p12A-

Optimization Modeling of Complex Surface Water Collection Systems, Ken Young, Stuart Stein, Kamal Saffarinia, George Oliger, Raphael Hurwitz, Robert Mayer and Janine Witko, (North American Water and Environment Congress & Destructive Water, Chen-

Environment Congress & Destructive water, Chen-chayya Bahala, ed., 1996), p3393-3398.

Preserving Williamsburg's Cables, Maria Grazia Bruschi and Terry L. Koglin, CE Mar. 96, p36-39.

Safety Analysis of Suspension-Bridge Cables: Williams-burg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

Billington, S1 Nov. 94, p3197-3211.
Seismic Isolation of Bridges in New York City, Jagtar S.
Khinda and Feng-Bao Lin, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p24-32.
So Mrs. Roebling—What's Your Side of the Story—About the Brooklyn Bridge? Patricia D. Galloway, (Civil Engi-

neering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p23-24.

VOC Inventory at New York City Wastewater Treatment

Plants, Richard Pope, Bert Aubrey and Demetrios Mos-chandreas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p75-80.

New York, State of

Bridge Deck Performance and Rehabilitation: A Reliabili-ty-Based Analysis, Paul D. DeStefano and Dimitri A. Grivas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1072-1081.

Evaluation of Selected Instruments for Monitoring Scour at Bridges in New York, Gerard K. Butch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4164-4171.

Intelligent Transportation Education, Steven P. Scalici, CE Apr. 96, p52-54.

Numerical Simulation of Temperature in the New York Bight, S. Rao Vemulakonda, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p66-79.

Scour-hole Dimensions at Selected Bridge Piers in New York, Gerard K. Butch, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3043-3051.

Significance of Lateral Elevation Gradients in Tidally Affected Tributaries, Frederick E. Schuepfer, Guy A. Apicella and Vincent J. DeSantis, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p229-239.

New Zealand

Guest Editorial, Pat Langhorne, CR Mar. 96, p1-5.

Newton-Raphson method

Application of the Newton Method in Valve Discharge Coefficient Relationships, Jorge A. Garcia and Antonia M. Romero, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p946-953.

Efficient Pump Representation for Fixed-Grid MOC in Pipeline Systems, David H. Axworthy and Bryan W. Karney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p370-375.

Game Model Approach to Multi-Purpose/Multi-Objective Water Resources Related Environmental Protection Project Planning and Management in Developing Nations: A Nigerian Example, Azuka Benjamin Anyika, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1057-1062.

Managing the Impacts of Storm Surges on Victoria Island, Lagos, Nigeria, Peter Chigozie Nwilo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3496.

Resources Strategy, Mona El-Kady, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1051-1056.

Nile River Valley

Mortality and Morbidity Patterns Associated with the October 12, 1992 Egypt Earthquake, Josephine Malilay, Ibrahim Fayez Elias, David Olson, Thomas Sinks and Eric Noji, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p266-268.

Anaerobic Biodegradation of High Energetics in Digestion Sewage Sludge, Sung-Hyun Kwon, Frank J. Y. Shiu and Teh Fu Yen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p794-799.

Artificial Recharge in the Oakes Test Area, Arden W. Freitag and Dale R. Esser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2335-2340.

Cropping Systems on the Delmarva Peninsula to Reduce Ground Water Contamination, W. F. Ritter and R. W. Scarborough, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2341-2346.

ed., 1996), p.231-2346.

Benitrification Incorporating Microporous Membranes, A. R. Reising and E. D. Schroeder, EE July 96, p599-604.

Denitrification of Ground Water/Waste Water using the Aquacel System, Peter Hall and Jerry Shapiro, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p577-581.

Electromigration of Nitrates in Soil, George Cairo, Dennis Larson and Donald Slack, IR Sept./Oct. 96, p286-290.

Evaluation of Nitrate Treatment Methods Under Uncertainty, Crystal C. Tannehill, M. F. Dahab and W. E. Woldt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Impact of Agricultural Water Conservation on Water Quali-ty in Arid Irrigated Areas, James E. Ayars, Kenneth K. Tanji and Thomas J. Trout, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p905-910.

Inhibiting Action of Calcium Nitrite on Carbon Steel Rebars, M. Ramasubramanian, B. N. Popov and R. E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1007-1016.

Mapping Groundwater Vulnerability to Nitrate and Pesti-cide Contamination in the Salinas Valley, Monterey County, California, Weibo Yuan, Joe LeClaire, Ali Diba, Michael Inada and Matt Zidar, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1099-1104.

Modeling the Lake Decatur Watershed in Illinois to Evaluate Effects of Best Management Practices on Nitrate Loading, Deva Borah, Misganaw Demissie and Laura Keefer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1681-1686.

Autotrophic and Heterotrophic Bacterial Diversity from Yucca Mountain, M. Khalil, D. L. Haldeman, A. Igbinovia, P. Castro, L. Ragatz and P. Amy, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p9-11.

Nitrogen

Artificial Recharge in the Oakes Test Area, Arden W. Freitag and Dale R. Esser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2335-2340.

Evaluation of the Nitrogen Cycle in a Tidal Flat, Kyoko Hata, Iwao Oshima, Takcaki Kuramoto and Kisaburo Nakata, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p542-554.

Modeling the Effect of Reduced Nitrogen Loading on Water Quality, Y. Peter Sheng, Eduardo A. Yassuda and Changlu Yang, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p644-658.

Planning Biosolids Land Application Rates for Agricultural Systems, David M. Crohn, EE Dec. 96, p1058-1066.

Source Apportionment Study of Nitrogen Species Meas-ured in Southern California in 1987, Meng-Dawn Cheng, Ning Gao and Philip K. Hopke, EE Mar. 96, p183-190.

Production of Nitrous Oxide Gas under Sequencing Batch Reactor System, Cheng-Nan Chang, Jih-Gaw Lin, Jin-Yuan Chen and Fong-Bing Hsu, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p782-787.

Nitrogen removal

Assessment of AWT Systems in Tampa Bay Area, Richard O. Mines, Jr., EE July 96, p605-611.

Cold Temperature Nutrient Removal from Wastewater, Jan A. Oleszkiewicz and Shahnaz Danesh, (Cold Regions Engineering: The Cold Regions Infrastructure—An In-ternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p533-544.

Eliminating Backflow in Retrofit BNR Systems, Gregory J. Daviero and Terry W. Sturm, EE Oct. 96, p950-954.

Application of Chaotic Dynamics to Stochastic Resonance, Marek Franaszek and Emil Simiu, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p86-89.

Stability of Bounded-Noise Excited System, Q. C. Li, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p128-131.

Vibration Isolation for Space Station Micro-Gravity Using High Temperature Superconductors, W. K. Chu, K. Ma, H. Xia and T. L. Wilson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p540-544.

Noise control

Solid-Waste Management System Analysis with Noise Control and Traffic Congestion Limitations, Ni-Bin Chang, Y. C. Yang and S. F. Wang, EE Feb. 96, p122-

Non-Newtonian fluids

Granular Flow Based on Non-Newtonian Fluid Mechanics, Sergio A. Elaskar, Luis A. Godoy and Alejandro T. Brewer, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p394-397.

aqueous phase liquids

Nonaqueous pnase riquisis of Light Nonaqueous Phase Liquid, Lizette R. Chevalier, Roger B. Wallace, David C. Wiggert and Mohsen D. Shabana, (Non-Aqueous Phase Liquids (NAPLs) in Sub-surface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p357-368.

Lassmitt N. Rous, ed., 1993, p337-304.
A 3-D NAPL Flow and Biodegradation Model, Phillip C. de Blanc, Daene C. McKinney, Gerald E. Speitel, Jr., Kamy Sepehrmoori and Mojdeh Delshad, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p478-489.

1990), p418-409.
Addressing Non-Aqueous Phase Liquids and Dissolved Plumes at Two Adjacent Superfund Sites with Commingled Groundwater Contamination, Jeffrey A. Dhont and Udai P. Singh, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p812-823.

Air Sparging Experiments on a Two Dimensional Sand Box with DNAPLs: Multiphase Investigation with Electrical Impedance Tomography, Jong Soo Cho, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1995. 402 and 1996.

1996), p369-380.

Behavior of DNAPLs in Fractured Bedrock, David Foster, Salvatore Priore and Kevin Brewer, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p583-594.

Characterizing In Situ DNAPL Distribution, Mobility State, and Dissolution, Timothy J. Peck, Joy E. Ligé, Ian D. MacFarlane and Frank T. Barranco, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 10066-1006. 1996), p103-114.

Compositional Modeling Study of Alcohol Flooding for Recovery of DNAPL, Stanley Reitsma and Bernard H. Kueper, (Non-Aqueous Phase Liquids (NAPLs) in Sub-surface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p526-537.

A Computerized Decision Support System Applied to NAPL Cleanup, Dale W. Lough and Wade E. Hathhorn, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface En-vironment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p693-704.

Controlled Field Experiments for Assessment of Subsurface NAPL Behaviour and Remediation, J. A. Cherry and D. J. A. Smyth, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p3-24.

Deciphering LNAPL Migration Pathways in a Heterogeneous Hydrogeologic Setting, Mark K. Levorsen and Christine Dreier Bynum, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p836-847.

Delineation of a Dielectric Fluid LNAPL Using Discrete Sampling Methods, Michael J. Pierdinock, Spence S. Smith, Christopher L. Kingma and John Seferiadis, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p139-150.

Designing SVE to Remove Volatile LNAPLs, Richard Haimann, Kathleen Schoen, Mark Underwood, Jeff Munic and Jim Hartley, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p431-441.

The Dielectric Constant of Soil-NAPL Mixtures at Low Frequencies (100 Hz-10 kHz), Victor A. Rinaldi and Emilio R. Redolfi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment a Remediation, Lakshmi N. Reddi, ed., 1996), p163-174.

Remediation, Lakshmi N. Reddi, ed., 1990), p103-174.
Dissolution of NAPLs Entrapped in Heterogeneous Porous
Media, Indumathi Manivannan, Susan E. Powers and
Garrey W. Curry, Jr., (Non-Aqueous Phase Liquids
(NAPLs) in Subsurface Environment: Assessment and
Remediation, Lakshmi N. Reddi, ed., 1996), p563-574.
Dissolution of Toluene Residuals: 3-D Laboratory Experiments, David A. Reynolds, Philippe Lamarche and
Michel Térreault, (Non-Aqueous Phase Liquids (NAPLs)

Michel Tétreault, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remedia-

in Subsurface Environment: Assessment and Remedia-tion, Lakshmi N. Reddi, ed., 1996), p607-618. DNAPL Recovery System at a Railroad Tie Treating Facil-ity, Richard Broad, III, David F. Atwater and Riaz Ah-med, (Nan-Aqueous Phase Liquids (NAPLs) in Subsur-face Environment: Assessment and Remediation, Laksh-

Jace Environment: Assessment and Remediation, Laksh-mi N. Reddi, ed. 1996), p743-750. Editor's Note, Thomas L. Theis, EE Dec. 96, p1049. Evaluation of a Bedrock DNAPL Pool Site, Daekyoo Hwang, Christopher Reitman and William Richardson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Enriroment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p731-742.

Experimental Study of One-Dimensional Immiscible Fluid Drainage in Lavered Sands. Calvin D. Miller.

Drainage in Layered Sands, Calvin D. Miller and Deanna S. Durnford, (Non-Aqueous Phase Liquids (NAPLs) in

S. Durnord, von Aqueous Praise Liquids (VAPLS) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p628-638. A Field Test of NAPL Removal by High Molecular Weight Alcohol Injection, Ronald W. Falta, Scott E. Brame, Cin-dy M. Lee, John T. Coates, Charles Wright, Sarah Price, Patrick Haskell and Eberhard Roeder, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed.,

sessment and remediation, Landilla N. Beson, 1996), p257-268.
Field-Scale Application of In-Situ Cosolvent Flushing:
Evaluation Approach, M. D. Annable, P. S. C. Rao, R. K.
Sillan, K. Hatfield, W. D. Graham, A. L. Wood and C. B.

Phys. Legisla, 1844 (1994), in Sub-Enfield, (Non-Aqueous Phase Liquids (NAPLs) in Sub-

surface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p212-220. Framework for a Screening Model for DNAPL Contamina-tion of Porous Media, Clinton S. Wilson, James W. Weaver, Tissa Illangasekare and Randail J. Charbeneau, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N.

Reddi, ed., 1996), p407-418.
In Situ Plume Interception and Treatment Technologies: An Overview, George P. Korfiatis and Alexandros Makarigakis, (Non-Aqueous Phase Liquids (NAPLs) in Subsur-face Environment: Assessment and Remediation, Laksh-

mi N. Reddi, ed., 1996), p66-88. Innovative Evaluaton Methods for Bioremediation, Eric A. Seagren, David J. Hollander, David A. Stahl and Bruce E. Rittmann, (Non-Aqueous Phase Liquids (NAPLs) in

E. Rittmann, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p381-392.
Investigation of Interwell Tracer Tests Used with Cosolvent Flooding, Charles Wright, Cindy M. Lee, John T. Coates and Ronald W. Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p151-162.
Leaching of PCBs from a NAPL Entrapped in Porous Media, Zafar Adeel, Richard G. Luthy and David A. Dzombak, (Non-Aqueous Phase Liquids (NAPLs) in Sub-surface Environment: Assessment and Remediation.

surface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p649-660.

LNAPL Detection, Measurement, and Distribution in the Subsurface Environment, David W. Ostendorf, Alan J. Lutenegger, Russell J. Suchana, Paul S. Cheever and Samuel J. Pollock, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment Remediation, Lakshmi N. Reddi, ed., 1996), p91-102.

- Mechanisms of Removal of Residual Dodecane Using Surfactant Foam, HsienShen S. Chu, Amir Salehzadeh, Avery H. Demond and Richard D. Woods, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p269-280.
- Modeling the Behavior of LNAPLs Under Hydraulic Flushing, S. Ratnam, P. J. Culligan-Hensley and J. T. Germaine, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p595-606.
- Multicomponent NAPL Composition Dynamics and Risk, Catherine A. Peters, Paula A. Labieniec and Christopher D. Knightes, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed. 1996), p681-692.
- Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996, 0-7844-0203-5, 864pp.
- Numerical Simulation of DNAPL Emplacement and Redistribution in Heterogeneous Porous Media at the M Area of the Savannah River Site, Rex A. Hodges and Ron W. Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed. 1996), p619-627.
- Numerical Simulation of Field Air Sparging Operations, Andrew G. Larson and Ronald W. Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p551-562.
- An Observational Approach to Removing LNAPL, Richard Haimann, Kathleen Schoen, Hooshang Nezafati and Jim Hartley, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p719-730.
- Optimizing Soil Vapor Extraction System Design and Operations for NAPL Remediation, John M. Farr, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p201-211.
- A Pore-Scale Study of the Stability of Nonaqueous Phase Liquid Ganglia under the Influence of Vibrations, Sunii Menon, Arun Pant and Lakshmi N. Reddi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), 9538-550.
- Process Upscaling of Nonaqueous Phase Liquid Behavior in Heterogenous Aquifers, Tissa H. Illangasekare, John E. Ewing and Kris O. Pytte, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p25-45.
- Rate-Controlled Micellar Solubilization of an LNAPL in Aquifer Materials, Dianne J. Luning Prak, Kurt D. Pennell, Linda M. Abriola and Walter J. Weber, Ir., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p639-648.
- Rates of Release of PAHs from DNAPL Mixtures, Suparna Mukherji, Catherine A. Peters and Walter J. Weber, Jr., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p575-582.
- Relating the Wettability of Contaminated Sands to NAPL Composition, William H. Anckner, Jr. and Susan E. Powers, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p502-512.
- Removal of DNAPL Pools Using Upward Gradient Ethanol Floods, Stuart Lunn and Bernard Kueper, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p345-356.
- Review of Factors Affecting In Situ Air Sparging, Daniel M. Baker and Craig H. Benson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p292-310.

- A Review of NAPL Modeling Approaches for Remediation, James W. Mercer, Zafar Adeel and Charles R. Faust, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p46-65.
- The Role of Capillary Pressure Curve Selection in Modeling LNAPL Transport in the Vadose Zone, Jason L. Buesing and Marina Pantazidou, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p490-501
- SEAM2D: A Numerical Model for Two-Dimensional Solute Transport and Sequential Electron Acceptor-Based Bioremediation of LNAPL-Contaminated Aquifers, Dan W. Waddill, Mark A. Widdowson and J. Steven Brauner, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p466-477.
- Site Characterisation of a Complex DNAPL Site—An Australian Experience, J. M. Duran and J. A. Grounds, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p800-811.
- Soil Type Effect on NAPL Removal by Surfactant, Olubunmi M. Ogunsola and Mark A. Tumeo, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p281-291.
- Stochastic Finite Element Analysis for Multiphase Flow in Random Porous Media, S. Dham and R. Ghanem, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p661-669.
- Successful Free Product Removal of NAPLs, Daniel S. Sauvé and Jeffrey L. Pintenich, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p233-244.
- Surfactant Enhanced Gravity Drainage (SEGD) of Dense Nonaqueous Phase Liquids: A New Concept in the Insitu DNAPL Remediation, Milind D. Deo and Ju-Woung Yoon, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmit N. Reddi, ed., 1996), p393-404.
- Surfactant-Enhanced Extraction and Biodegradation of a Non-Aqueous Phase Contaminant in Soil, Satishkumar Santharam, Larry Eugene Erickson and Liang-tseng Fan, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p419-430.
- Swelling of DNAPL by Cosolvent Flooding to allow its Removal as an LNAPL, Eberhard Roeder, Scott Eppes Brame and Ronald William Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p333-344.
- Three-Dimensional Numerical Simulation of Soil Vapor Extraction, Albert T. Yeung and Hui-Tsung Hsu, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p442-453.
- Three-Fluid Phase Flow in Heterogeneous Subsurface: Perturbation and Numerical Analyses, Alaa E. Abdin and Jagath J. Kaluarachchi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p513-525.
- Upscaling of Pore-Scale Concepts to Develop Models of NAPL Ganglion Dynamics, Rao S. Govindaraju and Lakshmi N. Reddi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p454-465.
- The Use of Surfactants to Remediate NAPL-Contaminated Aquifers, Kurt D. Pennell, Linda M. Abriola and Laura E. Loverde, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p221-232.

Value and Reliability of DNAPL-Source Location Programs: A Preliminary Framework, Travis C. McGrath, Robert B. Gilbert and Daene C. McKinney, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p187-198.

Sondestructive measurement

Closed-Form Back-Calculation of Rigid-Pavement Parameters, Li Shuo, T. F. Fwa and K. H. Tan, TE Jan/Feb. 96, p5-11.

Optical Fiber Sensors for Advanced Civil Structures, Marten J. de Vries, Stephen H. Poland, Jennifer L. Grace, Vivek Arya, Kent A. Murphy and Richard O. Claus, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p64-67.

Nondestructive tests

Analysis of Liquid-Core Cylindrical Acoustic Waveguides Embedded in Solid Media, Hung-Liang (Roger) Chen and Yidong He, EM Jan. 96, pl-9.

The Applicability of Neural Network Systems for Structur-al Damage Diagnosis, Chatmongkol Peetathawatchai and Jerome J. Connor, Jr., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p68-71.

Bridge Monitoring Using An Optical Fibers Sensor System, R. L. Idriss and M. B. Kodindouma, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p.238-244

Bridge Strength Evaluation Based on Field Tests, Jonathan S. Reid, Michael J. Chajes, Dennis R. Mertz and Geoffrey H. Reichelt, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p294-297.

Crase History of Swimming Pool Foundation Failure, Bernard H. Hertlein, CF Feb. 96, p33-34.

Characterization of Granular Material by Low Strain Dynamic Excitation and ANN, Salome Romero and Sibel Pamukcu, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), e1134-1145. p1134-1148.

Comparison of Electromagnetic and Other Surveys to Lo-cate Extensive Water Main Corrosion, T. H. W. Baker, S. E. McDonald and R. J. H. Brousseau, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p829-

Condition Assessment for Bridge Management, A. Emin Aktan, Daniel N. Farhey, David L. Brown, Vikram Dalal, Arthur J. Helmicki, Victor J. Hunt and Stuart J.

Shelley, IS Sept. 96, p108-117.

Shelley, IS Sept. 96, p108-117.
Damage Assessment of Reinforced Concrete Structures through Acoustic Emission Monitoring, Christian C. Steputat and Sashi K. Kunnath, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p837-844.
Defect Detection (Available only in Geo/Environmental Special Issue), Tracy Brettmann and Larry Olson, CE July 96, p22-664.

July 96, p2A-6A.

Detection of ASR in PCC Using Ultrasonic Waves, N. M. Al-Akhras, I. L. Al-Qadi and M. R. Hajj, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p897-904

Electrical Tagging of Fiber Reinforced Cement Comp ites, Jong Seh Lee and Gordon Batson, (Materials for New Millennium, Ken P. Chong, ed., 1996), p887-896.

Embedded Fiber Optic Displacement Sensor for Concrete Elements, Xi Chen, Farhad Ansari and Hong Ding, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p359-365.

Evaluation of Microcrack Damage Growth and Healing of Asphalt Concrete Pavements Using Stress Wave Method, Yongon Kim and Y. Richard Kim, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p612-615.

Experimental Study of Reinforced Concrete Beams Using Acoustic Surface Waveguides, Yidong He and Roger H. L. Chen, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p869-875.

Fabric Anisotropy and Its Relationship to Macroscopic Constitutive Behavior of Clays, A. Anandarajah, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

Fatigue Evaluation of Highway Bridges Using Ultrasonic Stress Measurements, Samer H. Petro, Udaya B. Halabe, Paul Fuchs, Powsiri Klinkhachorn and Hota V. S. Gan-gaRao, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p876-883.

Fatigue Strength of Externally Reinforced Concrete Beams, L. C. Muszynski and R. L. Sierakowski, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p648-

Ground Penetrating Radar for Infrastructure Condition As-sessment and Geophysical Applications: A Review, Udaya B. Halabe, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p812-819.

Monamman, ed., 1976), police 51.

Health Monitoring Studies on Composite Structures for Aerospace Applications, George James, Dennis Roach, Bruce Hansche, Raul Meza and Nikki Robinson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl127-1133.

Impact of Weight Falling onto the Ground, Jose M. Roesset, Eduardo Kausel, Vicente Cuellar, Jose L. Monte and Julian Valerio, GT Aug. 94, p1394-1412.

Inspection of Fatigue Sensitive Bridge Members, Richard A. Walther and Michael J. Koob, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p321-328.

Measuring Dielectric Properties of Concrete over Low RF, Rami H. Haddad and Imad L. Al-Qadi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1139-1149.

NDE of Distributed Cracking in Concrete, Scott F. Selleck, Eric N. Landis, Michael L. Peterson and Surendra P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p604-607.

A Non-Destructive Method for Prestress Evaluation, Ato-rod Azizinamini, Armin B. Mehrabi, Bruce Keeler and John Rohde, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Janshid Mohammadi, ed., 1996), p900-907.

Nondestructive Evaluation of Elastic Constants and Crack Depth in Concrete Using Transient Elastic Waves, T.-T. Wu and J.-S. Fang, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p861-868.

On Structural Identification of Constructed Facilities, A. Emin Aktan and James T. P. Yao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p651-658.

Performance of Stabilized Base Course at DFW, William P. Grogan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p308-317.

Probabilistic Framework to Detect and to Identify Anoma-lies in Structures, Nabil Fares and Roula Maloof, (Prob-abilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Proof Load Testing of Bridges, Vijay K. Saraf, Andrzej S. Nowak and Roger Till, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-

cea D. Grigoriu, ed., 1996), p526-529

Recent Advancements in Smart Tagged Composites for In-frastructure, Robert F. Quattrone and Justin B. Berman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1045-1054.

Reliability-Based Maintenance Strategy Using NDI, Achin-tya Haldar and Zhengwei Zhao, (*Probabilistic Mechan-*ics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p364-367.

Replace or Repair? Pipe Study Will Tell, ET Mar./Apr. 96,

Study of Parameters Affecting Impulse Response Method, Soheil Nazarian and Srinivasa Reddy, TE July/Aug. 96,

A Summary of Research and Development Projects in Non-destructive Evaluation Technologies for Bridges, Steven B. Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p230-237.

Tracing Initiation and Propagation of Cracks in Composite Slabs, Yiching Lin, J. Y. Richard Yen and Chen-Fung Chen, ST July 96, p756-761.

Using NDT to Fasttrack Pavements, James K. Cable, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p475-481.

Nonequilibrium flow

Nonequilibrium Thermodynamical Model for Spent Fuel Dissolution Rate, Ray B. Stout, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p393-395.

Nonlinear analysis

Analytical Modeling of Composite Reinforced ConcreteSteel Systems, Joseph M. Bracci, Sashi K. Kunnath and
Ali O. Atahan, (Natural Disaster Reduction, George W.
Housner, ed. and Riley M. Chung, ed., 1997), p379–380.

Class of Masing Models for Plastic Hysteresis in Structures, James L. Beck and Paramsothy Jayakumar, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p1083-1090.

Collapse of Transmission Line Towers in Typhoon Gay, Panitan Lukkunaprasit, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p351-352.

Coupled Nonlinear Analysis of Airport Pavements, T. E. Fenske, K. P. Boone and D. Liu, (Analysis and Computa-

tion, Franklin Y. Cheng, ed., 1996), p435-443. Design and Analysis of Approach Terminal Sections Using Simulation, John D. Reid, Dean L. Sicking and Gene W. Paulsen, TE Sept./Oct. 96, p399-405.

Energy Dissipation Devices in Bridges using Hydraulic Dampers, E. A. Delis, R. B. Malla, M. Madani and K. J. Thompson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1188-1196.

Establishing R_r and C_d Factors for Confined Masonry Buildings, María O. Moroni, Maximiliano Astroza, Juan Gómez and Rafael Guzmán, ST Oct. 96, p1208-1215.

First Exit Times in Non-Linear Dynamical Systems by Advanced Monte Carlo Simulation, H. J. Pradlwarter and W. Kliemann, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p523-526.

Flow Properties of the Swash Zone, M. Brocchini and D. H. Peregrine, (Coastal Dynamics '95, William R. Dally, ed.

Frameview: Object-Oriented Visualization System for Frame Analysis, Sheloney Moni and Donald W. White,

CP Oct. 96, p276-285.
Geometric and Material Nonlinearities in Steel Plates, P.
Roca, E. Mirambell and J. Costa, ST Dec. 96, p1427-

fround Motion Estimation and Nonlinear Seismic Analysis, David B. McCallen and Lawrence J. Hutchings, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p416-427.

Ground Response of Circular Tunnel in Poorly Consolidat-ed Rock, Yarlong Wang, GT Sept. 96, p703-708. Implications of Tendon Modeling on Nonlinear Response of TLP, Basim B. Mekha, C. Philip Johnson and Jose M.

Roesset, ST Feb. 96, p142-149.

Investigation of Nonlinear Fluid-Structure Interaction, T. E. Fenske, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p407-415.

Non Linear Computation of Fiber Reinforced Micro-Concrete Structures, Mouloud Behloul, Régis Adeline and Gérard Bernier, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p518-529.

Nonlinear Analysis and Design Issues for PR Frames, Arvind V. Goverdhan, (Analysis and Computation, Franklin

Y. Cheng, ed., 1996), p55-66.

Nonlinear Behavior of Composite Columns Under Varying Load Histories, A. Dall'Asta, EM Aug. 96, p743-752.

Nonlinear Dynamic Response of Frames Using Lanczos Modal Analysis, Steven M. Vukazich, Kyran D. Mish

and Karl M. Romstad, ST Dec. 96, p1418-1426.

Nonlinear FE Solution for Thin-Walled Open-Section
Composite Beams, B. Omidvar and A. Ghorbanpoor, ST

Nov. 96, p1369-1378.

Nonlinear Finite Element Analysis of Masonry-Infilled Re-inforced Concrete Frames, Medhat A. Haroun and Essam H. Ghoneam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1022-1025.

Nonlinear Identification of Semi-Active Control Devices, B. F. Spencer, Jr., S. J. Dyke, M. K. Sain and J. D. Carlson, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p164-167.

Nonlinear Lateral Pile Deflection Prediction in Sands, Shamsher Prakash and Sanjeev Kumar, GT Feb. 96, Nonlinear Pile Foundation Analysis Using Florida-Pier, M. I. Hoit, M. McVay, C. Hays and P. W. Andrade, BE

Nov. 96, p135-142 Nonlinear Static and Dynamic Analysis from Research to Practice, Filip C. Filippou, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p31-42.

Optimal Rehabilitation of Locally Damaged Structures
Using the Pseudo Distortion Method, Prafulla V.
Makode, Ross B. Corotis and Martin R. Ramirez, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi. ed., 1996). p606-612.

Parallel Structural Analysis with Computers and Engineers, Edward L. Wilson, (Analysis and Computation, Franklin

Y. Cheng, ed., 1996), p1-18.

Parameters in Bridge Restrainer Design for Seismic Re-trofit, M. Saiidi, E. Maragakis and S. Feng, ST Jan. 96, p61-68

p61-68.
Quartic Formulation for Elastic Beam-Columns Subject to Thermal Effects, B. A. Izzuddin, EM Sept. 96, p861-871.
Redundancy of Prestressed Concrete I-Beam Bridges, Michel Ghosn and Fred Moses, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p688-695.

Refined Second-Order Analysis of Frames with Members under Lateral and Axial Loads, Z. H. Zhou and S. L.

Chan, ST May 96, p548-554.

Response of Building Systems with Rocking Piers and Flexible Diaphragms, Andrew C. Costley and Daniel P. Abrams, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p135-140.

SFEM for Reliability of Structures with Material Nonlinearities, Jun Zhang and Bruce Ellingwood, ST June 96,

Stability Analysis of Axisymmetric Thin Shells, Ashutosh Bagchi and V. Paramasivam, EM Mar. 96, p278-281. Strength of Struts and Nodes in Strut-Tie Model, Young

Mook Yun and Julio A. Ramirez, ST Jan. 96, p20-29. Subharmonic Edge Waves. Stability Analysis, Antonio Lechuga, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p281-292. Synthesis of Correlated and Vector-Valued Time Series

Based on Random Vibration for Nuclear Piping, Yong Zhao and D. A. Gasparini, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p748-751.

Thin-Walled Curved Beams. I: Formulation of Nonlinear Equations, Young J. Kang and Chai H. Yoo, EM Oct. 94,

p2072-2101.

Thin-Walled Curved Beams. II: Analytical Solutions for Buckling of Arches, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2102-2125.

Tubular Members. II: Local Buckling and Experimental Verification, Spyros A. Karamanos and John L. Tassou-las, EM Jan. 96, p72-78.

Ultimate Analysis of Monolithic and Segmental Externally Prestressed Concrete Bridges, Gonzalo Ramos and Angel C. Aparicio, BE Feb. 96, p10-17.

Wave Groups Approaching a Beach: Full Irrotational Flow Computations, T. C. D. Barnes and D. H. Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p116-127.

Wind Wave Simulation in Coastal Zone, Tatjana Talipova, Efim Pelinovsky and Eliezer Kit, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p105-115.

Nonlinear differential equations

An Overview of Techniques for Analyzing a System Mod-elled as a Duffing Oscillator Driven by Deterministic and Stochastic Excitations, M. A. Tognarelli and A. Kareem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p728-731.

Nonlinear programming Managerial Fuzzy Optimal Planning for Solid-Waste Management Systems, Ni-Bin Chang and S. F. Wang, EE July 96, p649-658.

Multiobjective Optimization of Multireservoir System, S. Mohan, K. Elango and M. G. Devamane, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1968-1975.

Optimization and Sensitivity of Retaining Structures, Askin Saribaş and Fuat Erbatur, GT Aug. 96, p649-656.

Pump-and-Treat Ground-Water Remediation System Opti-mization, Daene C. McKinney and Min-Der Lin, WR

Mar./Apr. 96, p128-136.

Solving Mathematical Programming Problems Using Genetic Algorithms, Siripong Malasri, Jennifer R. Martin and Ricardo A. Medina, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p233-239.

System Downstream Control for On-Demand Irrigation Canals, Zihui Lin and David H. Manz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p824-829.

Active Vibration Control of Machine Foundation, Mohamed Abdel-Rohman and Hasan Al-Sanad, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

Analysis of the Nonlinear Hysteretic Response of an RC Building, Sarwidi and Apostolos S. Papageorgiou, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1099-1106.

Connections of Large Steerable Antennas, Joseph Antebi and Mehdi S. Zarghamee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p505-509.

Besign and Implementation of Nonlinear Control Strategies, T. T. Soong and Z. Wu, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1147-1154.

Dynamic Fatigue of High-Rise Natural Draught Cooling Towers, Wilfried B. Krätzig, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p298-309.

Experimental Investigation of the Temporal Intermittency in the Transition to Turbulence of a Plane Mixing Layer, A. L. W. Bokde, D. A. Jordan, Jr. and R. W. Miksad, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

High Performance Computing: Application to Highway Bridges, T. E. Fenske, Z. Yu, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed.,

1996), p444-452.

Hysteretic Response and Structural Reliability, Ricardo O. Foschi and Hong Li, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p882-885.

Influence of Foundation Nonlinearity on Offshore Towers Response, Mohamed H. El Naggar and Milos Novak, GT

Sept. 96, p717-724.

Influence of Imperfections on Nonlinear Dynamic Response of Trusses, Aslam Kassimali and Khalil Rabiei, (Bulding an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p534-541.

Modeling the Dynamic Nonlinear Response of Single Piles, Deepak Badoni and Nicos Makris, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1091-1098.

Nonlinear Analysis and Design Issues for PR Frames, Arvind V. Goverdhan, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p55-66.

Nonlinear Behavior of RC Cooling Towers and Its Effects on Strains, Stresses, Reinforcement and Cracks, Udo Wittek and Anmin Ji, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p287-297.

Nonlinear Dynamics of Unidirectional, Fiber-Reinforced Tori, Raouf A. Raouf and Anthony N. Palazotto, EM

Mar. 96, p271-276.

Nonlinear Performance of Offshore Platforms in Extreme Storm Waves, R. G. Bea, WW Mar./Apr. 96, p68-74.

Nonlinear Pounding of Bridges in Earthquakes, Xian Ma and Chris P. Pantelides, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1180-1187.

Nonlinear Response of Bridges under Multisupport Excita-tion, Giorgio Monti, Camillo Nuti and Paolo E. Pinto, ST Oct. 96, p1147-1159.

Nonlinear Soil Response—1994 Northridge, California, Earthquake, M. D. Trifunac and M. I. Todorovska, GT Sept. 96, p725-735.

Optimization Sensing and Control in Design of Antennas Mehdi S. Zarghamee and Joseph Antebi, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p147-153.

Oscillations of Bridge Stay Cables Induced by Periodic Motions of Deck and/or Towers, A. Pinto da Costa, J. A. C. Martins, F. Branco and J. L. Lilien, EM July 96, p613-622.

poi3-022.
Probabilistic Analysis of Complex Nonlinear Motions Under Combined Periodic and Random Excitations, Huan Lin and Solomon C. S. Yim, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p2-5.

Response Statistics of Moored Floating Structures Subject-ed to General Nonlinear Random Wave Forces, Shunji Kato and Takashi Okasaki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-

cea D. Grigoriu, ed., 1996), p158-161.

Stochastic Dynamics of Non-Linear Systems Excited by Parametric Delta Correlated Processes, Mario Di Paola and Antonina Pirrotta, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p930-933

Strongly Nonlinear Stochastic Response of a System with Random Initial Imperfections, Jiff Náprstek, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p740-743.

Thermohaline Buoyancy Effects on Turbulent Flows, R. E. Baddour, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p454-457.

Uniqueness in Analysis of Semirigid Frames, S. T. Ariarat-nam and L. Xu, ST Jan. 96, p110-111.

Use of Quadratic Transfer Functions to Predict Response of Tension Leg Platforms, Inyeol Paik and Jose M. Roesset, EM Sept. 96, p882-889.

Nonlinear systems

Analysis of the Nonlinearity Associated with the Free Vi-bration of an Orthotropic Shell, Jamal F. Nayfeh and Nicholas J. Rivieccio, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl115-1121.

Approximate Solutions to Nonlinear Random Vibration Problems and the Fokker-Planck-Kolmogorov Equation, David C. Polidori and James L. Beck, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p94-97.

Approximated Correlations Response of Nonlinear Systems Under Normal White Noise Inputs, M. Di Paola and G. Falsone, (Probabilistic Mechanics & Structural Reliabil-ity, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p926-929.

Characterization of a Nonlinear Polymer-Based Composite Material System, R. M. Hackett and P. I. Rodriguez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p771-780.

A Comparative Analysis of FORM/SORM and Polynomial Chaos Expansions for Highly Nonlinear Systems, R. Ghanem and D. Ghiocel, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p535-538.

Conditional Linearization in Nonlinear Random Vibration.

Condutoria Linearization in Violinear Vanandom Violaudion, R. N. Iyengar and D. Roy, EM Mar. 96, p197-200.
Dynamics of Multi-DOF Stochastic Nonlinear Systems, Timothy M. Whalen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p82-85.

Energy Dissipation Devices in Bridges using Hydraulic Dampers, E. A. Delis, R. B. Malla, M. Madani and K. J. Thompson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1188-1196.

First Passage Time of Nonlinear Ship Rolling in Nonsta-tionary Random Seas, C. W. S. To and Z. Chen, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p250-253.

How Can Coupled Systems Evolve? A Scenario Simulation Methodology, H. Takase, P. Grindrod and S. P. Crompton, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p258-260.

Hybrid Control of Seismic Response Using Nonlinear Out-put Feedback, A. K. Agrawal and J. N. Yang, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p339-

Hysteretic Systems: Chaotic Region and Control, M. Battaini, F. Casciati and L. Faravelli, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p499-502.

16.5, Y. K. Lin and T. C. Su, 1990), page 392-302.
Identification of Nonlinear Systems under Random Excitation, B. A. Zeldin and P. D. Spanos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p168-171.

Managing Multi-Degree-of-Freedom Systems in Structural Fuzzy Control, Fabio Casciati and Lucia Faravelli, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Method of Non-Linear Stochastic Dynamics - A Compara-tive Discussion, G. I. Schuëller and H. J. Pradlwarter, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

p966-969

Non-Linear Models for Resilient Modulus Characterization of Granular Soils, Anand J. Puppala, Louay N. Mohammad and Aaron Allen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p559-562.

Lin and T. C. Su, 1996), p599-562.
Nonlinear Control Strategies for Limiting Dynamic Response Extremes, D. P. Tomasula, B. F. Spencer, Jr. and M. K. Sain, EM Mar. 96, p218-229.
Nonlinear SDOF System Subject to Poisson-Distributed Pulse Process, Sau-Lon James Hu, George Tsiatas and Shuang Jin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed. 1996). p581-583. ed., 1996), p680-683.

Nonlinear Systems with Poisson White Noise, Mircea Gri-goriu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p120-123.

An Overview of Techniques for Analyzing a System Mod-elled as a Duffing Oscillator Driven by Deterministic and Stochastic Excitations, M. A. Tognarelli and A. Kareem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p728-731.

Random Response of Nonlinear System to PERPM Model, Y. Wang, Z. Hou, M. Dimentberg, M. Noori and Y. Zhou, (Probabilistic Mechanics & Structural Reliability,

Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p954-957.

Random Vibration of Mechanical and Structural Systems by T. T. Soong and Mircea Grigoriu, Dan M. Frangopol, EM Feb. 96, p184.

Refined Finite Element Analysis of Geomaterials, Boris Jeremić and Stein Sture, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p555-558. Reliability Analysis of Nonlinear Structures Using Stochastic Finite Elements, C. E. Brenner and C. Bucher, (Prob-abilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p596-599.

Reliability of Jackets: Beyond-Static-Capacity, D. G. Schmucker and C. A. Cornell, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and

Mircea D. Grigoriu, ed., 1996), p578-581.

Reliability of Ocean Structure Using Spectrum-Consistent Excitation, Yunshen Zhou, Zhikun Hou, Mikhail F. Dimentherg and Mohammad Noori, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p982-985.

Resonances in Nonlinear Stochastic Systems, Agnessa Kovaleva, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p736-739.

457

Response Cumulants of Nonlinear Systems Subject to External and Multiplicative Excitations, C. Papadimitriou, L. S. Katafygiotis and L. D. Lutes, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p744-747.

Response Spectral Densities of Stochastically Excited Nonlinear Systems, G. Q. Cai and Y. K. Lin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p732-735.

Sectional Analysis for Nonlinear System Identification of Concrete Structures, Jie Wang, Manoj B. Chopra and Sashi K. Kunnath, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p339-342.

Simplified Response-Spectrum Seismic Analysis of Nonlin-ear Structures, Roberto Villaverde, EM Mar. 96, p282-

Simulation of Nonlinear Structures with Artificial Neural Networks, Thomas L. Paez, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p72-75.

A Simulation Procedure for First Passage Problems of Non-linear Structures, Veit Bayer and Christian Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Some Recent Advances in Stochastic Structural Dynamics, Y. K. Lin, (*Probabilistic Mechanics & Structural Relia-*bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p396-421. Stable Forced Vibrations Near Unstable Positions, Michael

Zakrzhevsky, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p384-387.

Statistical Analysis of S-N Fatigue Data; Design Curve Based on Tolerance, C. L. Shen, P. H. Wirsching and G. T. Cashman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p470-473.

Statistics of Fractional Occupation Time for Nonlinear Sto-chastic Response, Armen Der Kiureghian and Chun-Ching Li, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p116-119.

Su. 1990), p116-119.
Stochastic Dynamics of Non-Linear Systems Excited by Parametric Delta Correlated Processes, Mario Di Paola and Antonina Pirrotta, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p930-933.

Stochastic Prediction and Control of Uncertain Nonlinear Dynamical Systems, R. Ghanem and M. Grigoriu, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), p277-280.

Stochastic Response of a Hysteretic System Under Nonsta-tionary Excitations, Ismail I. Orabi, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p392-395. System Dynamics and Modified Cumulant Neglect Closure Scheme United By Medicals and Caster Dev. Notates

Schemes, H. Uğur Köylüöğlu and Søren R. K. Nielsen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p380-383.

Thin-Walled Prestressed Concrete Members under Combined Loading, B. M. Luccioni, J. C. Reimundín and R. Danesi, ST Mar. 96, p291-297.

Nonpoint pollution
ANSWERS-2000: Runoff and Sediment Transport Model,
Faycal Bouraoui and Theo A. Dillaha, EE June 96,

Assessing Water Quality Impacts of Stormwater Runoff, G. Fred Lee and Anne Jones-Lee, (North American Water

rice Lee and Anne Sous-Eee, (vorm American water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3103-3108. BASINS—a GIS-linked Watershed Analysis and Modeling Tool, Gerald D. LaVeck, Marjoric C. Coombs and Marilyn Fonseca, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3629-3632.

BMP for Control of Agricultural Nonpoint Source Flow, E. K. O'Brien and J. C. Guitjens, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1489-1494.

Culvert Composite Sampler: A Cost-Effective Storm-Water Monitoring Device, Stephen J. Dowling and Brian W. Mar, WR July/Aug. 96, p280-286.

A Decision Making Approach for Stormwater Management Measures—A Case Example in the City of Waukesha, Wisconsin, James A. Bachhuber, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3981-3986. GIS Applications in Modern Stormwater Management, Charles G. Boehm, (North American Water and Environ-

ment Congress & Destructive Water. Chenchayya Batha-

la, ed., 1996), p3633-3638.

Immobilization of Metals and Solids Transported in Urban Pavement Runoff, John Sansalone, Steven Buchberger and Joseph Koran, (North American Water and Environ ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3115-3120.

Impact of Point and Nonpoint Discharges on the Water Quality of a Reach of the Red River of the North, Anil Peggerla and G. Padmanabhan, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2504-2509.

Lake/Reservoir Restoration Activities in Taiwan, Shaw I. Yu, Jan-Tai Kuo, Ching-Gung Wen, Shang-Lien Lo and Jen-Yang Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

Congress of Destructive water, Chemonya Emilian, ed., 1996), p4208-4213.

The Mamala Bay Study, Oahu, Hawaii: Introduction, Ger-ald T. Orlob, Camilla M. Saviz, Jerry R. Schubel and Rita R. Colwell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4101-4106.

Non-point Source Policies for Agricultural Drainage, Dennis W. Westcot, Joe Karkoski and Rudy Schnagl, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p875-880. Results of a GIS/HEC-1 Interface Module, Paul A. DeBar-

ry, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3194-3199.

Systematic Evaluation of Pollutant Removal by Urban Wet Detention Ponds, Jy S. Wu, Robert E. Holman and John R. Dorney, EE Nov. 96, p983-988.

The Treatment Train Detention Concept, Charles G. Boehm, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2270-2275.

Uncertainty in Comparative Analysis with Continuous Nonpoint Source Pollution Models, Dipmani Kumar and Conrad D. Heatwole, (North American Water and Envi-

Contact D. Freatwore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1705-1710.

Watershed Riparian Management and Its Benefits to a Eutrophic Lake, R. Bruce Williamson, Christine M. Smith and A. Bryce Cooper, WR Jan/Feb. 96, p24-32.

Nonstructural elements

Super-Element' to Represent the Behavior of Architectural Stud Partition Walls, Vicki L. Vance, H. Allison Smith and Luciana R. Barroso, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1106-1109.

Model to Incorporate Architectural Walls in Structural Analyses, H. Allison Smith and Vicki L. Vance, ST Apr.

96, p431-438.

NEHRP Provisions for 1994 for Nonstructural Compo nents, Richard M. Drake and Robert E. Bachman, AE Mar. 96, p26-31.

Nonuniform flow

An Analysis of Characteristics of Basset Force on Particles Accelerating in Arbitrary Flow Field, Shehua Huang, Liangjun Cheng and Wei Li, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p448-453.

onuniformity

Effects of Foundation Geometry on Bridge Pier Scour, Bruce W. Melville and Arved J. Raudkivi, HY Apr. 96, p203-209

Reducing Environmental Impacts through Non-Uniform Loading of Casks, N. Barrie McLeod, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p372-373.

Streambed Armoring, C. O. Chin, B. W. Melville and A. J. Raudkivi, HY Aug. 94, p899-918.

North Carolina

Channel Restoration Project Along Toby Creek, Dennis N. Jermeland, Daniel Billman and William R. Tingle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3521-3526.

North Sea

Wetland Restoration in Southern North Sea Coastal Areas: The Experience of Britain and The Netherlands, Henk Smit and John S. Pethick, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3740-3745.

The 1995 Flood in Southeastern Norway - Operational Forecasting, Warning, and Monitoring of a 200-year Flood, K. Repp, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2537.

ia, ed., 1990, p.251.
Concrete Pavements in Tunnels, J. S. Berg and P. M. Noss, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p911-922.

Evaluating Efficiency of Rock Blasting Using Data-Envelopment Analysis, James Odeck, TE Jan./Feb. 96,

p41-49

Hindcast Simulations of Ocean Currents in Norwegian Coastal Waters; Part 2: Summary of the Main Results, Eivind A. Martinsen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p391-403.

hindcast Simulations of Ocean Currents in the Norwegian Coastal Waters. Part 1: Model Set Up and Sensitivity Tests, Harald Engedahl, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p379-390.

Bright Studded Tire Research in Norway, Finland and Sweden, Eric Johnson, Tony Barter and David Sterley, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p676-687.

Nuclear energy

HPS: A Space Fission Power System Suitable for Near-Term, Low-Cost Lunar and Planetary Bases, Michael G. Houts, David I. Poston and William A. Ranken, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p973-983.

Nuclear Explosion Near Surface of Asteroids and Comets II. General Description of the Phenomenon, O. N. Shubin, V. Z. Nechai, V. N. Nogin, D. V. Petrov and V. A. Simonenko, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p74-80.

Nuclear fuel cycle

Analysis of Proliferation Risk for Taiwan's Spent Fuels, K. K. Li, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p489-491.

Design of an Advanced Fork System for Assembly Burnup Measurement, Ronald I. Ewing and Kevin D. Seager, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p340-341.

Evaluation of a Bi-Directional Aluminum Honeycomb Impact Limiter Design, Marvin J. Doman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p357-359.

Legal Weight Truck Cask Response to Regulatory Format Thermal Events, Part 1: Fuel Cladding, M. Greiner, R. J. Faulkner and Y. Jin, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p351-353.

Legal Weight Truck Cask Response to Regulatory Format Thermal Events, Part 2: Containment Seal, M. Greiner, Y. Jin and R. J. Faulkner, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

p354-356

Methodology to Group DOE Fuels for the Purpose of Re-pository Technical Acceptance, Robert Einziger, Ray Stout, Henry Loo and Scott Gladson, (High Level Radioactive Waste Management, Technical Program Commit-tee, 1996), p432-434.

Parametric Thermal Evaluations of Waste Package Emplacement, Robert H. Bahney, III and Thomas W. Doering. (High Level Radioactive Waste Management, Technical Program Committee, 1996), p434-447.

Risk Model Applied Backwards, Monica Maldonado, ET

Oct./Nov. 96, p1,7.

Spent Nuclear Fuel Dry Transfer System, Leroy Stewart and Stephen Agace, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

p471-473.
U.S. Light-Water Reactor Sport Fuel Inventory—Fissile Distribution, Ron C. Ashline and Charles W. Forsberg. (High Level Radioactive Waste Management, Technical Program Committee, 1996), p342-344.

Nuclear power plants

Building Codes and Nuclear Plants, Kenneth P. Buchert, CE Mar. 96, p28.

HPS: A Space Fission Power System Suitable for Near-Term, Low-Cost Lunar and Planetary Bases, Michael G. Houts, David I. Poston and William A. Ranken, (Engiw. Johnson, ed., 1996), p973-983.

Local Damage Assessment of Metal Barriers under Turbine Missile Impacts, Amde M. Amde, Amir Mirmiran and Thomas A. Walter, ST Jan. 96, p99-108.

Probabilistic Diagnosis of Seismic Design Load—To Har-monize Seismic Design Codes of Various Engineering Structures, Tsuyoshi Takada, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p190-193.

mircea D. Origonia, cu., 1997.

Framotely Controlled Salvage Machines, Vladimir Kemurdjian, Anatoly Osipov, Boris Safonov and Peter Astafurov, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p206-212.

Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996, 0-7844-0178-0, 248pp.

Saved by the Net, CE Sept. 96, p22.

Synthesis of Correlated and Vector-Valued Time Series Based on Random Vibration for Nuclear Piping, Yong Zhao and D. A. Gasparini, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p748-751.

Nuclear reactor containment

Structural Fragility Analysis Using Finite Element Computational Models, Dan M. Ghiocel, Paul R. Wilson, Gary G. Thomas and John D. Stevenson, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p18-21.

Nuclear reactor sites

Impacts of SNF Burnup Credit on the Shipment Capability of the GA-4 Cask, Amir S. Mobasheran, William Lake and John Richardson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p330-332.

Medical reaction Design of an Advanced Fork System for Assembly Burnup Measurement, Ronald I. Ewing and Kevin D. Seager, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p340-341.

Implementation of Variance Reduction Techniques Using Monte Carlo Stratified Sampling in the COMPROMIS Code Version 2, Emmanuel Ardillon, Patrice Pitner and Bernard Lapeyre, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p692-695.

goriu, ed., 1996), p692-695.

Probabilistic Fracture Mechanics of Nuclear Pressure Vessels, M. A. Khaleel and F. A. Simonen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p54-57.

Reliability of a Cast Duplex Stainless Steel Elbow by Using Probabilistic Fracture Mechanics, P. Hornet and P. Le Delliou, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p756-759.

Seismic Motion, Incoherence, Effects.

Seismic Motion Incoherency Effects on Dynamic Response, Dan M. Ghiocel, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p624-627.

U.S. Light-Water Reactor Spent Fuel Inventory—Fissile Distribution, Ron C. Ashline and Charles W. Forsberg, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p342-344.

Nuclear safety

450

Retrofitting a Nuclear Lab, CE Dec. 96, p12,13.

Safety Assessment of a Robotic System Handling Nuclear Material, Christopher B. Atcitty and David G. Robinson, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p255-261.

Nuclear wastes disposal Anaerobic Bacterial Quantitation of Yucca Mountain, Ne-vada Doe Site Samples, William W. Clarkson, Lee R. Krumholz and Joseph M. Sufita, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p39-40.

Analysis of Proliferation Risk for Taiwan's Spent Fuels, K. K. Li, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p489-491.

Application of GIS in Site Selection for Nuclear Waste Disppincation of GIS in Site Selection for Nuclear waste Dis-posal Facility, Grant Sheng, Isaac N. Luginawh and John Sorrell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p95-97.

Approach, Methods and Results of an Individual Elicitation for the Volcanism Expert Judgment Panel, Bruce M. Crowe, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p56-58.

An Assessment of Future Volcanic Hazard at Yucca Mountain, William R. Hackett, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Autotrophic and Heterotrophic Bacterial Diversity from Yucca Mountain, M. Khalil, D. L. Haldeman, A. Igbinovia, P. Castro, L. Ragatz and P. Amy, (High Level Radio-active Waste Management, Technical Program Committee, 1996), p9-11.

Current Status of Paleohydrologic Studies at Yucca Moun-tain and Vicinity, Nevada, John S. Stuckless, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p98-101.

Defining the Potential Repository Siting Block Yucca Mountain, Nevada, Robert W. Elayer and Richard M. Nolting, III, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p157-159

Dense Organic Liquids Reduce GA-4 Reactivity Margin, B. Snyder, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p333-335.

Discrete-Fracture Modeling of Thermal-Hydrological Processes at G-Tunnel and Yucca Mountain, John J. Nitao and Thomas A. Buscheck, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p117-118.

Distribution and Nutrient Limitations of Heterotrophic Bacteria from Yucca Mountain, D. L. Haldeman, L. Ragatz and P. S. Amy, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p30-32.

High Level Radioactive Waste Management, Sponsored by ASCE and the American Nuclear Society, Technical Program Committee, (Holly A. Dockery, chmn.), 1996, 0-7844-0169-1, 520pp.

Impacts of SNF Burnup Credit on the Shipment Capability of the GA-4 Cask, Amir S. Mobasheran, William Lake and John Richardson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p330-332.

In Situ Characterization of the Microbiota in Yucca Mountain Sediments, David B. Ringelberg, Julia O. Stair, David C. White and Larry H. Hersman, (High Level Radioactive Waste Management, Technical Program Company) mittee, 1996), p33-35.

Initial Studies to Assess Microbial Impacts on Nuclear Waste Disposal, J. M. Horn, Annemarie Meike, R. D. McCright and B. Economides, (High Level Radioactive Waste Management, Technical Program Committee,

Innovative Methods for Informing the Public—A Case Study, Stan Reid, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p507-

Intended Validation in the Swedish Program for Spent Nu-clear Fuel, Bjorn Cronhjort and Grant Sheng, (High Level Radioactive Waste Management, Technical Pro-

Levet Radioactive Waste Management, Technical Program Committee, 1996, p67-69.

Isotopic Systematics of Saline Waters at Aspö and Laxemar, Sweden, Bill Wallin and Zell Peterman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p41-42.

Lateral Diversion in the PTn Unit: Capillary-Barrier Analysis, Michael L. Wilson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p111-113.

Mechanical Properties Characterization of Asphalt Con-crete Barrier for Radioactive Nuclear Waste Vaults, Bercrete Barrier for Radioactive Nuclear Waste Vauits, Ber-nard A. Vallerga, Akharhusein A. Tayebali, Shmuel L. Weissman and Carl L. Monismith, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1288-1291 Microbial Studies in the Canadian Nuclear Fuel Waste Management Program, Simcha Stroes-Gascoyne, (High

Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p4-6.
Microbiological Influenced Corrosion (MIC) of Carbon
Steel Utilized in the Construction of Nuclear Waste Can-Steet Utilized the Constitution of National Waste Carristers, Dave Bergman, Pati Castro, Beth Pitonzo, Penny Amy and Denny Jones, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Modeling of Flow Through Fractured Tuff at Fran Ridge, Roger R. Eaton, Clifford K. Ho, Robert J. Glass, Michael J. Nicholl and Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p76-78

1990), p70-78.
Modelling of a Heater Experiment in a Saturated Granite with Thermoporoelastic Source Singularities, Emmanuel Detournay and Ilya Berchenko, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p44-67.
Modelling of Thermal-Hydrological-Mechanical Processes in a Discrete Joint, T. S. Nguyen, A. P. S. Selvadurai and P. Flavelle, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p66-63. Su, 1996), p60-63.

Nopal I Uranium Deposit: A Study of Radionuclide Migra-tion, Virgina Wong, Elizabeth Anthony and Philip Goodell, (High Level Radioactive Waste Management,

Goodell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p43-45.
Parametric Thermal Evaluations of Waste Package Emplacement, Robert H. Bahney, III and Thomas W. Doering, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p445-447.
Probabilistic Simulation of Geologic Waste Disposal Facilities Using the Repository Integration Program (RIP), Ian Miller and Rick Kossik, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed. 1996), p944-964. Roth, ed., 1996), p944-964.

A Program to Assess Microbial Impacts on Nuclear Waste Containment, Joanne Horn and Annemarie Meike, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p1-3.
Relative Humidity in the Near-Field Environment, Wunan
Lin, Jeffery J. Roberts and David Ruddle, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p128-129.

Results of the Probabilistic Volcanic Hazard Analysis Pro-ject, Robert R. Youngs, Kevin J. Coppersmith and Roseanne C. Perman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p61-63.

Salt-Saturated Concrete Strength and Permeability, T. W. Pfeifle, F. D. Hansen and M. K. Knowles, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p173-

Sensitivity Study of Waste Rollover Using Probabilistic Fi-nite Element Analysis, Arshad Alfoqaha, William Cofer and M. A. Khaleel, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p914-917.

Spent Nuclear Fuel Dry Transfer System, Leroy Stewart and Stephen Agace, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

p471-473

Survey of University Students' Knowledge and Views on Nuclear Waste Disposal and the Alternative Dispute Res-olution Process, Grant Sheng, Lenore Definer and Sonja Fiorini, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p510-512.

U.S. Light-Water Reactor Spent Fuel Inventory—Fissile Distribution, Ron C. Ashline and Charles W. Forsberg, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p342-344.

Uranium Dioxide Dissolution under Acidic Aqueous Conditions, S. A. Steward and E. T. Mones, (High Level Ra-dioactive Waste Management, Technical Program Com-mittee, 1996), p388-389.

Whither Nuclear Waste Disposal—A 50th Anniversary View, William W-L. Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1592-1596.

X-ray Radiography of Fracture Flow and Matrix Imbibi-tion, Jeffery J. Roberts and Wunan Lin, (High Level Radioactive Waste Management, Technical Program Com-

mittee, 1996), p89-91.

The Yucca Mountain Probabilistic Volcanic Hazard Analysis Project, Kevin J. Coppersmith, Roseanne C. Perman, Robert R. Youngs, Todd A. Crampton, Laurel A. DiSilvestro, Richard P. Smith, C. Allin Cornell, Peter A. Morris, Timothy Sullivan, Stephen T. Nelson and J. Carl Stepp, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p53-55.

"Design Control" and Scientific Investigations—Is There Any Linkage? Robert R. Richards, (High Level Radioac-tive Waste Management, Technical Program Committee, 1996), p208-210.

Nuclear Explosion Near Surface of Asteroids and Comets-II. General Description of the Phenomenon, O. N. Shu-bin, V. Z. Nechai, V. N. Nogin, D. V. Petrov and V. A. Simonenko, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p74-80.

Safety Analysis Requirements for Robotic Systems in DOE Nuclear Facilities, W. H. McCulloch, (Robotics for Chal-lenging Environments, Laura A. Demsetz, ed., 1996), p235-240.

Numerical analysis

Analysis of Structural Members Under Elevated Tempera-ture Conditions, K. W. Poh and I. D. Bennetts, ST Apr.

Application of Numerical Limit Analyses for Shallow Foundations on Clay, Andrew J. Whittle and Boonchai Ukritchon, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p132-135.

Constitutive Models for Concrete Penetration Analysis, Vladimir M. Gold, George C. Vradis and James C. Pear-son, EM Mar. 96, p230-238.

Dynamically Modified Linear Structures: Deterministic and Stochastic Response, Giuseppe Muscolino, EM Nov. 96, p1044-1051.

Exterior Reflections in Elliptic Harbor Wave Models, Bin-gyi Xu, Vijay Panchang and Zeki Demirbilek, WW May/June 96, p118-126.

A Finite Element Analysis of Mach Reflection by Using the Boussinesq Equation, Shoichiro Kato, Toshimitsu Takagi and Mutsuto Kawahara, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3440-3445.

Generalized Differential Quadrature Method for Buckling Analysis, H. Du, K. M. Liew and M. K. Lim, EM Feb.

96, p95-100.

Influence of Axial Stress and Dilatancy on Rock Tunnel Stability, Xiao-Dong Pan and Edwin T. Brown, GT Feb. 96, p139-146.

Interactive RANS/Laplace Method for Nonlinear Free Sur-face Flows, Hamn-Ching Chen and Sing-Kwan Lee, EM Feb. 96, p153-162.

Inverse Estimation of Parameters for an Estuarine Eutrophi-cation Model, J. Shen and A. Y. Kuo, EE Nov. 96,

p1031-1040.

Near-Drift Thermal Analysis Including Combined Modes of Conduction, Convection, and Radiation, Clifford K. Ho and Nicholas D. Francis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p448-450.

Negative Skin Friction on Piles in Layered Soil Deposits, K. S. Wong and C. I. Teh, GT June 95, p457-465.

New Approach to Roadway Performance Indices, Chiu Liu and Robert Herman, TE Sept./Oct. 96, p329-336.

New Metric Guide Stresses "Preferred Numbers" to Aid in Building Construction, NE June 96, p10.

Nonlinear Control Strategies for Limiting Dynamic Response Extremes, D. P. Tomasula, B. F. Spencer, Jr. and M. K. Sain, EM Mar. 96, p218-229.

Nonsteady-State Drawdowns in Two Coupled Aquifers, Louis H. Motz, IR Jan./Feb. 96, p19-23.

Numerical Analyses of Reinforced Underground Openings Subjected to Seismic Loadings, Fei Duan and Saeed Bonabian, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p412-414.

Numerical Analysis of Damage in Lattices and Consequences on Continuum Modelling, Gilles Pijaudier-Cabot, A. Delaplace and S. Roux, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1034-1037.

Numerical Simulation of Bridge Abutment Scour Develop-ment, Xibing Dou, Yafei Jia and Sam S. Y. Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3716-3721.

On Efficiency and Accuracy in Simulations of Granular-type Systems, Yi Sun and Oleg Vinogradov, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p96-99.

On the Numerical Treatment of Vorticity Diffusion from a Boundary Element in the Discrete Vortex Element Method, Fusen He and Tsung-chow Su, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p844-847.

Predicted and Observed Cyclic Performance of Piles in Calcareous Sand, Riadh H. Al-Douri and Harry G. Poulos, GT Jan. 95, p1-16.

Site and Size Optimization of Contaminant Sources in Surface Water Systems, Nikolaos D. Katopodes and Michael Piasecki, EE Oct. 96, p917-923.

Some Phenomenological Aspects of High Performance Concretes, and their Consequences for Numerical Analysis, Ravindra Gettu, Ignacio Carol and Pere C. Prat, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p506-517.

Divide Strain Processing Processing Processing Strain Processing Processing Processing Processing P

Unsteady Finite-Analytic Method for Solute Transport in Ground-Water Flow, Whey-Fone Tsai and Ching-Jen Chen, EM Feb. 95, p230-243.

Anticyclonic Upper Layer Residual Circulation and Estuarine Circulation in Osaka Bay, Keji Nakatsuji and Tateki Fujiwara. (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p128-142. Model Formulations for Numerical Creep Calculations for Concrete, Akihiko Kawano and Robert F. Warner, ST

Concrete, Akthiko Kawano and Robert F. Warner, ST Mar. 96, p284-290.

Numerical Methods for Modeling Water Quality in Distri-bution Systems: A Comparison, Lewis A. Rossman and Paul F. Boulos, WR Mar./Apr. 96, p137-146.

Numerical Methods in Structural Mechanics, Co-published with Thomas Telford, U.K., Zdenék Bittnar and Jiří Sejnoha, 1996, 0-7844-0170-5, 422pp.

Sediment Transport Mechanism Over Rippled Sand Beds, S. G. Sajjadi, J. N. Aldridge and D. J. Nicholas, (Estua-rine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p669-680.

Selection of Parameter-Estimation Method for LP3 Distribution, Babak Naghavi and Fang Xin Yu, IR Jan./Feb.

Selection of Sediment Transport Relations Part III: Numeri-cal Ranking of Sediment Transport Relations, David T. Williams and Pierre Y. Julien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2843-2848.

Numerical models

30 Flow Structures - From Laboratory to Field Applica-tions, P. Mewis and K.-P. Holz, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3446-3451.

An Analysis of Strong-Discontinuities in Inelastic Solids with Applications to the Finite Element Simulation of Strain Localization Problems, F. Armero and K. Gariki-pati, (Engineering Mechanics, Y. K. Lin and T. C. Su,

Su, 1996), p1171-1174.

St., 1990), p.1171-114. Application of High-Resolution Schemes to Free Surface Flows in Irregular Channels, Ke-Qiang Zheng and Eddy J. Langendoen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p201-206.

Applications of Predictive Numerical Simulations Using Calibrated Macroscopic Traffic Flow Models, Ronald Kates, Marcus Hoops and Hartmut Keller, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p394-397.

Benchmarking of a Total-System Performance Assessment Model for WIPP, Joseph E. Hachey and Dawn A. Shut-tle, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p322-324.

cal Program Committee, 1990), p322-324.
California Probable Maximum Precipitation, John L.
Vogel. (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p55-56.
Can Numerical Estuarine Models be Driven at the Estuary
Mouth, B. H. Johnson, H. V. Wang and K. W. Kim, (Estuarine and Coastal Modeling, Malcolm L. Spaulding
and Ralph T. Cheng, 1996), p255-267.
Catastrophic Riverine Flooding: Rapid Evaluation with a

Catastrophic Riverine Flooding: Rapid Evaluation with a Robust Numerical Model, David C. Froehlich and Michael A. Ports, (Natural Disaster Reduction, George W.

Changes in Water Table Elevation at Yucca Mountain in Response to Seismic Events, Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p102-104.

Chaotic Advection in a Bioengineering System, Ahmet C. Omurtag, Victor Stickel and Rene Chevray, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p450-453.

CHEMFLO Modeling of Aquifer Bioremediation in Va-dose Zone, Avdhesh K. Tyagi, (North American Water and Environment Congress & Destructive Water, Chen-

and Environment Congress & Destructive Water, Cher-chayya Bathala, ed., 1996), p2516-2521. Coastal Ocean Model Performance in Eastern Australia, William L. Peirson and Ian P. King, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p632-643.

A Comparison Between Linear Stability and Direct Numerical Simulation of Waves in a Trailing Vortex, Saad Ragab, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1058-1061.

Computational Modeling of Early Age HPC, Rob ter Steeg, Jan Rots and Ton van den Boogaard, (Worldwide Ad-vances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p542-553. Critical State Model at Finite Strains, Ronaldo I. Borja and Claudio Tamagnini, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p148-151.

and 1. C. Su, 1990), p148-151.

Dependence of Water Quality and Fish Habitat on Lake
Morphometry and Meteorology. Midhat Hondzo and
Heinz G. Stefan, WR Sept./Oct. 96, p364-373.

Discussion of Some Grid-Independence Issues in the Context of x—∈ and x—6 Models of Turbulence, Nabil Elkouh. Simone Sebben and B. Rabi Baliga, (Engineering
Mechanics, Y. K. Lin and T. C. Su, 1996), p297-300.

mechanics, T. K. Lin and T. C. Su, 1996), p297-300.
The DOB Groundwater Modeling System: A Conceptual
Model Approach, David R. Richards and Norman L.
Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,
1996), p2589-2594.

Dynamic Responses of Shallow-Buried Flexible Plates Subjected to Impact Loading, Hung-Liang (Roger) Chen and Shen-En Chen, ST Jan. 96, p55-60.

and Shen-En Chen, ST Jan. 90, p.35-60.

Dynamics of River Ice Jam Release, Hung Tao Shen and Shunan Lu, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p.594-605.

Editor's Note, Thomas L. Theis, EE Sept. 90, p.778.

Editor's Note, Thomas L. Theis, EE Nov. 96, p.956.

Effect of Acceleration on Bottom Shear Stress in Tidal Es-

tuaries, A. Y. Kuo, J. Shen and J. M. Hamrick, WW Mar/Apr. 96, p75-83. Effects of Vapor Extraction on Contaminant Flux to Atmosphere and Ground Water, Tjalfe G. Poulsen, Joel W. Massmann and Per Moldrup, EE Aug. 96, p700-706.

Examination of Exploration Options of the Yucca Mountain CHn Unit, Kurt E. Suchsland, Jerry L. King and Richard D. Memory, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p300-302.

Experimental and Numerical Studies of Shear Layers in Granular Shear Cell, Jan-Olov Aidanpää, Hayley H. Shen and Ram B. Gupta, EM Mar. 96, p187-196.

Experimental Verifications of H_a and Sliding Mode Control for Seismically Excited Buildings, J. N. Yang, J. C. Wu, A. M. Reinhorn, M. Riley, W. E. Schmitendorf and F. Jabbari, ST Jan. 96, p69-75.

Finite Amplitude Shear Wave Instabilities, H. Tuba Özkan and James T. Kirby, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p465-476. Fire Resistance of Circular Steel Columns Filled with Fiber-Reinforced Concrete, V. K. R. Kodur and T. T.

Lie, ST July 96, p776-782.

Lie, ST July 96, p716-782.
Flow Over Vortex Ripples: Models and Experiments, Lewis A. W., E. Hitching, G. Perrier, E. Asp Hansen, H. Earnshaw, K. Eidsvik, C. Greated, M. Sumer and A. Temperville, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996, p686-697.
Flow through Vertical Barrier Screens - A Numerical Model, M. E. Allen, M. P. Cherian and L. J. Weber, (Mosth American Water, and Europoment Courses & Courses & Price Pric

(North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Fuzzy Arithmetic for Ecological Risk Management, Jacques Ganoulis, Iraklis Bimbas, Lucien Duckstein and Istvan Bogardi, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p401-415.

Hindcast Simulations of Ocean Currents in Norwegian Coastal Waters; Part 2: Summary of the Main Results, Eivind A. Martinsen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p391-403.

Hindsight on River Ice Jam Stability, Spyros Beltaos, CR Sept. 96, p122-133.

Ice Jam Mitigation Using Setback Dykes: Coldwater River at Merritt, B.C. Spyros Beltaos and Paul F. Doyle, CR Dec. 96, p190-206.

Implementation of Runtime Visualization for Tough2, H.
Xin Yang and Srikanta Mishra, (High Level Radioactive
Waste Management, Technical Program Committee, 1996), p308-309.

Improving Robustness of Algorithms to Implement HiSS models in FEM, G. W. Wathugala and S. Pal, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p144-147. The Influence of Turbulence Closure Strategy on Numerical Modeling of Shallow Water Tides, Roger R. Grenier, Jr. and Richard A. Luettich, Jr., (Estuarine and Coastal Modeling, Malcolm I. Spaulding and Palph T. Chang Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p143-155.

Intracrystalline Diffusion in Clinoptilolite: Implications for Radionuclide Isolation, Sarah K. Roberts, Brian E. Viani and Douglas Phinney, (High Level Radioactive Waste Management, Technical Program Committee, 1996).

Investigation into the Possibilities of Using Bristol Channel Models for Tidal Predictions, M. Amin and R. A. Flather, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p41-52.

Laboratory Experiments on Density Current Over a Sloping Bottom in Rotating Fluid, Dieter Etling and Gabriel Cha-

bottom in Notating Final, Sector Caring and Gatheric Arbert d'Hieres, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p923-926.

Lanfill Site Evaluation and Application of MODFLOW to simulate Hydraulically Conductive Zones in Bedrock Assimulate Hydraulically Conductive Zones in Bedrock Assimulate. sociated with Diabase Dikes in North Carolina, M. A. Ponti, Jr., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996),

Large Strain Finite-Element Analysis of Snow, Günther Meschke, Changhong Liu and Herbert A. Mang, EM July 96, p591-602.

Longshore Currents Over Barred Beaches, A. J. H. M. Reniers, E. B. Thornton and T. C. Lippmann, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p413-424.
Longshore Nonuniformities of Nearshore Currents, F. E. Sancho, I. A. Svendsen, A. R. Van Dongeren and U. Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p425-436.
Model of Beach Profile Change Under Random Waves, Magnus Larson, WW July/Aug. 96, p172-181.
Modeling Coastal Ground-Water Response to Beach Dewatering, L. Li, D. A. Barry and C. B. Pattiaratchi, WW Nov/Dec. 96, p73-280.

Nov./Dec. 96, p273-280.

Modeling Ground-Water Remediation at an Oil Refinery, Ko-Hui Liu and Greg McNulty, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment d Remediation, Lakshmi N. Reddi, ed., 1996), p824-

Modeling Ice-Cover Melting Using a Variable Heat Trans-fer Coefficient, Semaan Sarraf and Xiu Tao Zhang, EM

Oct. 96, p930-938.

Modeling of Flow Through Fractured Tuff at Fran Ridge, Roger R. Eaton, Clifford K. Ho, Robert J. Glass, Michael J. Nicholl and Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p76-78.

Modeling of Surface Water Pumps in TVA Reservoirs, Boualem Hadjerioua, Mark H. Mobley, Gary E. Hauser and W. Gary Brock, (North American Water and Envinent Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3188-3193.

Modeling the Impact of Uncertainty in Spatial Variability of Estuarine Boundary Conditions, B. H. Johnson and K. W. Kim, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2731-2736.

Modeling the Periodic Stratification and Gravitational Circulation in San Francisco Bay, California, Ralph T. Cheng and Vincenzo Casulli, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p240-254.

1996), p240-254.
Modeling Time- and Depth-Varying Currents at Supertank, Jane McKee Smith and Ib A. Svendsen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p245-256.
Modelling of Hydro- and Lithodynamic Processes in Kollobrzeg Region, Leonard Gajewski, Elżbieta Zawadzka, Juliusz Gajewski and Andrzej Lewandowski, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler. ed. 1996). 9891-902. Zeidler, ed., 1996), p891-902.

Morphological Impact Assessment of Artificial Islands for the Øresund Link Between Denmark and Sweden, Karsten Mangor, Andrew M. Driscoll, Ida Brøker and Ann Skou, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p939-950.

Multicomponent NAPL Composition Dynamics and Risk, Catherine A. Peters, Paula A. Labieniec and Christopher

D. Knightes, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p681-692. Nested Three-Dimensional Hydrodynamic Modeling of the Delaware Estuary, John S. Ramsey, Robert P. Hamilton, Jr. and David G. Aubrey, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p53-65.

p33-65.
New Jersey Nearshore Hypoxia During the Summer 1976, Ross W. Hall and Mark S. Dortch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p608-617.
Nonequilibrium Thermodynamical Model for Spent Fuel Dissolution Rate, Ray B. Stout, (High Level Radioactive Waste Management, Technical Program Committee, 10066-303, 2056. 1996), p393-395.

Numerical Model for On-Offshore Sediment Transport with Moving Boundaries, Cheol-Eung Lee, Moo-Hyun Kim and Billy L. Edge, WW Mar/Apr. 96, p84-92.

Numerical Modeling for Saturated-Zone Groundwater Travel Time Analysis at Yucca Mountain, Bill W. Arnold and George E. Barr, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Numerical Modeling for Sediment-Pass-Through Reservoirs, Howard H. Chang, Larry L. Harrison, Wing Lee and Scott Tu, HY July 96, p381-388.

and Scott 10, H7 July 96, p361-388. Numerical Modeling of Anhui Debris Flow, Guoqi Han and Deguan Wang, HY May 96, p262-265. Numerical Modeling of Biologically Reactive Transport Near Nutrient Injection Well, T. Prabhakar Clement, Brian S. Hooker and Rodney S. Skeen, EE Sept. 96, p833-839

Numerical Modeling of Deep Well Injection Near a Fault, Peikang Jin and Michael E. Barber, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J.

S. Roth, ed., 1996), p912-926.
Numerical Modeling of Flows in Ultraviolet Disinfection Channels, D. A. Lyn, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3005-3009.

Battala, ed., 1990, p.5003-5009.
Numerical Modeling of Turbidity Currents, Scott F. Bradford and Nikolaos D. Katopodes, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng,

1996), p404-415.

Numerical Modeling of Water Flow over Porous Media, Christopher Y. Choi, Peter M. Waller and Fukumura Kazunari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2433-2438.

1990, p2435-2436.
Numerical Modeling of Wind-Structure Interactions, Dahai Yu and Ahsan Kareem, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1005-1012.

Numerical Modeling on the Ofunato Bay Ecosystem In-cluding the Oyster Farming, Tomohiko Terasawa, Kisa-buro Nakata and Koichi Taguchi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p530-541.

Numerical Simulation of 1993 Southwest Hokkaido Earth quake Tsunami around Okushiri Island, Shinji Sato, WW

young Fundament and Managament and Sandy Sept. Voct. 96, p.209-215.

Numerical Simulation of DNAPL Emplacement and Redistribution in Heterogeneous Porous Media at the M Area of the Savannah River Site, Rex A. Hodges and Ron W. Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Engineering Conference on Page 1 Jacob face Environment: Assessment and Remediation, Laksh-

nic Environment: Assessment and Remediation, Lakshmin N. Reddi, ed., 1996), p619-627.

Numerical Simulation of Field Air Sparging Operations, Andrew G. Larson and Ronald W. Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p551-562.

Numerical Simulation of Flow Field Around Buildings, Numerical Simulation of Flow Field Around Buildings, Da-hai Yu and Ahsan Kareem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p490-493.Numerical Simulation of Hydraulic Jump, Anand Raman and M. Hanif Chaudhry, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4052-4057.Numerical Simulation of Internal Kelvin Waves with Z.

Numerical Simulation of Internal Kelvin Waves with Zlevel and Sigma Level Models, David J. Schwab, Dmitry Beletsky, William P. O'Connor and David E. Dietrich, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p298-312.

Numerical Simulation of Permanent Deformation in Flexi-ble Pavement Systems Subjected to Moving Loads, David J. Kirkner, Weixin Shen, Michael I. Hammons and Donald M. Smith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p430-433.

Numerical Simulation of Unsteady Flow at Po River Delta, D. Ambrosi, S. Corti, V. Pennati and F. Saleri, HY Dec. 96, p735-743.

Numerical Simulation of Widening and Bed Deformation of Straight Sand-Bed Rivers. I: Model Development, Stephen E. Darby and Colin R. Thorne, HY Apr. 96,

Numerical Simulation of Widening and Bed Deformation of Straight Sand-Bed Rivers. II: Model Evaluation, Stephen E. Darby, Colin R. Thorne and Andrew Simon, HY Apr. 96, p194-202.

Parallel Performance of a Meshless Method for Wind Engineering Simulations, George Turkiyyah, Dorothy Reed, Cecile Viozat and Calvin Lin, (Analysis and Computa-tion, Franklin Y. Cheng, ed., 1996), p177-187.

Physical and Numerical Study of Wave Induced Currents in Wave Basins of Various Sizes, Peyman Badiei and J. William Kamphuis, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p377-388.

Practical Modeling of Hurricane Surface Wind Fields, Edward F. Thompson and Vincent J. Cardone, WW July/ Aug. 96, p195-205.

Aug. 30, p195-2010.

Aug. 30, p195-2010.

Granics through Soil Columns using Distributed Mass-Transfer Rates, Teresa B. Culver and Stephen P. Hallisey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2005-2010.

Preliminary Validation of the MAC3D Numerical Flow Model, Robert S. Bernard, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3434-3439.

cnayya Bathala, ed., 1996), p3434-3439.
A Quantitative Skill Assessment of Numerical Hydrodynamic Models of Coastal Currents, Timothy R. Keen and Scott M. Glenn, (Estuarine and Coastal Modeling, Malcolim L. Spaulding and Ralph T. Cheng, 1996), p26-40.
Reducing Model Study Time and Improving Reliability, Ralph Finch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4341-4346.
River Hydraulics, U. S. Army Corps of Engineer, 1906, 6.

River Hydraulics, U.S. Army Corps of Engineers, 1996, 0-7844-0159-4, 145pp.

Robust Stabilization of Systems with Time Delays, Mohammad Hosseini and Firdaus Udwadia, (Probabilis-tic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p438-441.

Dec. and wince a D. Original, ed., 1995, pp.53-441.
The Role of Capillary Pressure Curve Selection in Modeling LNAPL Transport in the Vadose Zone, Jason L. Buesing and Marina Pantazidou, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p490-601.

The Role of Macroflocs in Estuarine Sediment Dynamics and its Numerical Modeling, A. Malcherek and W. Zielke, (Estuarine and Coastal Modeling, Malcoln L. Spaulding and Ralph T. Cheng, 1996), p695-706.

SEAM2D: A Numerical Model for Two-Dimensional Solution Two-Dimension Two-Dimension Two-Dimensi

EAMALD: A Numerical Model for Iwo-Dimensional SOL the Transport and Sequential Electron Acceptor-Based Bioremediation of LNAPL-Contaminated Aquifers, Dan W. Waddill, Mark A. Widdowson and J. Steven Brauner, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface En-vironment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p466-477.

Sediment Transport in a Thermally Stratified Bay, Kai-Ping Wang, Zenitha Chroneer and Wilbert Lick, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p466-477.

Simulation of Dune and Nourished Berm Erosion During Storm Surges, Jürgen Newe and Hans-H. Dette, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p850-861.

Simulation of Pulsatile Flow Past a St. Jude Valve, L. Niu, D. Bluestein and R. T. Schoephoerster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p330-333.

Simulation of Three-Dimensional, Non-Hydrostatic Free-Surface Flows for Estuaries and Coastal Seas, Vincenzo Casulli and Stelling Guus S., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p1-12.

1990, p.1-12.
Small-Strain Response of Random Arrays of Spheres Using Discrete Element Method, Tang-Tat Ng and Emmanuel Petrakis, EM Mar. 96, p.239-244.
South Carolina Coastal Erosion Study: Inlet Morphodynamics and Sediment Transport, P. A. Work, W. E. Rogers and E. J. Hayter, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1047-1058

Surfactant-Enhanced Extraction and Biodegradation of a Non-Aqueous Phase Contaminant in Soil, Satishkumar Non-Aqueous Finse Contaminant in Soin, Satissumin, Santharam, Larry Eugene Erickson and Liang-tseng Fan, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p419-430.

A System Approach for Identifying and Improving Hydrau-lic Numerical Modeling Reliability, Bernard B. Hsieh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

p2725-2730.

Three-Dimensional Numerical Model for Fish Bypas Studies, E. A. Meselhe, A. J. Odgaard and V. C. Patal, (North American Water and Environment Congress & Destructive Water, Chenchavva Bathala, ed., 1996), p159-164.

Three-Dimensional Numerical Simulation of Soil Vapor Extraction, Albert T. Yeung and Hui-Tsung Hsu, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi,

ed., 1996), p442-453.

Three-Dimensional Tidal Currents and Water Quality in Stratified Omura Bay, Tadashi Fukumoto, Akihide Tada, Takehiro Nakamura and Hiroyoshi Togashi, (Estuarine and Coassal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p707-721.

Turbulence Model for Depth-Averaged Flows in Naviga-tion Installations, Hector R. Bravo and Forrest M. Holly,

Jr., HY Dec. 96, p718-727.

Turbulent Line Momentum Puffs, Joseph H. W. Lee, Wolfgang Rodi and C. F. Wong, EM Jan. 96, p19-29.

Two-Dimensional Hydraulics of Recirculating Groun Water Remediation Wells in Unconfined Aquifers, W. M. Stallard, K. C. Wu, N. Shi and M. Yavuz Corapcioglu, EE Aug. 96, p692-699.

Ultimate Analysis of Monolithic and Segmental Externally Prestressed Concrete Bridges, Gonzalo Ramos and Angel C. Aparicio, BE Feb. 96, p10-17.

Validation of a 3-D Numerical Model of LV Ejection, Tong Ding and Richard T. Schoephoerster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p322-325.

Validation of Numerical Model for Wind Waves and Swell in Harbors, Edward F. Thompson, H. S. Chen and Lori L. Hadley, WW Sept./Oct. 96, p245-257.

Velocity Distribution in Compound Channel Flows by Numerical Modeling, Giuseppe Pezzinga, HY Oct. 94, p1176-1198

Verification of a 3D Flow Model Using Laboratory Data, Yafei Jia and Sam S. Y. Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3458-3463.

Waves on a 1:100 Slope: Experiments and Numerical Models, G. Liberatore, M. Petti, M. Drago and M. Sclavo, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p355-365.

Nutrient loading

Nuclear Rodaing the Effect of Reduced Nitrogen Loading on Water Quality, Y. Peter Sheng, Eduardo A. Yassuda and Changlu Yang, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p644-658.

Nutrients

Cold Temperature Nutrient Removal from Wastewater, Jan A. Oleszkiewicz and Shahnaz Danesh, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p533-544.

Distribution and Nutrient Limitations of Heterotrophic Bacteria from Yucca Mountain, D. L. Haldeman, L. Ragatz and P. S. Amy, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p30-32.

ment, Technical Program Committee, 1996), p.30-32.

Hydraulic and Engineering Considerations in Designing
Constructed Treatment Wetlands for a Lake Restoration,
C. Charles Tai, Donthamsetti V. Rao and Jonathan Poline
kas, (North American Water and Environment Congress
& Destructive Water, Chenchayya Bathala, ed., 1996), p257-262

merical Modeling on the Ofunato Bay Ecosystem Including the Oyster Farming, Tomohiko Terasawa, Kisa-buro Nakata and Koichi Taguchi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p530-541.

Watershed Riparian Management and Its Benefits to a Eu-trophic Lake, R. Bruce Williamson, Christine M. Smith and A. Bryce Cooper, WR Jan./Feb. 96, p24-32.

Nylon fibers

(Syun noers)
Evaluation of Bond Strength with Polypropylene Fiber Reinforced Concrete, R. C. Zellers, V. Ramakrishnan, V. N. Rajpathak and S. Yu, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p123-132.

Oblituaries
Anton, Public-Works Engineer, Dies at 59, CE Apr. 96, p79. ASCE's Texas Section Loses Two of Its Past Presidents,

CE July 96, p72. Austin Brant, Retired Chairman of TAMS, Dies at 66, NE

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Basil Wilson, Noted Oceanographic Engineer, Was South Africa Native, NE May 96, p15. Dan Pletta, Prominent Engineering Educator, Dies at 92,

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Flora Wang, Noted Hydrologist, Was Louisiana State Pro-fessor, NE Oct. 96, p6.

Gene McMaster, Seattle Consultant, Was ASCE National

Officer, NE Apr. 96, p7. Grant Mickle Dies; Held Top Highway Posts, NE Feb. 96,

p14. Irving Amron, Civil Engineer Who Was Former ASCE

Staff Editor, Dies at 78, NE July 96, p15. James Ogilvie, Prominent Water-Resources Engineer, Dies at 84, NE Feb. 96, p14.

John Scoville, Killed in Croatia Plane Crash, Headed Harza Engineering in Chicago, NE May 96, p15. Louis Berger, Who Built Large Firm, Dies at 82, CE Oct. 96, p74.

Myron Goldsmith, Structural Engineer, Architect, Dies at 77, CE Oct. 96, p78.

Percy Michener, Engineer of Chesapeake Bridges, Dies at 92, NE Apr. 96, p7.

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p75-76. Rita Robison, An Engineering Writer for CE, Dies at 70, CE Oct. 96, p76,78.

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Warren Bellows, ASCE Life Member, Headed Houston

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William Claire, 84, Editor of ASCE's Urban Planning Guide, NE July 96, p15.

Object-oriented languages

3-D Graphical Simulation for Temporary Facility Planning using Object-Oriented Building Product Model, Kenji Ito, Yuji Kano, Jun Ueda and Shinichi Setoguchi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p49-55.

Addressing Current Issues in Structural Design Software, Julia D. Biedermann, CP Oct. 96, p286-294.

Computerized Tool for Hierarchical Simulation Modeling, Anil Sawhney and Simaan M. AbouRizk, CP Apr. 96, p115-124.

DBMS Implementation of a Linear Referencing Model, Nancy K. Wiegand, Teresa M. Adams and Alan P. Vonderohe, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p179-185.

Finite-Element Graphic Objects in C++, Jianing Ju and M. U. Hosain, CP July 96, p258-260. Frameview: Object-Oriented Visualization System for Frame Analysis, Sheloney Moni and Donald W. White, CP Oct. 96, p276-285.

The HEC NexGen Software Development Project, Darryl

W. Davis, (North American Water and Environme Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3770-3775. A Hybrid Approach to Integration in Construction, E. T. Thompson, J. H. M. Tah and R. Howes, (Computing in

Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p417-423.

A Knowledge Based Information Model for Components in the Process Industry, James Andrew Arnold and Paul Teicholz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p586-592.

Knowledge-Based Parametric Design using JSpace, Par-manand V. Dharwadkar and Alton B. Cleveland, Jr., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p70-76.

Mapping the Future, CE July 96, p18-19.

Multidisciplinary Product Modeling of Buildings, W. P. S. Dias, CP Jan. 96, p78-86.

Multimedia Development Software: Object-Oriented Inter-face-Based Simulation, Hossam El-Bibany, CP Oct. 96,

A New Software Architecture for Finite Element Analysis, Graham Archer, Christopher Thewalt and Gregory L. Fenves, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p683-689.

The Next Generation of Structural Engineering Automation Systems, Song Fong Jan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p494-500.

bject Orientation in Hydraulic Modeling Architectures, D. P. Solomatine, CP Apr. 96, p125-135.

Object-Oriented Analysis of South Florida Hydrologic Sys-tems, Todd S. Tisdale, CP Oct. 96, p318-326.

Schol, Todale, CP Oct. 96, p318-326.
Object-Oriented Construction Information Framework for Construction Management, Sangyoon Chin, Annette L. Stumpf and Liang Y. Liu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p786-792.

Parametric Estimating: An Object-Oriented Approach, Irtishad U. Ahmad and Praveen K. Ommi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p254-260.

Project Object, Richard M. Shane, Edith A. Zagona, Dave McIntosh, Terrance J. Fulp and H. Morgan Goranflo, CE

Technology Has Bright Future, Darryl W. Davis, CE May 96, p26-27.

Use of OMT in a Transport Human Engineering Prospect, T. Bellet and H. Tattegrain-Veste, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p363-367.

Objectives

Society's Board of Direction Approves FY 1997 Budget; ASCE Now Poised to Move Ahead on Strategic Plan, NE Sept. 96, p1,5.

Top 10 Reasons to Love Your Mission Statement, ME Nov./Dec. 96, p11.

Observation wells

Using Cavity Well to Determine Aquifer Thickness and Constants, Mohammad Saleem, IR May/June 94, p504-

Occupancy

Control of Floor Vibrations, Linda Morley Hanagan, Cheryl Rottmann and Thomas M. Murray, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p428-

Design Live Loads for Crowds in Motion, A. Ebrahimpour and R. L. Sack, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p420-427.

Measuring and Modeling Dynamic Loads Imposed by Moving Crowds, A. Ebrahimpour, A. Hamam, R. L. Sack and W. N. Patten, ST Dec. 96, p1468-1474.

Minimizing Floor Vibrations from Occupant Activities, Sarah E. Mouring and Bruce R. Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p405-

Reliability of Code Provisions for Wind-Induced Discom-fort, Rwey-Hua Cherng, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p494-497.

Structural Serviceability Review and Standard Implementation, Bruce Ellingwood, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p436-443.

Occupational health

Changes in OSHA in the Last 25 Years, Satish Mohan, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p93-112.

Occupational safety

Changes in OSHA in the Last 25 Years, Satish Mohan, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p93-112.

Identifying OSHA Paragraphs of Particular Interest, Jimmie Hinze and Katherine Bren, CO Mar. 96, p98-100.

Occupational Hazards Scheme of Social Insurance in Saudi Arabia: Overview, M. Osama Jannadi, ME Mar./Apr. 96, p55-57.

Occupational Safety and Health Administration

Changes in OSHA in the Last 25 Years, Satish Mohan, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p93-112.

Future Changes/Improvements in Construction Safety, Enno "Ed" Koehn and Mahendar R. Surabhi, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p121-128.

OSHA May Use Administrative Subpoena, CE Dec. 96, p24

OSHA Safety Regulations, CE Nov. 96, p28.

Ocean bottom

Laboratory Experiments on Density Current Over a Sloping Bottom in Rotating Fluid, Dieter Etling and Gabriel Cha-bert d'Hieres, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p923-926.

Statistical Analyses of Acoustical Wave Velocity in Porous Seafloor, M. Badiey, A. H-D. Cheng and Y. Mu, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

Undersea Engineering Feat, CE Oct. 96, p12.

Visual Mosaicking of the Ocean Floor and its Relation to Three-Dimensional Occlusions, Sanjay Tiwari, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p29-35.

Ocean disposal

The Balanced Indigenous Population (BIP) and Statistical Process Control (SPC) in Marine Pollution Ecology, George Robertson, Mike Mengel, Don Maurer and Irwin Haydock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1431-1436. Biological Serendipity from an Ocean Outfall Maintenance Inspection, Tom Gerlinger, George Robertson and Don Maurer, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2050-2055.

Emergency Repair of An Ocean Outfall, Gail Lynch, John Linder and Robert Ooten, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2039-2043.

External Inspection of an Ocean Outfall, Mike Heinz, Don

External Inspection of an Ocean Outfall, Mike Heinz, Don Siverts and Bob Ooten, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2056-2059.
Identifying Potential Trophic Relationships and Bioaccumulation Pathways Between Fish and Invertebrates, Mike Moore, Don Maurer, George Robertson, Hai Nguyen and Tom Gerlinger, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1699-1704.

The South Bay Ocean Outfall, Frank X. Collins, Gregory W. McBain, Jon Y. Kaneshiro, Luciano Meiorin and Larry Stout, North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2044-2049.

Ocean engineering

Basil Wilson, Noted Oceanographic Engineer, Was South

Africa Native, NE May 96, p15

Ocean Environment Contours for Structural Response Analysis and Experiment Design, Steven R. Winterstein, Todd C. Ude, Paolo Bazzurro and C. Allin Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p592-595.

Reliability of Ocean Structure Using Spectrum-Consistent Excitation, Yunshen Zhou, Zhikun Hou, Mikhail F. Dimentberg and Mohammad Noori, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed.

chanics & Structural Retiability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), 9982-985.
Stochastic Integral/Calculus for Non-Gaussian Delta-Correlated Processes, Sau-Lon James Hu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p246-249.

Tunneling Under Pressure, Stephen J. Navin, Jon Y. Kaneshiro, Larry J. Stout and Gregory E. Korbin, CE Feb. 96, p64-67

Undersea Engineering Feat, CE Oct. 96, p12.

Ocean environments

Environmental Fluid Mechanics — A Review of Some Recent Results, Robert L. Street, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p30-32.

Undersea Engineering Feat, CE Oct. 96, p12.

Wave Climate Variability in Southern California, Richard Seymour, WW July/Aug. 96, p182-186.
With Respect to Coasts, Darryl Hatheway, CE Dec. 96,

p29-30.

Ocean resources

Project Blue Revolution, Patrick K. Takahashi, EY Dec. 96,

Ocean thermal energy conversion Composite Holds Back Seawater at 13 Fathoms, CE June 96, p87.

Project Blue Revolution, Patrick K. Takahashi, EY Dec. 96, p114-124.

Coastal Ocean Model Performance in Eastern Australia, William L. Peirson and Ian P. King, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p632-643.

Linkages Between the El Nino-Southern Oscillation and U.S. Droughts, John A. Dracup and Thomas C. Piechota, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p373-374.

Practical Modeling of Hurricane Surface Wind Fields, Edward F. Thompson and Vincent J. Cardone, WW July/ Aug. 96, p195-205. Probabilistic Analysis of Complex Nonlinear Motions Under Combined Periodic and Random Excitations, Huan Lin and Solomon C. S. Yim, (*Probabilistic Me-chanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p2-5.

Simulating Nature Wind Waves in a Wave Flume, John Z. Yim, C.-R. Chou and M.-Y. Lai, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p45-56.

Wave Climate Variability in Southern California, Richard Seymour, WW July/Aug. 96, p182-186.

Waves with Two-peaked Spectrum in the Gdańsk Bay, Bar-bara Paplińska, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p33-44.

Oceanography

Dynamic Processes on a Ridge and Runnel Beach, David Simmonds, George Voulgaris and David Huntley, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p868-878.

Melnikov Processes and Noise-Induced Exits from a Well, Emil Simiu and Michael R. Frey, EM Mar. 96, p263-270.

Can Numerical Estuarine Models be Driven at the Estuary Mouth, B. H. Johnson, H. V. Wang and K. W. Kim, (Es-tuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p255-267.

Hindcast Simulations of Ocean Currents in Norwegian Coastal Waters; Part 2: Summary of the Main Results, Eivind A. Martinsen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Hindcast Simulations of Ocean Currents in the Norwegian Coastal Waters. Part 1: Model Set Up and Sensitivity Tests, Harald Engedahl, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p379-390.

Measures of Exceedance by Random Fields for Ocean Stress and Environmental Application, M. R. Leadbetter and Holger Rootzén, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p258-261.

Optimized Boundary Conditions for Coastal Modeling, Igor Shulman and James K. Lewis, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p268-282.

Probabilistic Analysis of Ocean Outfall Mixing Zones, Hening Huang, Robert E. Fergen, John R. Proni and John J. Tsai, EE May 96, p359-367.

Southern Boundary Experimental Forecasts with the NOAA East Coast Ocean Model, Richard A. Schmalz, Jr., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p442-453.

Odor control

Comparison of Commonly Used Odor Control Technologies, Kartik Vaith, Mike Cannon, Darrell Milligan and James Heydon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p64-74.

Gas-Phase Removal of H2S and NH3 with Dielectric Barrier Discharges, Moo Been Chang and Tian Deng Tseng, EE

Jan. 96, p41-46.

Odor Control in Wastewater Treatment Plants, WEF Manual of Practice No. 22 (M&R No. 82), Joint Task Force of the Water Environment Federation and the American Society of Civil Engineers, (Perry L. Schafer, chmn.), 1995, 0-7844-0085-7, 285pp.

Study of Biological Reactors for Control of Odor, VOC and Toxic Emissions from Wastewater Treatment Plants, Todd S. Webster, Joseph S. Devinny, Edward M. Torres and Shabbir S. Basrai, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p571-576.

Water-Treatment Plant Helps Clean the Air of Jupiter, CE Mar. 96, p82.

Odors

Odor Control in Wastewater Treatment Plants, WEF Manual of Practice No. 22 (M&R No. 82), Joint Task Force of the Water Environment Federation and the American So-ciety of Civil Engineers, (Perry L. Schafer, chmn.), 1995, 0-7844-0085-7, 285pp.

Modified Oedometer for Arid, Saline Soils, Omar Saeed Baghabra Al-Amoudi and Sahel N. Abduljauwad, GT Oct. 94, p1892-1897.

Strain Rate and Structuring Effects on the Compressibility of a Young Clay, Serge Leroueil, Didier Perret and Jacques Locat, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p137-150.

Offshore engineering

Application of Kalman Filter to Short-Term Tide Level Prediction, Pei-Hwa Yen, Chyan-Deng Jan, Youe-Ping Lee and Hsiu-Fang Lee, WW Sept/Oct. 96, p226-231.

Offshore Conclave Is Due This Month in Houston, CE May

Offshore pipeline

Seismic Assessment for Offshore Pipelines, R. Bruschi, O. T. Gudmestad, F. Blaker and F. Nadim, IS Sept. 96, p145-151.

Offshore platforms

Blast Wall Bravura, Pieter J. van der Weijde and Paul H. L. Groenenboom, CE Dec. 96, p62-65.

Inflated Contour Approach for Deepwater Tendon Design, J. W. van de Lindt and J. M. Niedzwecki, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p582-585.

Nonlinear Performance of Offshore Platforms in Extreme Storm Waves, R. G. Bea, WW Mar./Apr. 96, p68-74.

Storm Waves, R. G. Bea, WW Mar/Apr. 96, p68-74.
Offshore Platform's Failure and Repair - Case Studies, T. S. Thandavamoorthy and A. R. Santhakumar, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p181-182.
Reliability of Jackets: Beyond-Static-Capacity, D. G. Schmucker and C. A. Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p578-581.

Offshore structures

Offsmice structure of the control
Dynamic Response of Compliant Offshore Structures, R. Adrezin, P. Bar-Avi and H. Benaroya, AS Oct. 96, n114-131

Effects of Testing, Inspection and Repair on the Reliability of Offshore Structures, Guoyang Jiao and Oddvar I. Eide, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p154-157.

iva D., p134-137.

Francop, p134-137.

Francopol, ed. and Mircea D. Grigoriu, ed., 1996), p250-253.

Grout Repair of Dent-Damaged Steel Marine Tubulars, James Ricles and Troy Gillum, WW May/June 96,

Implications of Tendon Modeling on Nonlinear Response of TLP, Basim B. Mekha, C. Philip Johnson and Jose M. Roesset, ST Feb. 96, p142-149.

Influence of Foundation Nonlinearity on Offshore Towers Response, Mohamed H. El Naggar and Milos Novak, GT Sept. 96, p717-724.

Instability Analysis of an Inclined Tower in Waves, Subrata K. Chakrabarti, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p836-839.

T. C. Su, 1990), p830-839.
A Method for Structural Reliability Analysis of Marine Structures Using Combined Plate and Frame Structure Models, Hiroo Okada, Koji Masaoka, Yoshisada Murotsu, Shigeyuki Hibi and Wataru Kiyokawa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p150-153.

A Parametric Study of Strength of Tubular Multiplanar KK-Joints, M. M. K. Lee and S. R. Wilmshurst, ST Aug. 96, p893-904.

Reassessment and Requalification of Infrastructure: Application to Offshore Structures, R. G. Bea, IS June 96,

Reliability of Ocean Structure Using Spectrum-Consistent Excitation, Yunshen Zhou, Zhikun Hou, Mikhail F. Dimentberg and Mohammad Noori, (*Probabilistic Me-chanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p982-985.

Repair of Main Pass 69 Waterflood Platform, G. E. Sgouros, T. E. Webster and N. M. Hennegan, WW July/ Aug. 96, p165-171.

Stochastic Response of Offshore Structures Excited by Drag Forces, Arvid Naess and Solomon C. S. Yim, EM May 96, p442-448.

Towards a Probabilistic Model for Marine Corrosion of Steel, Robert E. Melchers, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p660-663.

Tubular Members. I: Stability Analysis and Preliminary Results, Spyros A. Karamanos and John L. Tassoulas, EM Jan. 96, p64-71.

Tubular Members. II: Local Buckling and Experimental Verification, Spyros A. Karamanos and John L. Tassou-las, EM Jan. 96, p72-78.

Ultimate Transverse Strength and Reliability Analysis of Offshore Production Ships, Xiaozhi Wang and Lars M. Sørhaug, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p146-149.

Undrained Multidirectional Direct Simple Shear Behavior of Cohesive Soil, Don J. DeGroot, Charles C. Ladd and John T. Germaine, GT Feb. 96, p91-98.

Vibration Absorber for Offshore Structures: Frequency-Domain Analysis, Mikhail F. Dimentherg, Shiyu Chen, Zhikun Hou and Mohammad Noori, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p588-591.

Ogilvie, James L. (Life M.)

James Ogilvie, Prominent Water-Resources Engineer, Dies at 84, NE Feb. 96, p14.

Ohio

Drought Experiences of Ohio and Their Applications in the DAR-JAI River Basin of Taiwan, Tiao J. Chang, Wen C. Huang and Chian M. Wu, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p628-636.

Field Measurements of Streambed Scour at Bridge Piers in Ohio, K. Scott Jackson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3033-3042.

Returning Veteran, Charles A. Baumgartner and William E.

Rock 'N' Roll in Cleveland, Rita Robison, CE Feb. 96, p48-49.

Ohio River

McAlpine Intake Model Study for Innovative Lock Design, John E. Hite, Jr. and Larry Dalton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3135-3140.

Bugs Clean Tunnels, CE Aug. 96, p22.

Coating of Steel Structures in Cold Regions, Yuji Nakamu-ra, Taiichi Inaba and Akihiro Tamada, (Cold Regions En-gineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p173-184.

Crude Oil Pipe Line Crossing Western Panama, Hugh Lacy and Brant Brown, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p356-364.

P. Catalanio, et al., 1990, p. 20-509.
Driven Pile Capacities in Warm Permafrost in Komi Republic, Russia, Steven R. Thompson and Rupert G. Tart, Jr., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p.254-265.

Experiences in Cleaning Up the Influence of Oil Spill on the Water Bodies, G. M. Barenboim, N. A. Rubanova and I. M. Saipulaev, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2534.

Expert System for Assessing Main Pipeline Reliability and Residual Lifetime, Sviatoslav A. Timashev and Inessa L. Yablonskikh, (*Probabilistic Mechanics & Structural Re-*liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p322-325.

Factors Affecting the Selection of a Crossing Method, David E. Hairston, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p214-221.

Record Breaking Bundled Pipeline Crossings, Gerald Don-nelly and Mark W. Struss, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p37-47.

Remote Pipeline Routing with Application to Space Opera-tions, Sandra C. Feldman, Ramona E. Pelletier, Wm. Ed-ward Walser, James C. Smoot and Douglas Ahl, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p231-236.

Tenneco's Risk Management Approach to Pipeline Crossings, J. S. Street and J. C. Bowles, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p14-21.

Computer Optimization of a Groundwater Treatment Facility, Denis M. O'Carroll and Thomas L. Theis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2492-2497.

Disposal of Drilling Wastes in Permafrost Prudhoe Bay, Alaska, Paul Hansen, Michael Snyder and Per Wangstrom, Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p327-338.

Rehabilitating Arctic Tundra in Alaska, Jay D. McKen-drick, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p764-769.

Reliability Based Design for Oil Country Tubular Goods, P. R. Brand, D. B. Lewis and M. A. Maes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p534-537.

Gray Freezing to Treat Oil Sands Tailings Pond Water, W. Gao, D. C. Sego and D. W. Smith, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p60-70.

Oil shale

In Situ Measurement of Rockfill Properties, Anne Eckert Clift, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p37-48.

Adhesion Kinetics of Fuel Oil #6 and Oil-in-Water Emul-sions on Marine Sediments under Turbulent Mixing Con-ditions, Rudolf Jaffé, Hector R. Fuentes, Vassilios A. Gittons, Rudoit Jaffe, Flector R. Fuentes, Vassinos A. Tsihrintzis and Liduo Shen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4389-4394.

Aquifer Transmissivity Computations Based on Data from Pump-and-Treat Facilities, Walter Z. Tang, Dean F. Radeloff and Vassilios A. Tsihrintzis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1273-1276.

Chenchayya Bantala, ed., 1990), p1273-1278.

Esperiences in Cleaning Up the Influence of Oil Spill on the Water Bodies, G. M. Barenboim, N. A. Rubanova and I. M. Saipulaev, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2534.

LNAPL Detection, Measurement, and Distribution in the Subsurface Environment, David W. Ostendorf, Alan J. Lutenegger, Russell J. Suchana, Paul S. Cheever and Samuel J. Pollock, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p91-102.

Method for Estimating Boiling Temperatures of Crude Oils, Robert K. Jones, EE Aug. 96, p761-763.

Oil Spills: Prevention, Prediction, and Preparation, Richard E. Burke, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

gress & Destructive Water, Chenchayya Batman, ed., 1996, p770-775. State-of-the-Art Review of Modeling Transport and Fate of Oil Spills, ASCE Task Committee on Modeling of Oil Spills of the Water Resources Engineering Division, HY

Nov. 96, p594-609.

A Three Dimensional Oil Spill Model, Li Zheng and Pooji-tha D. Yapa, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3764-3769.

Oil storage Offshore Conclave Is Due This Month in Houston, CE May 96, p71.

Geotechnical Properties of Oil-Contaminated Kuwaiti Sand, Hasan A. Al-Sanad, Walid K. Eid and Nabil F. Is-mael, GT May 95, p407-412.

Oklainotta
Ekhibit Highlights Oklahoma's Building, CE Feb. 96, p8.
Re-engineering Cowboy Heaven (Available only in Focus on Structures Special Edition), Richard G. Weingardt and John F. Davis, CE Jan. 96, p10A-13A.

Water Wisdom of the Ancients, L. Michael Trapasso, CE Jan. 96, p64-65.

One dimensional flow

HEC-RAS (River Analysis System), Gary W. Brunner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3782-3787.

Open channel flow

Abwasser-Hydraulik: Theorie Und Praxis (Sewer Hydraulics: Theory and Practice) by Willi H. Hager, Ben Chie Yen, HY Oct. 96, p591.

Application of High-Resolution Schemes to Free Surface Flows in Irregular Channels, Ke-Qiang Zheng and Eddy J. Langendoen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p201-206. Backwater Computation for Transcritical River Flows, C. Beffa, HY Dec. 96, p745-748.

Computation of Shallow Recirculating Flow Dominated by Friction, S. Babarutsi, M. Nassiri and V. H. Chu, HY

July 96, p367-372. July 30, p.301-312.
Distribution of Reynolds Stress above a Packed Bed in Open Channel Flow, Mahesh Balakrishnan, Clinton Dancey, Thanais Papanicolaou and Panos Diplas, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p665-668.

Effects of Bed Discordance on Flow Dynamics at Open Channel Confluences, Pascale Biron, James L. Best and André G. Roy, HY Dec. 96, p676-682

Error Estimate in Einstein's Suspended Sediment Load Method, Nadim M. Aziz, HY May 96, p282-285.

Flood Protection Using Inflatable Dams, R. H. Plaut, S. Liapis and D. P. Telionis, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed.,

1997), 9264-265.
Friction-Term Response to Boundary-Condition Type in Flow Models, Raymond W. Schaffranek and Chintu Lai,

HY Feb. 96, p73-81.

A Heuristic Model for Particle Entrainment into Suspension, Yarko Niño and Marcelo García, (Engineering Me-

ston, tarko Nino and Marche Osarcia, (engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p812-815.

Hydraulic Jump in Sloping Channels, Mustafa Gunal and Rangaswami Narayanan, HY Aug. 96, p436-442.

Incipient Jump Conditions for Flows over a Vertical Sill, Iwao Ohtsu, Youichi Yasuda and Hideki Hashiba, HY

Iwao Ohtsu, Toulchi Tasuua and Aug. 96, p465-469.
Modeling Natural Hydrodynamic Systems with a Differential-Turbulence Column, Brett Brunk, Monroe Weber-Shirk, Anna Jensen, Gerhard Jirka and Leonard W. Lion, HY July 96, p373-380.

W. L. L. M. H. J. 1937 J. 250. Modeling Unsteady Open-Channel Flows Having Longitudinally Varied Fluid Density, Chintu Lai and Tsan-Wen Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1905-1910.

Nonunique Water-Surface Profiles in Open Channels, Sub-hash C. Jain, HY Dec. 93, p1427-1434.

On the Shoulders of Giants-Part II, Francis E. Griggs, Jr., El Jan. 96, p17-25

Physically Based Hydraulic Jump Model for Depth-Averaged Computations, Abdul A. Khan and Peter M. Steffler, HY Oct. 96, p540-548. River Hydraulics, U.S. Army Corps of Engineers, 1996, 0-

7844-0159-4, 145pp.

Spatiotemporal Stochastic Open-Channel Flow. I: Model and Its Parameter Data, Timothy K. Gates and Muham-mad A. Al-Zahrani, HY Nov. 96, p641-651.

Spatiotemporal Stochastic Open-Channel Flow. II: Simulation Experiments, Timothy K. Gates and Muhammad A. Al-Zahrani, HY Nov. 96, p652-661.

SpatioTemporal Stochastic Open-Dhannel Flow, Timothy K. Gates and Muhammad A. Al-Zahrani, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p346-351.

Stability of Shallow Shear Flows, Vincent H. Chu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1074-1077.

Three-Dimensional Organized Vortices Above Flexible Water Plants, Syunsuke Ikeda and Minoru Kanazawa, HY Nov. 96, p634-640.

Transition from Hydraulic Jump to Open Channel Flow, S. Wu and N. Rajaratnam, HY Sept. 96, p526-528.

Turbulence in Open-Channel Flows by Jehisa Nezu and Hiroji Nakagawa, Ching-Jen Chen, EM June 96, p590.

Vegetation-Induced Drag: An Experimental Study, Chad Dunn, Fabián López and Marcelo García, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3824-3828.

Vertically Averaged and Moment Equations Model for Flow over Curved Beds, Abdul A. Khan and Peter M. Steffler, HY Jan. 96, p3-9.

Open channels

Control of an Irrigation Canal, Leslie Skertchly Molina and J. P. Miles, HY July 96, p403-410.

Discharge Characteristics of Overshot Gates, Brian Wahlin and John Replogle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3604-3609.

Estimation of Mean Flow Velocity in Ice-Covered Chan-nels, Martin J. Teal, Robert Etterna and John F. Walker, HY Dec. 94, p1385-1400.

Hydraulic Performance of Open Channel Breaching, Juan A. González and Ben Chie Yen, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p334-339.

Hydrodynamic Behavior of Partly Vegetated Open Chan-nels, Dan Naot, Iehisa Nezu and Hiroji Nakagawa, HY Nov. 96, p625-633.

A Knowledge Based System for the Design of Open Chan-nels, James M. Crum and Michael E. Mulvihill, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4125-4130.

Optimal Sizing of Width- and Depth-Constrained Trapezoi-dal Channels, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4294-4299.

Validation of the MAC3D Numerical Flow Preliminary Validation of the MAC3D Numerical Flow Model, Robert S. Bernard, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3434-3439.

Submerged Flow Regimes of Rectangular Sharp-Crested Weirs, S. Wu and N. Rajaratnam, HY July 96, p412-414.

Synchronized Measurements of Bed-Shear Stress and Flow Velocity in Open Channels with Simulated Vegetation, Fabián López and Marcelo García, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3651-3655.

Unstable Patterns in Partly Vegetated Channels, Dan Naot, Iehisa Nezu and Hiroji Nakagawa, HY Nov. 96, p671-

Velocity and Turbulence Distribution in Unsteady Open-Channel Flows, T. Song and W. H. Graf, HY Mar. 96, p141-154.

Waste of Water is Costly. Why Not Use an Accurate Flow Monitoring System? Hans-Peter Vaterlaus, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3617-3622.

Openings

Continuum Model for Analysis of Multiply Connected Per-forated Cores, Domenico Capuani, Marco Savoia and Ferdinando Laudiero, EM Aug. 94, p1641-1660.

Dynamic Analysis of Prestressed Concrete Beams with Openings, Hany Abdalla and John B. Kennedy, ST July 95, p1058-1068.

Dynamic Characteristics of Post-Tensioned Girders with Web Openings, Nabil F. Grace and Brian Ross, ST June 96, p643-650.

Protection of the Building Envelope in Maintaining Struc-tural Integrity, Clifford Oliver, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p121-122.

Operating costs
Billion Dollar Water Q&M Market Projected, CE May 96, p19,21.

Computer Optimization of a Groundwater Treatment Facility, Denis M. O'Carroll and Thomas L. Theis, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2492-2497.

Mechanistic-Probabilistic Vehicle Operating Cost Model, Curtis F. Berthelot, Gordon A. Sparks, Terry Blomme, Lyle Kajner and Mark Nickeson, TE Sept./Oct. 96, p337-341.

Optimization of Water Supply System Operation, Vilas Ni-tivattananon, Elaine C. Sadowski and Rafael G. Quimpo, WR Sept./Oct. 96, p374-384.

Operating criteria

Operating Rule Optimization for Missouri River Reservoir System, Jay R. Lund and Ines Ferreira, WR July/Aug. 96, p287-295.

Reservoir Targets for Urban Water Supply Systems, B. J. C. Perera and Gary P. Codner, WR July/Aug. 96, p270-

Operation

Operation
Cold-Related Electric Power System Considerations, John
Aspnes and James Cote, (Cold Regions Engineering: The
Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p436-446.

A Concept of Driving on Orbital Station, M. Malenkov, V. Gorbunov, S. Vladykin, V. Zhivoglotov, R. Beglov and V. Syromyatnikov, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996). p559-565.

Design and Operation of the Sub-Orbital Lunar Explorer, Walter Collins, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p949-

EMC Issues in Electric Railway Traction Systems, M. Mazzucchelli, P. Pozzobon and G. Sciutto, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p44-48.

ed., 1990), p44-48.

Expert System for Water Treatment Plant Operation, Xin X. Zhu and Angus R. Simpson, EE Sept. 96, p822-829.

Extending the Limits—San Jose Runway, Loy Warren, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p151-157.

Faster, Cheaper, Better: Teleoperated Space Robots, Tom Billings, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p150-156.

An Interactive Operator Interface for Task-Level Direction of a Robot in Uncertain Environments, Eric S. Miles and Robert H. Cannon, Ir., (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p50-56.

An Interactive Planning Environment for Critical Opera-tions, Kuo-Liang Lin and Carl T. Haas, CO Sept. 96,

p212-222

Operation and Maintenance of Ground Water Facilities (M&R No. 86), Committee on Ground Water of the Irrigation and Drainage Division, American Society of Civil Engineers, (Lloyd C. Fowler, chmn.), 1996, 0-7844-0139-X, 180pp. Planning an International Moon Mission: Lessons Learned, Joan Johnson-Freese, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996).

Postoccupancy Indoor Environmental Quality Evaluation of an Institutional Building, Brian A. Rock, P.E. and Craig A. Hillman, AE Sept. 96, p88-94. World-Wide Command and Control: Operating the Interna-

tional Space Station, Michael J. See, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p458-466.

Optimal control methods
Design of Global Control Algorithm for Irrigation Canals,
J. Mohan Reddy, HY Sept. 96, p503-511.

Design of Supplemental Dampers for Control of Structures, N. Gluck, A. M. Reinhorn, J. Gluck and R. Levy, ST Dec. 96, p1394-1399.

Evaluation of System Constant Volume Control, Zihui Lin and David H. Manz, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4353-4358.

Fast and Robust Algorithm for General Inequality/Equality Constrained Minimum Time Problems, B. Driessen and N. Sadegh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1215-1224.

Linear Optimal Structural Control Including the External Excitation, G. F. Panariello, R. Betti and R. W. Longman, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p760-763.

On-Board Neural Network Control of Kinetic Energy Projectiles for NEO Exploration, R. E. Vance, M. V. Spangler, Z. Qian, C. Cho and K. A. Prisbrey, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1183-1189.

Optimal Polynomial Control of Seismically Excited Linear Structures, Anil K. Agrawal and Jann N. Yang, EM Aug.

96, p753-761.

Optimal Waste Decomposition-Landfill as Treatment Process, Robert P. Anex, EE Nov. 96, p964-974.

Optimum Simulation and Control of Fixed-Speed Pun Stations, Mark T. Yin, John F. Andrews and Michael K. Stenstrom, EE Mar. 96, p205-211.

Robust H. Control Considering Actuator Saturation. I: The-ory, J. Geoffrey Chase and H. Allison Smith, EM Oct. 96, p976-983.

Robust H_ Control Considering Actuator Saturation. II: Applications, J. Geoffrey Chase, H. Allison Smith and Tet-suo Suzuki, EM Oct. 96, p984-993.

nuo suzuki, EM Uct. 96, p984-993.
Time-Delay Linear Systems with Gaussian White Noise Input, M. Grigoriu, T. T. Soong and A. Reinhorn, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p422-425.

Optimal design Annealing Strategy for Optimal Structural Design, Shyh-Rong Tzan and Chris P. Pantelides, ST July 96, p815-

Application of Structural Optimization to Practical Tall Steel Building Design, Chun-Man Chan and Joohyuk Park, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p123-134.

Characterization of Pultruded FRP Wide-Flange Beams, Ju-lio F. Davalos, Pizhong Qiao and Hani A. Salim, (Mate-rials for the New Millennium, Ken P. Chong, ed., 1996),

Conceptual Design Optimization of Structural Systems, Donald E. Grierson, (Analysis and Computation, Frank-

lin Y. Cheng, ed., 1996), p99-110.

Constraint-Based Reasoning for Optimal Concrete Design and Detailing, Warren K. Lucas and W. M. Kim Roddis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p154-165.

Corrosion Control of Drinking Water Using Tray Aerators, Enrique J. La Motta and Srinivas Chinthakuntla, EE July 96, p640-648.

gn of Multistage Pumping Main, Prabhata K. Swamee,

TE Jan/Feb. 96, pl. 4.

Design of Optimal Reliable Multiquality Water-Supply Systems, Avi Ostfeld and Uri Shamir, WR Sept./Oct. 96, p322-333.

Design of Prestressed Concrete Transmission Poles: Opti-mization Approach, Fatma Y. Kocer and Jasbir S. Arora, ST July 96, p804-814.

Design of Sediment-Transporting Pipeline, Prabhata K. Swamee, HY Jan. 95, p72-76.
Large River Diversion Optimization Considering the Uncertainties Involved, M. H. Afshar, A. Afshar and H. Pargress & Destructive Water, Chenchayya Bathala, ed., 1996), p4347-4352.

Methodology for Optimizing Design of Integrated Tank Irrigation System, R. C. Srivastava, WR Nov/Dec. 96, p394-402.

Optimal Design of Prestressed Concrete Transmission Poles, Fatma Y. Kocer and Jasbir S. Arora, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p111-122. Optimal Design of Sloping Weir, Prabhata K. Swamee, Govinda C. Mishra and Adel A. S. Salem, IR July/Aug.

96, p248-255.

Optimal Design of Steel Transmission Poles, Fatma Y. Kocer and Jasbir S. Arora, ST Nov. 96, p1347-1356. Optimal Pipeline Sizing Technique, Helmi M. Hathoot, Ahmed I. Al-Amoud and Fawzi S. Mohammad, TE May/

June 96, p254-257.

Optimal Reliability-Based Design of Check Dam Structure, Satoshi Katsuki, Nobutaka Ishikawa and Kazuo Itoh, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p91-98.

optimal Sizing of Width- and Depth-Constrained Trapezoi-dal Channels, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4294-4299.

Optimization and Sensitivity of Retaining Structures, Aşkin Saribaş and Fuat Erbatur, GT Aug. 96, p649-656.

Optimization of Composite Highway Bridge Systems, M. Z. Cohn and J. J. Werner, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p135-146. Optimization Sensing and Control in Design of Antennas,

Mehdi S. Zarghamee and Joseph Antebi, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p147-153. Optimum Design and Operation of Multiple Subunit Drip Irrigation Systems, G. C. Dandy and A. M. Hassanli, IR Sept./Oct. 96, p265-275.

Reliability of Remediation Designs in Presence of Model-

ing Error, Changqing Zhen and James G. Uber, WR July/Aug. 96, p253-261. Reliability-Based Optimization of Composite Structures, Xiaoping Liu and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol,

ed. and Mircea D. Grigoriu, ed., 1996), p122-125 Steel Girder Bridge Cost Optimization Using AASHTO Specifications, T. E. Fenske, M. Yener, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p472-481.

Irrigation Policy for Realization of High Agropotential of Bihar State in India, I. N. Sinha, IR Jan/Feb. 96, p31-39. The Strategic/Master Plan at Boeing Field: A Means of Op-

timizing Airport Utilization at an Inner City Airport, Ju-lie Rodwell, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p12-23.

Optimization

Analysis and Computation, Franklin Y. Cheng, ed., 1996, 0-7844-0163-2, 522pp.

0-7844-0163-2, S22pp. Application of a Hydrodynamic Model in Design of the Kingman Lake Wetland Restoration Project, Karen M. Nook and William G. Grosskopf, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p58-63.
Chebyshev Model for Water-Quality Management, Andrews K. Takyi and Barbara J. Lence, WR Jan /Feb. 96, 440-48

Civil Engineering Applications of Genetic Algorithms, Weng-Tat Chan and David K. H. Chua, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1072-1078.

Comparison of Algorithms for Nonlinear Integer Optimiza-tion: Application to Monitoring Network Design, Yuh-Ming Lee and J. Hugh Ellis, EE June 96, p524-531.

Comparison of Stochastic Programming and Robust Opti-mization Models for Groundwater Plume Containment, David W. Watkins, Jr. and Daene C. McKinney, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p612-617. Computer Optimization of a Groundwater Treatment Facili-

ty, Denis M. O'Carroll and Thomas L. Theis, (North

ty, Dents M. O carroll and Infolias L. Hiels, Vorent American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2492-2497. Control of Mega-Sub Building Against Wind Loads, Win-ston Chai and Maria Q. Feng, (Probabilistic Mechanics

& Structural Reliability, Dan M. Frangoop, ed. and Mircea D. Grigoriu, ed., 1996), p486-489. Customer Oriented Train Scheduling in Underground Rail-way Systems, Riceardo Minciardi, Massimo Paolucci and Raffaele Pesenti, (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p149-153.

p149-153.
Data and Data Interpretation in Bridge Management Systems, George Hearn, Dan M. Frangopol, Tianna Szanyi and Steven Marshall, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p245-252.
Design of Branched-Water-Supply Network on Uneven Terrain, Brian Young, EE July/Aug, 94, p974-980.
Design of Flocculating Baffled Channel, Prabhata K. Swarnee, EE Nov. 96, p1046-1048.
Design of Prestressed Concrete Transmission Poles: Optimization Approach, Fatma Y. Kocer and Jasbir S. Arora, ST July 96, p804-814.
Design Synthesis: Transcending to Stochastic Realm Part

ST July 90, pobv-8-14. Design Synthesis: Transcending to Stochastic Realm Part 3: Optimization, Jean M. Parks, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), pl 30-133.
Double-Layer Grids: Review of Dynamic Analysis Methalics.

ods and Special Topics, Ramesh B. Malla and Reynaud

L. Serrette, ST Aug. 96, p882-892.

Economic Evaluation of Design Codes—Case of Seismic Design, A. Warszawski, J. Gluck and D. Segal, ST Dec.

96, p1400-1408.

Enhanced Movements Estimation Methods for High Resolution Airport Surface Radar Images, P. F. Pellegrini, A. Boccellari, E. Piazza and R. Valenti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p92-98

Expert System for Assessing Main Pipeline Reliability and Residual Lifetime, Sviatoslav A. Timashev and Inessa L. Yablonskikh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p322-325.
FORM/SORM Search Algorithms in the Presence of Inadmissible Domains, Roger Sindel and Rüdiger Rackwitz,
(Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p570-573

Fuzzy Controlled Genetic Algorithm Search for Shape Op-timization, Chee Kiong Soh and Jiaping Yang, CP Apr.

96, p143-150.

Genetic-Algorithm Programming of Road Maintenance and Rehabilitation, T. F. Fwa, W. T. Chan and C. Y. Tan, TE May/June 96, p246-253.

May/June 96, p246-253.

Groundwater Remediation Design When Pretty Good is Good Enough, J. Wayland Eheart, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p848-853.

Hydraulics of Subsurface Flow Constructed Wetlands, A. T. Hjelmfelt, Jr. and A. L. Thompson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p52-57.

The Impact of Numerical Precision on Optimal Groundwater Hydraulic Control, David P. Ahlfeld and R. Guy Riefler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

gress & Destructive Water, Chenchayya Bathala, ed., 1996), p618-621.

Including Inspection Imperfection in Optimizing Structural Management Policies, Mingxiang Jiang, Ross B. Corotis and J. Hugh Ellis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p368-371.

Incorporating Damage Control in Structural Design, Dan M. Frangopol, Marek Klisinski and Kai-Yung Lin, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p598-605.

Interdependence of Beach Fill Volumes and Repetition In-tervals, Hans-H. Dette, Alfred Fuehrboeter and Arved J.

Raudkivi, WW Nov./Dec. 94, p580-593.
Interseasonal Irrigation System Planning for Waterlogged Sodic Soils, S. N. Panda, S. D. Khepar and M. P.

Kaushal, IR May/June 96, p135-144.

Limit State Design Method of Structural System Using Reliability-Based Optimization and Efficient Monte-Carlo Simulation Technique, Wataru Shiraki, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p635-

Mathematical Techniques & Software for Stochastic De-sign Optimization, Jean M. Parks and Chun Li, (Probabilistic Mechanics & Structural Reliability, Dan M. Fran gopol, ed. and Mircea D. Grigoriu, ed., 1996), p118-121.

Mixed Optimization Technique for Large-Scale Water-Resource Systems, Marcello Niedda and Giovanni M.

Resource Systems, Marcello Niedda and Giovanni M. Sechi, WR Nov/Dec. 96, p387-393. Modeling and Solving Water Resources Engineering Design Problems as Stochastic Programs to Account for an Uncertain Future, D. S. Yakowitz, W. Elshorbagy and K. Lansey, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p106-117. Modeling Kinetics of Illuminated and Dark Advanced Oxidation Processes, Andrew Hong, Mark E. Zappi, Chiang Hai Kuo and Donald Hill, Ez Jan. 96, p58-62. Modeling Reliability of Train Arrival Times, L. Ferreira and A. Higgins, TE Nov/Dec. 96, p414-420. A Multi-Loop Strategy for Performance-Based Optimiza-

and A. Higgins, Ic Nov Abec. 20, private and A. Higgins, Ic Nov Abec. 40, private and private and private and private and private and R. Oakley and Graham S. Rhodes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol,

Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p126-129.
Multifactor Spatial Analysis for Landfill Siting, Jehng-Jung Kao and Hung-Yue Lin, EE Oct. 96, p902-908.
Multiobjective Optimization of Multireservoir System, S. Mohan, K. Elango and M. G. Devamane, (North American Water and Environment Congress & Destructive

Water, Chenchayya Bathala, ed., 1996), p1968-1975. Multiple Heavy Lifts Optimization, Kuo-Liang Lin and Carl T. Haas, CO Dec. 96, p354-362.

New Approach for Optimization of Overall Construction Schedule, Shirong Li, CO Mar. 96, p7-13. A New Method for Efficient Reliability-Based Design Optimization, Y.-T. Wu and W. Wang, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p274-277.

A New Strategic Management of Pumping Station in Sewer Systems, David Tsoi and Tsun-Hou Kuan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2486-2491. Nondestructive Evaluation of Elastic Constants and Crack

Depth in Concrete Using Transient Elastic Waves, T.-T. Wu and J.-S. Fang, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p861-868.

Operating Rule Optimization for Missouri River Reservoir System, Jay R. Lund and Inês Ferreira, WR July/Aug. 96, p287-295.

Optimal Design of Water-Distribution Networks with GIS. Saud A. Taher and John W. Labadie, WR July/Aug. 96, p301-311.

Optimal Dispersed Ground-Water Contaminant Manage-ment: MODCON Method, R. C. Peralta, J. Solaimanian and G. R. Musharrafieh, WR Nov./Dec. 95, p490-498.

Optimal Estimation of Storage-Release Alternatives for Storm-Water Detention Systems, Rafael Segarra-García and Mohammad El Basha-Rivera, WR Nov./Dec. 96, p428-436.

Optimal Land Grading Based on Genetic Algorithms, Srinivasa L. Reddy, IR July/Aug. 96, p183-188. Optimal Management of a Coastal Aquifer in Southern Tur-key, Khosrow Hallaji and Hasan Yazicigil, WR July/ Aug. 96, p233-244.

472

Optimal Regional Scheduling of Solid Waste Systems. I: Model Development, Jess W. Everett and Abhijit R. Modak, EE Sept. 96, p785-792.

Optimal Regional Scheduling of Solid Waste Systems. II: Model Solutions, Abhijit R. Modak and Jess W. Everett,

EE Sept. 96, p793-799.

Optimal Rehabilitation of Locally Damaged Structures Using the Pseudo Distortion Method, Prafulla V. Makode, Ross B. Corotis and Martin R. Ramirez, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p606-612.

Optimization and Pipe-Sizing Decisions, Thomas M. Wal-ski, WR July/Aug. 95, p340-343.

Optimization and Simulation in Design and Operation of Reservoirs, A. Afshar and F. Peyrovian, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1956-1961.

Optimization of a 550-/690-MPa High-Performance Bridge Steel, A. B. Magee, J. H. Gross and R. D. Stout, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p1561-1570.

Optimization of a Ground-Water Injection/Extraction Sys-tem, Anand Prakash, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1167-1172.

Optimization of Groundwater Remediation with DES, Jae-Heung Yoon and Christine A. Shoemaker, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p622-627.

Optimization of Soil Vapor Extraction System Design, Yung-Hsin Sun and William W-G. Yeh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl 387-1392.

Optimization of Water Distribution System with Blending Requirements, Yung-Hsin Sun, Shu-li Yang, William W-G. Yeh, Ali Diba and Timothy A. Blair, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4359-4364.

Optimization of Water Supply System Operation, Vilas Ni-tivattananon, Elaine C. Sadowski and Rafael G. Quimpo,

WR Sept./Oct. 96, p374-384.

Optimization Sensing and Control in Design of Antennas, Mehdi S. Zarghamee and Joseph Antebi, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p147-153.

Optimized Boundary Conditions for Coastal Modeling, Igor Shulman and James K. Lewis, (Essuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p268–282.

Optimized Input Shaping for a Single Flexible Robot Link, David G. Wilson, Dennis Stokes, Gregory Starr and David G. Wilson, Dennis Stokes, Gregory Starr and Rush D. Robinett, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1225-1229.

Optimizing Haul Unit Size and Number Based on Loading Facility Characteristics, Douglas D. Gransberg, CO Sept.

96, p248-253.

Optimizing Municipal Wastewater Treatment in Cold Climates: Scale, Process and Benefits, Isobel W. Heathcote and William J. Jewell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1419-1424.

Optimum Risk Management with Uncertain Hazard and Vulnerability Information, Lawrence A. Twisdale and Peter J. Vickery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p88-

Optimum Simulation and Control of Fixed-Speed Pumping Stations, Mark T. Yin, John F. Andrews and Michael K.

Stenstrom, EE Mar. 96, p205-211.

Optimum Storage Reallocation and Gate Operation in Mul-tipurpose Reservoirs, Abbass Afshar and Hamid Morad-Khani, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1962-1967.

Parallel Eigenvalue Algorithms for Large-Scale Control-Optimization Problems, A. Saleh and H. Adeli, AS July

96, p70-79.

Pipe Network Analysis and Design in Developing Regions. Case Study: Novokuznetsk, Siberia, Dan Gessler, Johannes Gessler and Randy Hoffman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1255-1260.

Possibilities of Fracture Mechanics Models Application to Optimisation of Operational Use of Large-Size Machine Components, Lech Bukowski and Piotr Artymiak, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p780-783.

Pump-and-Treat Ground-Water Remediation System Opti-mization, Daene C. McKinney and Min-Der Lin, WR Mar/Apr. 96, p128-136.

Regional Groundwater Management with Health Risk Assessment, Susan D. Pelmulder and Yung-Hsin Sun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Reliability-Based Optimization of Composite Structures, Xiaoping Liu and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p122-125.

Reliability-Based Optimum Bridge Repair Strategy, Allen C. Estes, Dan M. Frangopol and George Hearn, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p372-375.

Reliability-Based STructural Optimization-Software Development, M. Gasser and G. I. Schuëller, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p531-534.

Chamics, I. L. Band I. L. State Optimization: State-of-the-Art versus State-of-the-Practice, Dan M. Frango-pol and Ross B. Corotis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p67-78.

Frankini 1. Cheng, ed., 1997, 1907-78.
Reliability/Cost of Adaptive Intraply Hybrid Fiber Composite Structures, Christos C. Chamis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p644-647.

Reservoir Operating Rules with Fuzzy Programming, Samuel O. Russell and Paul F. Campbell, WR May/June

96, p165-170.

So, proc. 170.

Robustness of Reservoir Storage Reallocation Decisions to Climate Change, Andrew W. Wood, Dennis P. Lettenmaier and Richard N. Palmer, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p19-37.

SCOOT Control of a Simulated Road Network, J. P. Silcock and D. A. Crosta, (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

p583-587.

The Secondary Inlet of the Eastside Pipeline Project, Antonio J. Perez and Aida G. Garabetian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p702-707.

Site and Size Optimization of Contaminant Sources in Surface Water Systems, Nikolaos D. Katopodes and Michael

Piasecki, EE Oct. 96, p917-923.

Solid-Waste Management System Analysis with Noise Control and Traffic Congestion Limitations, Ni-Bin Chang, Y. C. Yang and S. F. Wang, EE Feb. 96, p122-

Solving Mathematical Programming Problems Using Genetic Algorithms, Siripong Malasri, Jennifer R. Martin and Ricardo A. Medina, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p233-239.

Source Characterization at Contaminated Sites, Sudhakar R. Kondisetty, Priyantha W. Jayawickrama and Kenneth A. Rainwater, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed. Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p927-943.

Strategic Planning in Construction Companies, Abraham Warszawski, CO June 96, p133-140.

A Strategy for Solving Static Multiple-Optimal-Path Tran-sit Network Problems, Nicholas Koncz, Joshua Green-feld and Kyriacos Mouskos, TE May/June 96, p218-225.

Stress-Strain Behavior of High-Performance 70W Bridge Steel, E. M. Focht and S. J. Manganello, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1540-

Use of SALQR Optimization in Large Aquifer Cleanup, Christopher M. Mansfield and Christine A. Shoemaker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Vulnerability Assessment within BMS, Edgar P. Small and Steven B. Chase, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p446-449.

Wave Run-Up: Recent IBW PAN Investigations, Jerzy Kolodko, Jaroslaw Kapiński, Marek Szmytkiewicz and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p197-208.

Yields from Ground-Water Storage for California State Water Project, L. Jeffrey Lefkoff and Donald R. Kendall, WR Jan./Feb. 96, p72-74.

Optimization models

Adaptive Search Optimization in Reducing Pump Operat-ing Costs, S. Pezeshk and O. J. Helweg, WR Jan./Feb. 96, p57-63.

Chance-Constrained Optimal Monitoring Network Design for Pollutants in Ground Water, Bithin Datta and Sanjay D. Dhiman, WR May/June 96, p180-188.

Co-Evolution of Design Specifications and Design Solu-tion, Mary Lou Maher and Josiah Poon, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p77-83.

Designing Instream Flows to Satisfy Fish and Human Water Needs, Hal Cardwell, Henriette I. Jager and Michael J. Sale, WR Sept./Oct. 96, p356-363.

Equilibrium Network Traffic Signal Setting under Condi-tions of Queuing and Congestion, Hai Yang, (Applica-tions of Advanced Technologies in Transportation Engi-

neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p578-582.

Evaluating Strategies to Manage Seawater Intrusion, Tracy Nishikawa and Eric G. Reichard, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4323-4328.

Evolving Design Genes as well as Design Solutions, John S. Gero, Vladimir A. Kazakov and Thorsten Schnier, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p84-90.

Framework for PMS Using Mechanistic Distress Submodels, David K. H. Chua, TE Jan./Feb. 96, p29-40.

Modeling Reservoir Evaporation Losses by Generalized Networks, Yung-Hsin Sun, Shu-li Yang, William W-G. Yeh and Peter W. F. Louie, WR May/June 96, p222-226.

Optimal Structures for Decentralized Provision of Roads, Frannie Humplick and Azadeh Moini-Araghi, IS Sept.

96, p127-138.

Optimization Modeling of Complex Surface Water Collec-tion Systems, Ken Young, Stuart Stein, Kamal Saffarinia, George Oliger, Raphael Hurwitz, Robert Mayer and Janine Witko, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3393-3398.

Optimization of Graphical Models, Jeanine Graf, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p97-103.

Single-Criteria Genetic Optimization for Design and Detailing of Concrete Structures, W. M. Kim Roddis, Warren K. Lucas and Vorathum Chunnanond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p91-96.

21st Century Earth Observing Systems: Emerging Role for Spaceports, Stanley A. Morain, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p245-253.

Building Large Space Bases in Low Earth Orbit, J. Michael Snead, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p367-377. A Concept of Driving on Orbital Station, M. Malenkov, V. Gorbunov, S. Vladykin, V. Zhivoglotov, R. Beglov and V. Syromyatnikov, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996). p559-565.

Concrete Space Station Construction in Lunar Orbit, Don J. Wade, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p578-584.

Space, Stewart W. Johnson, ed., 1990, p. 18-304. Distributed Control for Serial Assembly in Space, Frank McQuade and Colin R. McInnes, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1169-1175.

Flywheels for Energy Storage in Space Using Supercon-ducting Bearings, T. L. Wilson, W. K. Chu, K. Ma and H. Xia, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p355-359.

Interferometric Imaging for Deep Space Asset Monitoring, Gary C. Loos, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p214-

Investigation of On-Orbit Servicing Robot, T. Matsue and Y. Wakabayashi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p533-

Issues of Landing on Near Earth Asteroids, D. J. Scheeres, S. J. Ostro and R. S. Hudson, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p54-60.

Issues on Geomechanics, Nicholas C. Costes and Stein Sture, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p516-520.

Space, Stewart W. Johnson, ed., 1990, p310-320.
Nanotechnology and Orbital Debris, Hans-Joachim Blome and Thomas L. Wilson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p328-333.

On Exploration and Usage of Near-Earth-Missing Objects, V. A. Simonenko, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p61-

ORDER: A Preliminary Concept for ORbital DEbris Removal, Brian A. Phail, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996). p334-340.

The Production of Photovoltaic Devices in Space, A. Ignatiev and A. Freundlich, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p287-292

Review of the Solar Power Satellite, James McSpadden and Kai Chang, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p254-259.

Space Applications of Surplus Ballistic Missiles, Matthew A. Bille, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p406-412.

Space Debris, Trisha Chhabildas, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1270-1273.

US Space Policy and the Use of Excess US Ballistic Mis-sile Assets, Mike Trial, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p206-213

"SPS 2000" and its Internationalisation, Patrick Collins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p269-279.

ASR Case Study - City of Salem, Oregon, Joe Glicker and Paul Eckley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2679-2684.

Portland's Light Rail Goes Underground, Philip M. Rice and Joseph P. Gildner, CE Dec. 96, p32-35.

Organic chemicals

Modeling the Behavior of LNAPLs Under Hydraulic Flushing, S. Ratnam, P. J. Culligan-Hensley and J. T. Germaine, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p595-606.

Phytoremediation: Plant Uptake of Atrazine and Role of Root Exudates, Joel G. Burken and Jerald L. Schnoor, EE Nov. 96, p958-963.

Predicting Transport of Organics through Soil Columns using Distributed Mass-Transfer Rates, Teresa B. Culver and Stephen P. Hallisey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2005-2010.

Process Upscaling of Nonaqueous Phase Liquid Behavior in Heterogenous Aquifers, Tissa H. Illangasekare, John E. Ewing and Kris O. Pytte, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p25-45.

Regional Groundwater Management with Health Risk Assessment, Susan D. Pelmulder and Yung-Hsin Sun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1291-1296.

p1291-1296.

Selection Among Aqueous and Off-Gas Treatment Tech-nologies for Synthetic Organic Chemicals, Bruce I. Dvorak, Christopher J. Herbeck, Claire P. Meurer, Des-mond F. Lawler and Gerald E. Speitel, Jr., EE July 96,

SoilRisk: Risk Assessment Model for Organic Contami-nants in Soil, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE May 96, p388-398.

ann robert L. sagrist, Eb. rany 30, 1536-379.
Stochastic Finite Element Analysis for Multiphase Flow in Random Porous Media, S. Dham and R. Ghanem, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p661-669.

Toxicity of Organic Chemicals and Their Mixtures to Activated Sludge Microorganisms, E. Hall, B. Sun, J. Prakash and N. Nirmalakhandan, EE May 96, p424-429.

Organic compounds
A Diffusion-Type Adsorption Batch Test Method for Determination of Benzene Adsorption on Regina Clay, Xiao Zhang, S. Lee Barbour and John V. Headley, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p175-186.

Individual Biotransformation Rates in Chlorinated Aliphat-ic Mixtures, J. B. Hughes and G. F. Parkin, EE Feb. 96,

Interference by Natural Organics in Diesel Analyses, Paul Dworian, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p71-81.

Model of Electrodialysis Process Associated with Organic Adsorption, Thawach Chatchupong and Robert J. Mur-phy, EE Feb. 96, p154-161.

his, E. Pelson, p. 134-161.

Niche for Steam Stripping in Treating Dilute SOC-Contaminated Waters, Bruce I. Dvorak, Desmond F. Lawler and Gerald E. Speitel, Jr., EE Sept. 96, p871-874.

Surface Thermodynamics of an Organoclay, Muniram Budhu and Rossman Giese, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p17-30. 1996), p17-30.

Transport of Aqueous Organic Compounds in Thermoplas-tic Geomembranes. II: Mass Flux Estimates and Practi-cal Implications, Jae K. Park, Joni P. Sakti and John A.

Hoopes, EE Sept. 96, p807-813.

Transport of Organic Compounds in Thermoplastic Geomembranes. I: Mathematical Model, Jae K. Park, Joni P. Sakti and John A. Hoopes, EE Sept. 96, p800-806

Diffusive Transport of Organic Colloids from Sediment Beds, K. T. Valsaraj, S. Verma, I. Sojitra, D. D. Reible and L. J. Thibodeaux, EE Aug. 96, p722-729. From Cholera to Cancer to Cryptosporidiosis, Daniel A.

Okun, EE June 96, p453-458.

Okun, EE June 90, p453-458. Interactions Between Ozone, AOM, and Particles in Water Treatment, Mysore S. Chandrakanth, Sadasivam Krishnan and Gary L. Amy, EE June 96, p459-468. Modeling of NOM-Facilitated PAH Transport Through Low-f_n Sediment, William P. Johnson, Gary L. Amy and Steven C. Chapra, EE June 95, p438-446.

Regeneration of Adsorbents Using Heterogeneous Photoca-talytic Oxidation, Junbiao Liu, John C. Crittenden, David W. Hand and David L. Perram, EE Aug. 96, p?07-713.

Organization theory

Organization titled by Approaches to Simulating Organizational Behavior of Con-current Design Teams, Yan Jin and Raymond E. Levitt, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p281-287.

A Computational Organizational Approach to Modeling an Engineering Design Team, Jan Thomsen, Yul J. Kwon, John C. Kunz and Raymond E. Levitt, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p275-280.

Continuous Excellence: Building Effective Organizations, Mel Hensey, 1995, 0-7844-0013-X, 105pp. Process Models in Enterprise Engineering - Tools for Enhancing Process Description, Lars Chr. Christensen, Tore R. Christiansen and Yan Jin, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p634-641.

The Virtual Design Team (VDT): Concurrent Design of Facility Products, Processes and Organizations, Raymond E. Levitt, Tore R. Christiansen, Geoff Cohen, Yan Jin and John C. Kunz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p268-274.

Organizational policy

Approaches to Organization Development, Mel Hensey, ME Sept./Oct. 96, p11.

ASCE Leaders Field Questions on "Institutes, Academies" to Emerge in Restructured Society, NE Apr. 96, p1,5. ASCE Planning Group Recommends Funding Shift in FY 97 Budget, NE July 96, p1,6.

ASCE President Talks about 'Extraordinary Happenings' in 1996; Ask Members' Help in Effecting Major Changes.

NE Apr. 96, p2. ASCE's Board Gives Green Light on Institutes, Virginia

Fairweather, NE June 96, p1,3. ASCE's Strategic Plan: Almost Everything You Need to Know about ASCE's Proposed 'Institutes' and 'Academies', NE Mar. 96, p3-4.

ASCE's Two New Institutes Are Open for Business, NE Nov. 96, p1,4.

Business Plans Live and Grow, Jack E. Reinhard, P.E., ME Nov./Dec. 96, p3-4.

Corps Public Works In Jeopardy, Hugh Converse, CE June 96, p35.

I Don't Believe in Change Just for the Sake of Change, Gary D. Bates, ME May/June 96, p20-24.

The Influence of Trust on Risk-Based Decision Making, David L. McLain and B. Katarina Hackman, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p169-179.

Society's Board of Direction Approves FY 1997 Budget; ASCE Now Poised to Move Ahead on Strategic Plan, NE

Sept. 96, p1,5.

The 'Structure' of Restructuring, NE Feb. 96, p4,5.

Organizations

Approaches to Organization Development, Mel Hensey, ME Sept./Oct. 96, p11. ASCE and American Red Cross Sign Pact on Disaster Aid,

NE Oct. 96, pl. ASCE Leaders Field Questions on "Institutes, Academies to Emerge in Restructured Society, NE Apr. 96, p1,5.

ASCE Task Group Lays Foundation for Structural Institute, Eric Rasmussen, NE June 96, p14.

ASCE's Board Gives Green Light on Institutes, Virginia Fairweather, NE June 96, pl.3. ASCE's New Paradigm, Delon Hampton, P.E., CE July 96,

ASCE's Strategic Plan in Action: The Civil Engineering Research Foundation, NE Oct. 96, p7.

ASCE's Two New Institutes Are Open for Business, NE Nov. 96, p1,4.

Continuous Excellence: Building Effective Organizations, Mel Hensey, 1995, 0-7844-0013-X, 105pp.

Engineering Too Splintered, F. James Knight, CE Oct. 96,

Firehouse Becomes Building-Trade Classroom for Women, CE June 96, p10.

Fostering Reclamation through Cooperation, Cheryl K. Davis, Olujimi O. Yoloye and Mary Grace Pawson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3696-3700.

I Don't Believe in Change Just for the Sake of Change, Gary D. Bates, ME May/June 96, p20-24.

Leading "Unmanageable" Systems, Mel Hensey, ME July/ Aug. 96, p9-10.

Project Management Functions in Facility Owners' Envi-ronment: Organizational Diagnostics, Hossam El-Bibany, Douglas Ault, Ben Branch and John Bechtel, AE Dec. 96, p138-144.

Promote People Skills, Jim Krug, ME Sept./Oct. 96, p1. Quality Is Dead; Long Live Quality, ME Jan./Feb. 96, p9-

Scientists Discover New Element, SC May 96, p67-68.

Seven ASCE Members Elected to NAE, CE Aug. 96, p67. Society's Board of Direction Approves FY 1997 Budget; ASCE Now Poised to Move Ahead on Strategic Plan, NE Sept. 96, p1,5.

Suggested Name Change for ASCE, Carl H. Carpenter, P.E., CE Oct. 96, p31.

Sustainability: Another New Paradigm, Larry Quinn, P.E.,

CE Oct. 96, p6.

Volunteer Organizations Use of Appropriate Technology in Developing Countries, Jim Horner and Tsegaye Hailu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2754-2759.

Analysis of a Long Thick Orthotropic Circular Cylindrical Shell Panel, K. Chandrashekhara and K. S. Nanjunda Rao, EM June 96, p575-579.

Anisotropy Effect on One-Dimensional Consolidation, L. Cui, Y. Abousleiman, A. H-D. Cheng and J.-C. Roegiers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p471-474.

Orthotropic Steel Decks Are Viable Bridge Option, CE Nov. 96, p19-20.

Warping Solution for Shear Lag in Thin-Walled Orthotrop-ic Composite Beams, Roberto Lopez-Anido and Hota V. S. GangaRao, EM May 96, p449-457.

Flexural Characteristics of Two-Dimensional Advanced Composite Grid Reinforced Concrete, David W. Jensen and Craig W. Smart, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p398-401.

Orthotropic plate

Analysis of the Nonlinearity Associated with the Free Vi-bration of an Orthotropic Shell, Jamal F. Nayfeh and Nicholas J. Rivieccio, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pi115-1121.

Dynamic Response Analysis of Slab-Type Bridges, Jag-mohan L. Humar and Ahmed H. Kashif, ST Jan. 95, p48-62.

Vibration Analysis of Special Orthotropic Plate with Variable Cross-Section, and with a Pair of Opposite Edges Simple Supported and the Other Pair of Opposite Edges Free, Duk Hyun Kim, Keyong Jin Kim and Do Sik Sim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1408-1417.

Analytical Solution for Galloping Oscillations, Mykhaylo I. Kazakevych and Oleksiy H. Vasylenko, EM June 96,

Approximations for Elasto-Plastic Oscillations with Gaussian White Noise Excitation, Roger Pettersson, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p506-509.

Filling of Pipelines with Undulating Elevation Profiles, Chyr Pyng Liou and William A. Hunt, HY Oct. 96, p534-539.

Observations of Seiche Forcing and Amplification in Three Small Harbors, Michele Okihiro and R. T. Guza, WW Sept./Oct. 96, p232-238.

On a Conceptual Model for Turbulent Skin Friction, Chao

On a Conceptual Model for Turbulent Skill Friction, Clinds Si and Manhar Dhanak, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p293-296.

Oscillations of Bridge Stay Cables Induced by Periodic Motions of Deck and/or Towers, A. Pinto da Costa, J. A. C. Martins, F. Branco and J. L. Lilien, EM July 96, 433, 639. p613-622.

Plane Solutions of Interface Cracks in Anisotropic Dissimilar Media, Chien-Ching Ma and Jyi-Jiin Luo, EM Jan. 96, p30-38.

Radiation Hydrodynamics of a Slightly-Submerged Body, P. Ananthakrishnan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p832-835.

The Resonance Drives with Adaptive Control, Teodor S. Akinfiev, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p947-950.

Resonances in Nonlinear Stochastic Systems, Agnessa Ko-valeva, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p736-739.

Stable Forced Vibrations Near Unstable Positions, Michael Zakrzhevsky, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p384-387.

A Strategy for Active Control of Tall Civil Structures Using Regenerative Electric Actuators, A. C. Nerves and R. Krishnan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p503-506.

Oscillators

Oscinators
Approximate Solutions to Nonlinear Random Vibration
Problems and the Fokker-Planck-Kolmogorov Equation,
David C. Polidori and James L. Beck, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p94-97.

Comparative Assessment of Prediction Strategies for Adaptive Control, R. Ghanem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p134-137.

Conditional Linearization in Nonlinear Random Vibration, R. N. Iyengar and D. Roy, EM Mar. 96, p197-200.

Experiments with Elasto-Plastic Oscillator, S. Randrup-Thomsen and O. Ditlevsen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p518-521.

Hysteretic Systems: Chaotic Region and Control, M. Bat-taini, F. Casciati and L. Faravelli, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p499-502.

Identification of Nonlinear Systems under Random Excitation, B. A. Zeldin and P. D. Spanos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p168-171.

Moment Lyapunov Exponent and Stability Index for Linear Stochastic Systems with Small Diffusion, Nikolai Moshchuk and Rafail Khasminskii, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p538-541.

Nonlinear SDOF System Subject to Poisson-Distributed Pulse Process, Sau-Lon James Hu, George Tsiatas and Shuang Jin, (Probabilistic Mechanics & Structural Reli-ability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p680-683.

On Moment Stability of Markov Dynamical Systems, Lambros Katafygiotis and Yevgeny Tsarkov, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p546-549.

On the Almost-Surely Lyapunov Exponent of a Duffing-van der Pol Delay Oscillator, M. S. Fofana, (*Probabilis*tic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p550-553.

An Overview of Techniques for Analyzing a System Mod-elled as a Duffing Oscillator Driven by Deterministic and Stochastic Excitations, M. A. Tognarelli and A. Kareem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996). p728-731

Random Response of Nonlinear System to PERPM Model, Y. Wang, Z. Hou, M. Dimentberg, M. Noori and Y. Zhou, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p954-957.

Random Vibration of a Hysteretic Oscillator, Arvid Naess and Vibeke Moe, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p514-517. Reliability of Ocean Structure Using Spectrum-Consistent Excitation, Yunshen Zhou, Zhikun Hou, Mikhail F. Dimentberg and Mohammad Noori, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p582-985. Response of an Oscillator with One-Sided Barrier under Non-White Random Excitation, G. Q. Cai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p112-115. Stochastic Linearization of a Boolean Hysteresis Model, S.

stechanics, 1. K. Lin and T. C. Su, 1996), pl12-115. Stochastic Linearization of a Boolean Hysteresis Model, S. Dobson, M. Noori, Z. Hou and M. Dimentberg, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p502-505.

System Dynamics and Modified Cumulant Neglect Closure Schemes, H. Uğur Köylüoğlu and Søren R. K. Nielsen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p380-383.

p.300-363. Time-Delay Linear Systems with Gaussian White Noise Input, M. Grigoriu, T. T. Soong and A. Reinhorn, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p422-425.

Oscillatory flow Acoustic Sediment Flux Measurements from DUCK '94, Acoustic Sediment Flux Measurements from DUCK '94, Karen M. Kohanowich, Timothy P. Stanton and Edward B. Thornton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p739-748.

Cross-Flow Vibrations of Cylinder in Irregular Oscillatory Flow, Andrzej Kozakiewicz, B. Mutlu Sumer and Jørgen Fredsøe, WW Nov./Dec. 94, p515-534.

Modeling of the Oscillatory Response of Electrorheological Fluids, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p894-897.

Outage Probability in Mobile Radio Communications in a Three-Dimensional Space, Silvano Pupolin, Luciano Tomba and Michele Zorzi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p271-275.

Outfall sewers

The Balanced Indigenous Population (BIP) and Statistical Process Control (SPC) in Marine Pollution Ecology, George Robertson, Mike Mengel, Don Maurer and Irwin Haydock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1431-1436. Biological Serendipity from an Ocean Outfall Maintenance

Inspection, Tom Gerlinger, George Robertson and Don Maurer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2050-2055.

Case History - Outfall Pipeline Failure - Burlington, VT, Nelson L. Thibault and Eugene J. Forbes, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p487-493

Characteristics of Radial Jets and Mixing under Buoyant Conditions, Zhen-Ren Guo and James J. Sharp, HY Sept.

96, p495-502.

Comparison of Near-Field Dilutions Derived from In Situ Measurements and Simulated Dilutions at the Sand Island Sewage Outfall Plume, HI, A. A. Petrenko, B. H. Jones, T. D. Dickey and P. J. W. Roberts, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3886-3891.

Companison of Worst-Case and Probabilistic Approaches to Cosen Outfall Mixing Zone Analysis, Having Haynes and

Ocean Outfall Mixing Zone Analysis, Hening Huang and Robert E. Fergen, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3674-3679.

Emergency Repair of An Ocean Outfall, Gail Lynch, John Linder and Robert Ooten, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2039-2043.

External Inspection of an Ocean Outfall, Mike Heinz, Don Siverts and Bob Ooten, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2056-2059.

The Fate of Pathogenic Organisms in Mamaia Bay, John P. Connolly and Alan F. Blumberg, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4090-4095.

Fault Crossing Design and Seismic Considerations for the South Bay Ocean Outfall, Jon Y. Kaneshiro, Gregory E. Korbin and James D. Hart, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p477-486.

Lawrence F. Catalano, ed., 1990), p4/1-480.
Identifying Potential Trophic Relationships and Bioaccumulation Pathways Between Fish and Invertebrates, Mike Moore, Don Maurer, George Robertson, Hai Nguyen and Tom Gerlinger, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1699-1704.
Historical Production of Lawrence Business Conference on Computer States

Mitigation of Predation at a Juvenile Bypass Outfall Site, J. DenBleyker and L. J. Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p893-898.

chayya Bathala, ed., 1996), p893-898.
Modeling Outfall Plume Behavior Using Far Field Circulation Model, Alan F. Blumberg, Zhen-Gang Ji and C. Kirk Ziegler, HY Nov. 96, p610-616.
Near Field Modeling, Philip J. W. Roberts, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3892-3897.
Numerical Model for Sea Outfall Hydraulics, Zhen-Ren Guo and James J. Sharp, HY Feb. 96, p82-89.
Observations of Edd. Girculation in Manuala Bay, Hawaii.

Observations of Tidal Circulation in Mamala Bay, Hawaii, Peter Hamilton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3880-3885.

Pigging Submarine Outfalls, Jonathan A. French, EE May 95, p396-401.

Probabilistic Analysis of Ocean Outfall Mixing Zones, Hening Huang, Robert E. Fergen, John R. Proni and John J. Tsai, EE May 96, p359-367.

Sewer Crossing of Creek with Bridge Widening, Surendra Anketell, (*Pipeline Crossings 1996*, Lawrence F. Ca-talano, ed., 1996), p275-281.

Site and Size Optimization of Contaminant Sources in Surface Water Systems, Nikolaos D. Katopodes and Michael

Piasecki, EE Oct. 96, p917-923.

The South Bay Ocean Outfall, Frank X. Collins, Gregory W. McBain, Jon Y. Kaneshiro, Luciano Meiorin and Larry Stout, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2044-2049.

A Stormwater Management Plan, Diana Harvey, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2060-2065. Transport Modeling of the Coastal Waters of Oahu, Hawaii,

Transport shoughing of the Coastal waters of Oahu, Hawan, Alan F. Blumberg and John P. Connolly, (North American Water and Environment Congress & Destructive Water, Chenchaya Bathala, ed., 1996), p4084-4089.
Tunneling Under Pressure, Stephen J. Navin, Jon Y. Kaneshiro, Larry J. Stout and Gregory E. Korbin, CE Ech. 06 - 66 - 67.

Feb. 96, p64-67.

Turbulent Line Momentum Puffs, Joseph H. W. Lee, Wolfgang Rodi and C. F. Wong, EM Jan. 96, p19-29.

Peak Outflow from Breached Embankment Dam, David C. Froehlich, WR Jan./Feb. 95, p90-97.

Reducing Glacial-Lake Outburst Hazards in the Khumbu Himal, Richard Kattelmann and Teiji Watanabe, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p258-259.

Outwash

Wave Reflection and Overwash of Dunes, Nobuhisa Koba-yashi, Yukiko Tega and Mark W. Hancock, WW May/ June 96, p150-153.

Overconsolidated clays

Overconsolidated clays Estimation of Driven Pile Resistance at an Overconsoli-dated Clay Site Using Geostatistical Methods, Gil L. Yoon and Michael W. O'Neill, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p950-953.

Overflow

Catastrophic Riverine Flooding: Rapid Evaluation with a Robust Numerical Model, David C. Froehlich and Mi-chael A. Ports, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p225-226.

CSO Planning Model Development and Verification Strate-gy, Edward H. Burgess, Thomas Day, James T. Smullen and Larry A. Roesner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1230-1235.

Dynamics of Turbidity Current with Reversing Buoyancy, B. E. Hürzeler, J. Imberger and G. N. Ivey, HY May 96, p230-236.

Flushing Criteria in Estuarine and Laboratory Experiments, Walter Debler and Jorg Imberger, HY Dec. 96, p728-

Modeling Overfalls Using Vertically Averaged and Moment Equations, Abdul A. Khan and Peter M. Steffler, HY July 96, p397-402.

Modeling SSO's Resulting from Peak Conditions, Marc P. Walch, Kathleen S. Leo, Stephanie L. Ross and William M. Brant, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1777-1782.

Overflow Impacts on River Studied, CE May 96, p8.

Preparation of Notification Models Using Continuous Modeling Techniques, Mark TenBroek, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2474-2479.

Swirl Technology: Enhancement of Design, Evaluation, and Application, Richard Field and Thomas P. O'Connor, EE Aug. 96, p741-748.

Treatment of Wet Weather Discharges in Columbus, Georgia, Stephen P. Hides, (North American Water and Envient Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p582-587.

Controlling Overhead Costs, Kirti Gandhi, ME July/Aug. 96, p18-22.

Costs and Overhead Not the Same Thing, Ken Anderson, CE May 96, p28-29.

Lower Overhead Responsible for Rise in Profits, ME Mar./ Apr. 96, p8.

Overland flow

Assessment of Kinematic Wave Time of Concentration, Richard H. McCuen and Jill M. Spiess, HY Mar. 95,

Development of a Hydrologic Model with Both Spatially Distributed and Physically Based Capabilities, Dennis L. Johnson and Arthur C. Miller. (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3200-3205.

Distributed Hydrologic Modeling of Humid Regions, Fred L. Ogden, Brent A. Watts and B. Saghafian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2909-2914.

Field Verification of Dem-Derived Watershed Response, Randal F. Bodnar, Mark Michelini and Rafael G. Quimpo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3206-3211.

Loss of Contaminants from Soil During Runoff Events, A. Parr, S. Zou and B. McEnroe, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p70-81.

Performance Evaluation of Overland Flow Wastewater Treatment System under Winter and Summer Condi-tions, R. V. Surampalli, P.E., S. C. Chou and S. K. Ban-erji, P.E., CR Dec. 96, p163-177.

SCS Runoff Equation Revisited for Variable-Source Runoff Areas, Tammo S. Steenhuis, Michael Winchell, Jane Rossing, James A. Zollweg and Michael F. Walter, IR May/June 95, p234-238.

Time of Concentration and Peak Discharge Formulas for Planes in Series, Tommy S. W. Wong, IR July/Aug. 96, p256-258.

Overloads

A Bridge Live Load Model Including Overloads, Gongkang Fu and Osman Hag-Elsafi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p34-37.

Modelling of Randomly Meandering Fatigue Crack Growth, Kazimierz Sobczyk and Jerzy Trebicki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p478-481.

Traffic Load Effects on Highway Bridges, Sang Hyo Kim and Sang Ho Lee, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p38-41.

Innovative N.Y. Bridges Add Highway Clearance, CE July 96, p19-20.

Overtopping

Dam Foundation Erosion Study: Pit 4 Scale Model Simulation, R. J. Wittler, S. R. Abt, T. L. Lewis, J. F. Ruff and K. Adhya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3829-3834.

Dam Foundation Erosion Study: the Design of a Sidewall Orifice for Simulation of a Free Trajectory Overtopping Jet, R. J. Wittler, S. R. Abt, T. L. Lewis, J. F. Ruff and K. Adhya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p340-345.

Wave Overtopping and Pressure Dependent on Crest Eleva-tion, Tsutomu Sakakiyama, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

Wave Reflection and Overwash of Dunes, Nobuhisa Koba-yashi, Yukiko Tega and Mark W. Hancock, WW May/ June 96, p150-153.

Overturning tests

Controlling Chaos to Prevent Ship Capsizing, Mingzhou Ding, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p434-437.

Owners

Assessing ESOPs, Ed Carberry, ME Sept./Oct. 96, p17-19.

The Case for Water Markets as the Best Means for Effective Water Allocation, Ronald G. Cummings and R. Peter Terrebonne, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2921-2926.

Considering Constructor Prequalification, Gary D. Bates, P.E., ME Nov./Dec. 96, p10.

Corrections, CE Aug. 96, p31.

Design-Build Joint Venture Liability, Michael C. Loulakis and William L. Cregger, CE May 96, p32.

Federal Legislation Will Increase Design-Build Opportuni-ties, Michael C. Loulakis and William L. Cregger. CE July 96, p35.

The Great Lakes Storm Damage Reporting System, David Wallin and P. S. Chawla, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p183-184.

Insolvency Does Not Excuse From Payment, CE June 96, p24.

Interface Problems between Building Owners and Design ers, Abdul-Mohsen Al-Hammad and Ibrahim Al-Hammad, CF Aug. 96, p123-126.

Issues in Pursuing Quality in Facility Program Develop-ment, Ernest W. Parti, AE Mar. 96, p32-40.

More-Stable Owner-Contractor Relationships, Peter Dozzi, Francis Hartman, Neil Tidsbury and Rafi Ashrafi, CO Mar. 96, p30-35.

Selecting Design-Build: Public and Private Sector Owner Attitudes, Anthony D. Songer and Keith R. Molenaar, ME Nov./Dec. 96, p47-53.

Successful Partnering: Fundamentals for Project Owners and Contractors by H. J. Schultzel and V. P. Unruh, Frederick S. Merritt, AE June 96, p82.

Thinking Ahead with Forward Pricing, Brian E. Kasen and Victor C. Oblas, ME Mar./Apr. 96, p12-16.

Worth the Risk? Charles W. Lockhart and William J. Roberds, CE Apr. 96, p62-64.

Oxidation

Advanced Oxidation Processes for Removal of Natural Organics and Pesticides from Drinking Water, Badri N. Ba-driyha and Massoud Pirbazari, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3010-3016.

Biodegradation of Nonionic Surfactants and Effects of Oxi dative Pretreatment, C. D. Adams, S. Spitzer and R. M.

Cowan, EE June 96, p477-483. Editor's Note, Thomas L. Theis, EE June 96, p452.

Fuel and Cladding Oxidation under Expected Repository Conditions, J. Kevin McCoy, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p396-398.

Modeling Kinetics of Illuminated and Dark Advanced Oxi-dation Processes, Andrew Hong, Mark E. Zappi, Chiang Hai Kuo and Donald Hill, EE Jan. 96, p58-62.

ORP Measurement in Anaerobic Systems Using Flow-Through Cell, Munish Gupta, Ashutosh Gupta, Makram T. Suidan, Gregory D. Sayles and Joseph R. V. Flora, EE Nov./Dec. 94, p1639-1645.

Regeneration of Adsorbents Using Heterogeneous Photoca-talytic Oxidation, Junbiao Liu, John C. Crittenden, David W. Hand and David L. Perram, EE Aug. 96, p707-713.

Digital Image Analysis of Two-Dimensional Fluidized Beds at Lunar Gravity, D. J. Brueneman, L. L. Sorge, M. A. Gibson, C. W. Knudsen and H. Kanamori, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p769-775.

Fuzzy Logic Process Control of HPO-AS Process, Mark T. Yin and Michael K. Stenstrom, EE June 96, p484-492.

Numerical Modeling on the Ofunato Bay Ecosystem Including the Oyster Farming, Tomohiko Terasawa, Kisa-buro Nakata and Koichi Taguchi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p530-541.

Oxygen Utilization of Trickling Filter Biofilms, Steven W. Hinton and H. David Stensel, EE Sept/Oct. 94, p1284-

1297

A Preliminary Design of a Pilot Plant for the Production of Lunar Oxygen, W. E. F. L. Moulford, A. R. Martin, P. W. Cains, P. D. Martin and G. Tan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p762-768.

Pulling Propellants Out of Thin Air: Demonstration of an End-to-End Mars In-Situ Propellant Production Unit, John F. Connolly and Robert M. Zubrin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p706-716.

REGA (Regolith Evolved Gas Analyzer), David S. McKay and Carlion C. Allen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996).

p673-679.

Standpipe Solids Transfer Behavior in a Lunar Gravity Fluidized Bed, Les L. Sorge, David J. Brueneman, J. Dale Ortego, Jr., Michael A. Gibson, Christian W. Knudsen, Hiroshi Kanamori and B. Kent Joosten, Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p776-782.

Volcanic Glass — Oxygen Ore on the Moon, Carlton C. Allen, John M. Woodell and David S. McKay, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p756-761.

Oxygen demand

New Jersey Nearshore Hypoxia During the Summer 1976, Ross W. Hall and Mark S. Dortch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T.

Cheng, 1996), p608-617.

Oxygen Supplies for Bioremediation in Tundra Soils, Dan-iel M. White and Robert L. Irvine, (Cold Regions Engi-neering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p339-350.

Oxygen transfer

Editor's Note, Thomas L. Theis, EE Jan. 96, p3.

The Importance of Water Depth for Sparger Performance, Charles Clauss, John S. Gulliver and Steven C. Wilhelms, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1305-1310.

Optimal Geometric Shape of a Surface Aeration Tank, Achanta Ramakrishna Rao and U.S Laxmi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p800-805.

Oxygen Transfer Efficiency in Small Diffusers, Mark A. Tumeo and Tamar J. Stephens, EE Jan. 96, p55-57.

Oxygen Utilization of Trickling Filter Biofilms, Steven W. Hinton and H. David Stensel, EE Sept./Oct. 94, p1284-1297

Oxygenation

Automobile Emissions Under Arctic Conditions Using Unleaded and 10 Percent Ethanol Admixed Gasolines, R. J. Andres, J. D. Goldbach and F. L. Williams, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p792-803.

Bubbleless Fiber Aerator for Surface Waters, Peter T. Weiss, Bryan T. Oakley, John S. Gulliver and Michael J.

Semmens, EE July 96, p631-639.

Advanced Oxidation Processes for Removal of Natural Organics and Pesticides from Drinking Water, Badri N. Badriyha and Massoud Pirbazari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3010-3016.

Biodegradation of Nonionic Surfactants and Effects of Oxi-dative Pretreatment, C. D. Adams, S. Spitzer and R. M. Cowan, EE June 96, p477-483.

Editor's Note, Thomas L. Theis, EE June 96, p452.

The Educational Ozone Researcher: A University Satellite, Linden H. McClure and Ellen L. Riddle, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1327-1333.

Interactions Between Ozone, AOM, and Particles in Water Treatment, Mysore S. Chandrakanth, Sadasivam Krishnan and Gary L. Amy, EE June 96, p459-468.

Milwaukee's Ozone Upgrade, James C. Kaminski, P.E. and Paul W. Prendiville, P.E., CE Sept. 96, p62-64.

Ozone Layer Could Regenerate, CE Feb. 96, p8.

Ozone Update Requested, Ernest Nussbaum, CE Nov. 96, p36.

Studying the Ozone Layer from Space, Emilia K. Arguello, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1259-1261.

Zoo Treats Aquatic Exhibits with Ozone, CE Nov. 96, p8.

Ozonization

Establishing the Relative Process Risks for Chlorination and Ozonation - A Case Study Illustrates the Need to and Ozonation - A Case Study Hustrates the Need to Evaluate the Process Hazard Implications of a Change in Drinking Water Disinfection Process due to D/DBP Reg-ulations, Paul G. Beswick, Craig E. Brackbill and L. Donald Duke, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1021-1026.

Ozone Update Requested, Ernest Nussbaum, CE Nov. 96, p36.

Development of a Robotic Bridge Painting System, Yong Bai and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p185-191.

Dissolution of Lead Paint in Aqueous Solutions, Gregory L. Barnes and Allen P. Davis, EE July 96, p663-666

Dust-Free Chemical Stripper Puts Old Paint Out to Pasture, CE May 96, p84.

Evaluating Paint-Sludge Chars for Adsorption of Selected Paint Solvents, Byung R. Kim, Edward M. Kalis, Irving T. Salmeen, Carl W. Kruse, Ilham Demir, Stephen L. Carlson and Massoud Rostam-Abadi, EE June 96, p532-

Golden Gate Bridge Gets Its Color Back, CE Sept. 96, p12.

A Process Unit Based Approach to Media-Integrated Waste Minimization: A Paint Manufacturing Case Study, Raffa D. Walicki, Isobel W. Heathcote and Gordon Hayward, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1632-1637.

Speed Is In Your Head, CE Sept. 96, p12.

Paleoclimatology

1995: Where the Past (Paleoflood Hydrology) Meets the Present, Understanding Maximum Flooding, Robert D. Jarrett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1148.

Paleogeology

Approach, Methods and Results of an Individual Elicitation for the Volcanism Expert Judgment Panel, Bruce M. Crowe, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p36-58.

An Assessment of Future Volcanic Hazard at Yucca Mountain, William R. Hackett, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p59-60.

Paleohydrology

Current Status of Paleohydrologic Studies at Yucca Mountain and Vicinity, Nevada, John S. Stuckless, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p98-101.

Plumbing the Hydraulic Secrets of Ancient Inca City Holds Great Fascination for Denver Civil Engineer, NE May 96, p16.

Panels

Aluminum Has History, Kurt P. Thompson, CE Sept. 96, p36,38.

Analysis of a Long Thick Orthotropic Circular Cylindrical Shell Panel, K. Chandrashekhara and K. S. Nanjunda Rao, EM June 96, p575-579.

Average Stress-Strain Relationships of Rebars in RC Panels, Abdeldjelil Belarbi and Amlan K. Sengupta, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p743-746.

Buckling of Composite Panels with Central Holes, David H. Farnham and Walter J. Horn, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p374-377.

Comparison of Water Backwash and Brush Cleaning Systems for Vertical Panel Fish Screens, Morton D. McMillen and Clint W. Smith, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1129-1134.

Estimating Transverse Strength of Masonry Infills, Richard Angel and Joseph Uzarski, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p101-111.

An Experimental Investigation of Sandwich Flat Panels Under Low Velocity Impact, Anthony N. Palazotto, Eric J. Herup and Timberlyn Harrington, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p402-407.

Failure Criteria for Masonry Panels under In-Plane Loading, U. Andreaus, ST Jan. 96, p37-46.

A Finite Element Model for the Aeroelasticity Analysis of Hypersonic Panels, Part II: Determination of Flutter Boundary, Ji Y. Shen and Lonnie Sharpe, Jr., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1148-1154.

A Gatehouse for Johnson, Pedro Sifre and David Harrison, CE Feb. 96, p44-47.

Maximum Shear Strengths of Reinforced Concrete Structures, Li-Xin "Bob" Zhang and Thomas T. C. Hsu, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p408-419.

Probabilistic Modeling of Roof Sheathing Uplift Capacity, D. V. Rosowsky and S. D. Schiff, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p334-337. Probability Based Design Requirements for Unstiffened Panels in Ship Structures, Bilal M. Ayyub, Gregory J. White, Alaa E. Mansour and Paul H. Wirsching, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p102-105.

Probability-Based Design Requirements for Longitudinally Stiffened Panels in Ship Structures, G. J. White, B. M. Ayyub, A. E. Mansour and P. H. Wirsching, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p110-113.

Rock 'N' Roll in Cleveland, Rita Robison, CE Feb. 96, p48-49.

Shear Properties of Components Used in Stressed-Skin Panels, I. Robert Kliger and Patrick J. Pellicane, MT May 96, p77-82.

Shear Resistance of Gypsum-Sheathed Light-Gauge Steel Stud Walls, Reynaud Serrette and Kehinde Ogunfunmi, ST Apr. 96, p383-389.

These Straw Houses Won't Blow Down, CE Nov. 96, p13-15.

Paper industry

EcoBlocks: Nontraditional Use for Mixed Wastepaper, A.
M. Springer, Marc Rose and Rich Ryu, EE May 96,
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Energy from Paper Sludge: Criteria and Hazardous Air Pollutants, Amy K. Zander, Thomas L. Theis and Michael Brennan, EE Aug. 96, p758-760.

Pyrolysis Kinetics of Uncoated Printing and Writing Paper of MSW, Ching-Yuan Chang, Chao-Hsiung Wu, Jiann-Yuan Hwang, Jyh-Ping Lin, Wan-Fa Yang, Shin-Min Shih, Leo-Wang Chen and Feng-Wen Chang, EE Apr. 96, p299-305.

Viscoelastic Modeling of Paper, Edmond P. Saliklis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p246-249.

Paper mills

Geotechnical Properties of Paper Mill Sludges for Use in Landfill Covers, Horace K. Moo-Young and Thomas F. Zimmie, GT Sept. 96, p768-775.

Pilot Testing of a Zero-Discharge Treatment Process, Pascale Lagacé, Paul R. Stuart and Ronald Zaloum, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p99-104.

Parabolic bodies

Gabled Hyperbolic Paraboloid Roofs without Edge Beams, Tamara Jadik and David P. Billington, ST Feb. 95, p328-335.

Parallel processing

Formal Specification of Concurrent Finite Element Systems, Harpreet S. Chadha and John W. Baugh, Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p166-176.

High Performance Computing: Application to Highway Bridges, T. E. Fenske, Z. Yu, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p444-452.

Implementation and Application of Parallel Processing Computer Methods for Probabilistic Analysis, Harry R. Millwater, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p266-269.

An Implementation of Finite Element Method on Distributed Workstations, Eduardo De Santiago and Kincho H. Law, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p188-199.

The Next Generation of Structural Engineering Automation Systems, Song Fong Jan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p494-500.

Parallel Eigenvalue Algorithms for Large-Scale Control-Optimization Problems, A. Saleh and H. Adeli, AS July 96, p70-79.

Parallel Performance of a Meshless Method for Wind Engineering Simulations, George Turkiyyah, Dorothy Reed, Cecile Viozat and Calvin Lin, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p177-187.

Parallel Structural Analysis with Computers and Engineers, Edward L. Wilson, (Analysis and Computation, Franklin

Y. Cheng, ed., 1996), p.1-18.

Two-Dimensional Parallel Computing Solution of Coupled Heat and Moisture Flow in Unsaturated Soil, Hywel Rhys Thomas and Chi Leung Welkin Li, CP July 96, p236-247.

Verifying the Timing Requirements of Multiprocessor Control Systems, John W. Baugh, Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p278-285.

Dynamic Response Analysis of Slab-Type Bridges, Jag-mohan L. Humar and Ahmed H. Kashif, ST Jan. 95,

A Family of Invariant Stress Surfaces, Steen Krenk, EM

Mar. 96, p201-208.

Identification of Vortex-Induced-Response Parameters in Time Domain, Himanshu Gupta, Partha P. Sarkar and Kishor C. Mehta, EM Nov. 96, p1031-1037.

Inappropriate Parameterization in Biofilm-Process Design Curves, C. S. P. Ojha and Rajnish Shrivastava, EE Jan. 96, p67-70.

Inverse Estimation of Parameters for an Estuarine Eutrophi-cation Model, J. Shen and A. Y. Kuo, EE Nov. 96, p1031-1040.

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Macroscopic Models with Complex Coefficients and Cau-sality, Nicos Makris, José A. Inaudi and James M. Kelly, EM June 96, p566-573.

Parameter Estimation of Structures from Static Strain Measurements. I: Formulation, Masoud Sanayei and Michael J. Saletnik, ST May 96, p555-562.

Parameter Estimation of Structures from Static Strain Measurements. II: Error Sensitivity Analysis, Masoud Sanayei and Michael J. Saletnik, ST May 96, p563-572.

Probability-Weighted Moments without Plotting Position Formula, Tefaruk Haktanir, HE Apr. 96, p89-91 Reliability of Remediation Designs in Presence of Model-

ing Error, Changqing Zhen and James G. Uber, WR July/Aug. 96, p253-261.

Selection of Parameter-Estimation Method for LP3 Distribution, Babak Naghavi and Fang Xin Yu, IR Jan./Feb.

96, p24-30. Sensitivity Analysis of Furrow-Irrigation Performance Pa rameters, Dawit Zerihun, Jan Feyen and J. Mohan Reddy, IR Jan./Feb. 96, p49-57.

Structural Damage Identification from Dynamic-Test Data. Juan R. Casas and Angel C. Aparicio, ST Aug. 94,

p2437-2450.

Uncertainty of Hydraulic Parameters, Peggy A. Johnson, HY Feb. 96, p112-114.

WLS Method for Parameter Estimation in Water Distribu-tion Networks, P. V. Niranjan Reddy, K. Sridharan and P. V. Rao, WR May/June 96, p157-164.

Parametric hydrology

Nonparametric Estimation of Low-Flow Frequencies, Kaz Adamowski, HY Jan. 96, p46-49.

Parapets

Effect of Sidewalks and Railings on Wheel Load Distribu-tion in Steel Girder Bridges, K. M. Tarhini, M. Mabsout and M. Kobrosly, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p881-886.

Parking

Intrusion Detection by Linear Active Cameras, J.-P. DeParis, L. Duvieubourg and J.-G. Postaire, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p114-118.

Planning for Intermodal Access at American Airports, Phil-lip S. Shapiro, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p78-88.

Parking facilities

Manufacturers Meet the "Tee" Aim, CE Dec. 96, p89. New Hybrid Seismic System Set for Seattle, CE Oct. 96, p20,22. Parking Lot Corrosion Cure, Scott Greenhaus, CE Nov. 96,

Performance of Precast Parking Garages in the Northridge Earthquake: Lessons Learned, Sharon L. Wood, John F. Stanton and Neil M. Hawkins, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1221-1227.

Seismic Behavior of Precast Parking Structure Diaphragms, R. B. Fleischman, R. Sause, A. B. Rhodes and S. Pessiki, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1139-1146.

Parking lots

Chambers System Helps Developers Level Floodplain, CE Apr. 96, p96.

Retrofitting an Urban Watershed for Improved Water Qual-ity, David Ennis, Michael Clar, Candace Szabad and Chien Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4202-4207.

Scottsdale Builds Bird Haven in Shadow of Freeway, CE Feb. 96, p12,14.

Vollmer, Engineer and Architect, Dies at 80, CE Apr. 96,

Partially saturated soils

Constitutive Relations for Partially Saturated Soils Containing Gas Inclusions, S. Pietruszczak and G. N. Pande, GT Jan. 96, p50-59.

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Particle distribution

Deposition of Particles from a Vertical Jet, M. J. Neves, H. J. S. Fernando and A. A. Neves, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p442-445.

Reducing Model Study Time and Improving Reliability, Ralph Finch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4341-4346.

Simulation of Suspended Particles Transport in the En-trance Region of Tube Flow, Shi-kang Wang and N. H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p462-465.

St., 1770), Proceeds.

Three Dimensional Particle Tracking Model for the Sacramento-San Joaquin Delta, Tara A. Smith and Gilbert V. Bogle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4329-4334.

Particle interactions

Micromechanical Modelling for Granular Materials, Ching S. Chang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p551-554.

Particle motion

Alluvial Channel Geometry: Theory and Applications, Pierre Y. Julien and Jayamurni Wargadalam, HY Apr. 95, p312-325.

An Analysis of Characteristics of Basset Force on Particles Accelerating in Arbitrary Flow Field, Shehua Huang, Liangjun Cheng and Wei Li, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p448-453.

Deformation Patterns in Biaxial Shear of Particulates, Anil Misra and Hongjun Jiang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p568-571.

Electrophoretic Mobility of Cryptosporidium Oocysts and Giardia Cysts, Jerry E. Ongerth and Julie Proctor Pecoraro, EE Mar. 96, p228-231.

Modeling the Fate of Copper Discharged to San Francisco Bay, Carl W. Chen, Daniel Leva and Adam Olivieri, EE Oct. 96, p924-934.

Particle Dynamics in the Sound Between Denmark and Sweden, Jens R. Valeur, Morten Pejrup and Anders Jen-sen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p951-962.

Segregation in Hopper Flows, Masami Nakagawa, Xiaoshan Lin and G. G. W. Mustoe, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p386-389.

Studying Mixed Granular Flows by Image Analysis, Len-nart Gustafsson and Peter Gustafsson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p100-103.

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Swamee and Aditya Tyagi, EE Jan. 96, p71-73.

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90, p407-415.
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 Streambed Armoring, C. O. Chin, B. W. Melville and A. J. Raudkivi, HY Aug. 94, p899-918.
 Uncertainty Analysis of Reservoir Sedimentation, Hyun-

Suk Shin and Jose D. Salas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2294-2299.

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Brewery Wastewater Treatment in UASB Reactor at Ambient Temperature, Yue-Gen Yan and Joo-Hwa Tay, EE June 96, p550-553.

Design of Class-I Sedimentation Tanks, Prabhata K. Swamee and Aditya Tyagi, EE Jan. 96, p71-73.

Stress-Strain Modeling of Sands Using Artificial Neural Networks, G. W. Ellis, C. Yao, R. Zhao and D. Penuma-du, GT May 95, p429-435.

Tributary No. 9 Restoration, Maryland State Highway Administration, James W. Gracie, Robert Shreeve and Linda Kelbaugh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3539-3544.

Particles

Analysis of Behavior of Sand Surrounding Pile Tips, P. Simonini, GT Nov. 96, p897-905.

Analysis of Disjoint Two-Dimensional Particle Assemblies.

Tuong X. Tran and Richard B. Nelson, EM Dec. 96, p1139-1148.

pi139-1146. Diffusive Transport of Organic Colloids from Sediment Beds, K. T. Valsaraj, S. Verma, I. Sojitra, D. D. Reible and L. J. Thibodeaux, EE Aug. 96, p722-729. Effect of Maxwell Binder on Two-Phase Materials, Han

Zhu, Jeff W. Rish, III and William C. Dass, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p576-579.

Mechanics, Y. K. Lin and I. C. Su, 1990, po 70-319. Electrophoretic Mobility of Cryptosporidium Ocysts and Giardia Cysts, Jerry E. Ongerth and Julie Proctor Pecoraro, EE Mar. 96, pc28-231. A Heuristic Model for Particle Entrainment into Suspen-sion, Yarko Niño and Marcelo García, (Engineering Me-tal). V. Lin and T. C. Su, 1000. 2012, 931.

chanics, Y. K. Lin and T. C. Su, 1996), p812-815.

Improvement of Soft Clays by High-Voltage Electrokinet-ics, Julie Q. Shang and Wayne A. Dunlap, GT Apr. 96,

Interactions Between Ozone, AOM, and Particles in Water

Treatment, Mysore S. Chandrakanth, Sadasivam Krish-nan and Gary L. Amy, EE June 96, p459-468. Jamming of the Flow of Granular Materials, Yi Sun and Oleg Vinogradov, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p265-268.

Macroscopic Constitutive Behavior of Clays from Microscopic Considerations, A. Anandarajah and J. Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p709-712.

MRI Studies of Direct Shear Tests on Round Particles,

MRI Studies of Direct Shear Tests on Round Particles, Tang-Tat Ng, Marlene Kelley and James Sampson, (En-gineering Mechanics, Y. K. Lin and T. C. Su, 1996), p572-575.
A Note on the Incipient Motion of Sediment Particles, A. Papanicolaou, P. Diplas, M. Balakrishnan and C. Dan-cey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p657-660.

Particle Spinning Motion during Saltating Process, Hong-Yuan Lee and In-Song Hsu, HY Oct. 96, p587-590.
Resuspension of Particle Bed by Round Vertical Jet, Jordi Colomer and Harindra J. S. Fernando, EE Sept. 96,

p864-869.

Sizing Dumped Rock Riprap, David C. Froehlich and Craig A. Benson, HY July 96, p389-396.

Source Apportionment Study of Nitrogen Species Measured in Southern California in 1987, Meng-Dawn Cheng, Ning Gao and Philip K. Hopke, EE Mar. 96, p183-190.

Stochastic Analysis for Movement of Fine Particles in Porous Media, Rao S. Govindaraju, HE Oct. 96, p161-168.

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Interparticle Contact Behavior and Wave Propagation, Giovanni Cascante and J. Carlos Santamarina, GT Oct. 96, p831-839.

Particulate Sampler to be Carried on a High Altitude Bal-loon, Christopher Benning and Jared Whitaker, (Engi-neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1334-1338.

At AWWA Conference, Public Utilities Put Up a Fight, CE Sept. 96, p24-25.

The Best Partnering Books for Your Design Firm, Ned Godfrey, ME Sept./Oct. 96, p7-9.

Construction Dispute Resolution Endorsed, CE June 96, p8. Construction Forum, SC Feb. 96, p9-11.

The Future of Engineered Quality, Michael T. Kubal, ME Sept./Oct. 96, p45-52.

Owner-Contractor Relationships on Contaminated Site Remediation Projects, Cynthia M. Ruff, David A. Dzombak and Chris T. Hendrickson, CO Dec. 96, p348-353.

Partnering for Performance, Duke Nielsen, ME May/June 96, p17-19. Partnering for Quality Projects, ME July/Aug. 96, p11-12.

Partnering Manual for Design and Construction by William C. Ronco and Jean S. Ronco, Frederick S. Merritt, AE Sept. 96, p122.

Partnering: Building a Stronger Design Team, Richard G. Weingardt, AE June 96, p49-54.

Relationship Between Project Interaction and Performance Indicators, James B. Pocock, Chang T. Hyun, Liang Y. Liu and Michael K. Kim, CO June 96, p165-176.

Successful Partnering: Fundamentals for Project Owners and Contractors by H. J. Schultzel and V. P. Unruh, Frederick S. Merritt, AE June 96, p82.

Twenty-First Century Partnering and the Role of ADR, Robert S. Miles, ME May/June 96, p45-55. What Project Partnering Is and Is Not, Gary D. Bates, ME

Jan./Feb. 96, p10.

Partnerships Industry-University Partnerships for Construction Engineering Education, Robert K. Tener, El Oct. 96, p156-

Infrastructure Planning and Sustainable Development, David W. Wright, UP Dec. 96, p111-117.

Pub-Priv Partnership for New JFK Terminal, CE Oct. 96,

p12. Searching for a Successful Strategy? Mel Hensey, ME Sept./Oct. 96, p6-7.

Passenger terminals

Apron Reconstruction at Kansas City International Airport, John R. Anderson and Renita M. Mollman, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p158-169.

Passenger Information Terminals: Towards Standardisa-tion, P. Papaioannou, S. Basbas and D. Panayotako-poulos, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p24-29. Pub-Priv Partnership for New JFK Terminal, CE Oct. 96,

Passenger transportation Advanced Traveller Information Systems: Experience from the PLEIADES and ROMANSE Projects, D. J. Jeffery and R. J. Meekums, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p296-304.

Operation of Airport Security Checkpoints Under Increased Threat Conditions, Christopher A. Chung and Hidayat Nyakman, TE July/Aug. 96, p264-269.

San Francisco International Airport Light Rail System, William Leder and Gene Bordegaray, (Meeting the Chal-lenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p106-114.

Passive control

Control of Mega-Sub Building Against Wind Loads, Win-ston Chai and Maria Q. Feng, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p486-489.

Dynamical Model of a Magnetorheological Damper, B. F. Spencer, Jr., S. J. Dyke, M. K. Sain and J. D. Carlson, (Analysis and Computation, Franklin Y. Cheng, ed.,

1996), p361-370.

Experimental Implementation of Hybrid Control, J. Pandya, De Albay, M. Uras and H. Aktan, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1172-1179.

Passive Control Systems for Mitigation of Near-Field Earthquake Ground Motions, Peter W. Clark and James M. Kelly, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p217-218.

Passive Isolation Systems for Launch Vehicles, Eugene R. Fosness, Paul S. Wilke and Conor D. Johnson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1176-1182.

Passive Structural Control with Sequential Coupling, Paul Weidlinger, ST Sept. 96, p1072-1080.

Seismic Analysis and Model Studies of Bridge Abutments, K. L. Fishman and R. Richards, Jr., (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p77-99.

Theoretical and Experimental Studies on Hybrid Control of Seismic Structures, F. Y. Cheng, P. Tian, V. Rao, K. Martin, F. Liou and J. H. Yeh, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p322-338.

Vibration Confinement in Trusses, Muhammad A. Hawwa and Reyolando M. Brasil, EM Mar. 96, p286-290.

Vibration Control of Structures Utilizing Architectural Walls, H. Allison Smith, Luciana R. Barroso and Vicki Vance, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p495-498.

Passive earth pressure

Difference between Load-Transfer Relationships for Laterally Loaded Pile Groups: Active P-Y or Passive P-δ, M. F. Bransby, GT Dec. 96, p1015-1018.

Establishing the Relative Process Risks for Chlorination and Ozonation - A Case Study Illustrates the Need to Evaluate the Process Hazard Implications of a Change in Drinking Water Disinfection Process due to D/DBP Reg-ulations, Paul G. Beswick, Craig E. Brackbill and L. Donald Duke, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1021-1026.

The Fate of Pathogenic Organisms in Mamala Bay, John P. Connolly and Alan F. Blumberg, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4090-4095.

Transport Modeling of the Coastal Waters of Oahu, Hawaii, Alan F. Blumberg and John P. Connolly, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4084-4089.

Effect of Geogrid Reinforcement in Model Track Tests on Pavements, Fereidoon Moghaddas-Nejad and John C. Small, TE Nov./Dec. 96, p468-474.

Local Urban Transit Bus Impact on Pavements, Reed Gib-by, Rebecca Dawson and Peter Sebaaly, TE May/June 96, p215-217.

Pavement Management Pays Off, Rita Robison, CE Apr. 96, p44-47.

Pavement damag

Detection of Cracks in Concrete Using the Impact Respon es, H. L. (Roger) Chen and Lianfeng Pei, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p620-623.

Formulation for Viscoelastic Response of Pavernents under Moving Dynamic Loads, A. T. Papagiannakis, N. Amoah and R. Taha, TE Mar./Apr. 96, p140-145.

Framework for PMS Using Mechanistic Distress Submodels, David K. H. Chua, TE Jan./Feb. 96, p29-40.

Studded Tire Research in Norway, Finland and Sweden, Eric Johnson, Tony Barter and David Sterley, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p676-687.

Pavement deflection

Coupled Nonlinear Analysis of Airport Pavements, T. E. Fenske, K. P. Boone and D. Liu, (Analysis and Computa-tion, Franklin Y. Cheng, ed., 1996), p435-443.

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AASHTO Layer Coefficients for Cement-Stabilized Soil Bases, David N. Richardson, MT May 96, p83-87.

Accelerated Evaluation of New Materials in Transportation Applications Using Advanced Technologies, Mark B. Snyder, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p505-509.

Comparisons between Laboratory Measured and FWD Backcalculated Resilient Moduli, Anand J. Puppala, Steven L. Cumbaa and William H. Temple, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p347-350.

Data Acquisition and Handling for the Minnesota Road Research Project, David E. Newcomb and Joseph A. Cornell, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p510-514.

Design and Construction for Asphalt Pavements in Permafrost Areas: Case Study of Qinghai-Tibet Highway, Nin-gyuan Li and Ralph Haas, (Cold Regions Engineering: gyuan Li and Raipn Haas, (Cota Regions Engineering, The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p866-877.

Extending the Limits-San Jose Runway, Loy Warren, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p151-157.

Low Temperature Cracking and Rutting in Asphalt Concrete Pavements, Ted S. Vinson, R. Gary Hicks and Vincent C. Janoo, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p203-248.

Mechanistic Design of Asphalt Concrete Pavements in Cold Regions, Ted S. Vinson and James W. Rooney, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed.,

1996), p151-202.

Modeling Damage to Rigid Pavements Caused by Subgrade Pumping, M. Asghar Bhatti, Jeffery A. Barlow and James W. Stoner, TE Jan./Feb. 96, p12-21.

Pavement Design Applying Allowable Frost Heave, Seppo Saarelainen, (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p890-898.

Pavement Design at Louisville: Optimizing Local Practice, Darren L. Piedmonte, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996),

p187-198

Pavement Design for Rehabilitation and Minimizing Construction Effects on Aircraft Operations, R. Barry Pierce and Lino H. Neri, Jr., (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996),

Rehabilitation of Taxiway "NB" at IAH with Concrete Overlay, Adil Godiwalla, Keith E. Chapman, Charles Juhasz, William Stamper and Wayne Overman, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p170-186.

Pavement deterioration

Database Preparation for Pavement Modeling-Virginia's Experience, Adel W. Sadek, Thomas E. Freeman and Michael J. Demetsky, TE Nov./Dec. 96, p454-461.

Development of Performance Models for PMS, Kathryn A. Zimmerman and Margaret R. Broten, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p254-262. City Airports, Prianka

Local Urban Transit Bus Impact on Pavements, Reed Gib-by, Rebecca Dawson and Peter Sebaaly, TE May/June

96, p215-217.

Low Temperature Cracking and Rutting in Asphalt Concrete Pavernents, Ted S. Vinson, R. Gary Hicks and Vincent C. Janoo, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p203-248.

The O'Hare International Airport Pavement Management System, Margaret Broten, George Schwandt and William Weiss, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p273-283.

Arports, Friants Scievinaire, ed., 1990, p.273-263.

Pavement Distress Caused by Deep Heave in Anchorage, Alaska, Rupert G. Tart, Jr., Mark R. Musial and Michael E. Krueger, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p923-934.

Three-Dimensional Finite-Element Simulation of FWD Loading on Pavement Systems, W. Uddin, R. M. Hackett, P. Noppakunwijai and Z. Pan, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p284-294.

Pavement management systems

Database Preparation for Pavement Modeling—Virginia's Experience, Adel W. Sadek, Thomas E. Freeman and Michael J. Demetsky, TE Nov/Dec. 96, p454-461.

A Decade of Experience in Developing Pavement Management Systems for Local Agencies, Chi Amy Chow, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p992-998.

Development of Performance Models for PMS, Kathryn A. Zimmerman and Margaret R. Broten, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p254-262.

Framework for PMS Using Mechanistic Distress Submodels, David K. H. Chua, TE Jan./Feb. 96, p29-40.

Genetic-Algorithm Programming of Road Maintenance and Rehabilitation, T. F. Fwa, W. T. Chan and C. Y. Tan, TE May/June 96, p246-253.

The Importance of Maintaining Smooth Airport Pavements, Tony Gerardi, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p295-305.

The O'Hare International Airport Pavement Management System, Margaret Broten, George Schwandt and William Weiss, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p273-283.

Pavement Management Pays Off, Rita Robison, CE Apr. 96, p44-47.

Synthesized Images for Pavement Management System Design, H. D. Cheng and Mario Miyojim, CP Jan. 96, p60-66.

Pavement markings

Telerobotic Pavement Marker Application, Rami A. Rihani and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p171-177.

Pavement overlays

Mechanistic Design of Asphalt Concrete Pavements in Cold Regions, Ted S. Vinson and James W. Rooney, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p151-202.

Rehabilitation of Taxiway "NB" at IAH with Concrete Overlay, Adil Godiwalla, Keith E. Chapman, Charles Juhasz, William Stamper and Wayne Overman, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p170-186.

Pavement recycling

Airfield Pavement Reconstruction at DFW International Airport, Dwain K. Brown and Darryl Boyd, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p140-150.

Pavements

Accelerated Evaluation of New Materials in Transportation Applications Using Advanced Technologies, Mark B. Snyder, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p505-509.

Aging and Low-Temperature Cracking of Asphalt Concrete Mixture, Julie E. Kliewer, Huayang Zeng and Ted S. Vinson, CR Sept. 96, p134-148. Analysis of Pavement Structural Responses Using In-Situ Instrumentation, Dar-Hao Chen and Michael Murphy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p705-708.

Application of FWD in Analyzing Finite Width Effect of Pavements, Dar-Hao Chen, Michael Murphy and Mohan Yeggoni, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1018-1021.

Apron Reconstruction at Kansas City International Airport, John R. Anderson and Renita M. Mollman, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p158-169.

Cool Roofs and Pavements to Help Hot Smoggy Cities, Arthur H. Rosenfeld, Hashem Akbari, Haider Taha and Melvin Pomerantz, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1-13.

Data Acquisition and Handling for the Minnesota Road Research Project, David E. Newcomb and Joseph A. Cornell, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p510-514.

Environmental-Induced Longitudinal Cracking in Cold Regions Pavements, Robert L. Scher, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p899-910.

Evaluation of Bridge Decks and Pavements at Highway Speed using Ground Penetrating Radar, Kenneth R. Maser, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p820-828.

An Expert System as Support in Maintenance of Road Pavement Surface, P. Giannattasio, M. Crispino, V. Nicolosi, G. Ambrosino and M. Boero, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p500-504.

Field Evaluation of GEOSYNTHETICALLY STABI-LIZED PAVEMENTS, Imad L. Al-Qadi, Thomas L. Brandon and Salman A. Bhutta, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p328-337.

Field Observations of Instrumented Highway Sections with Different Frost Protections, J.-M. Konrad, G. Dore and M. Roy, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carison, ed., 1996), p652-663.

Florida Department of Transportation Aviation Office Statewide Pavement Maintenance Management Program, J. David Scherling, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p263-272.

Geotextile-Reinforced Surface for Rapid Construction of Low-Volume Pavements, Reed B. Freeman and Randy C. Ahlrich, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p298-307.

Ground Penetrating Radar for Infrastructure Condition Assessment and Geophysical Applications: A Review, Udaya B. Halabe, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p812-819.

Material Properties, Specifications and Testing for Pavements in Cold Regions, Edwin J. Chamberlain, Vincent C. Janoo and Stephen A. Ketcham, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p289-318.

Mechanistic Evaluation of Fly Ash Asphalt Concrete Mixtures, N. Ali, J. S. Chan, S. Simms, R. Bushman and A. T. Bergan, MT Feb. 96, p19-25.

Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996, 0-7844-0179-9, 300pp.

Neural Networks and AASHO Road Test, M. R. Banan and K. D. Hjelmstad, TE Sept./Oct. 96, p358-366.

Nevada Test Site on Track, CE Mar. 96, p20-21.

Numerical Simulation of Permanent Deformation in Flexible Pavement Systems Subjected to Moving Loads, David J. Kirkner, Weixin Shen, Michael I. Hammons and Donald M. Smith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p430-433.

Pavement Evaluation with Seismic Tomographic Imaging, S. Nazarian, D. Yuan, D. Doser and K. Dhanasekharan, S. Nazarian, D. Tuan, D. Doser and R. Dinadisckination (Case Histories of Geophysics Applied to Civil Engineer-ing and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p56-72.Performance of Hot Mix Asphalt Using Coarse and Skip

Graded Aggregates, Moses Karakouzian, Michael R. Dunning, Robert L. Dunning and Jerold D. Stegeman,

MT May 96, p101-107.

Performance of Polyethylene Parting Strips in PCC Pavements, Samuel P. Lawrence, Awad S. Hanna and Jeffrey

S. Russell, TE Mar./Apr. 96, p155-163.

Performance of Stabilized Base Course at DFW, William P. Grogan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p308-317.

Polyolefin Fiber Reinforced Concrete, Billy D. Neeley and

Polyonen Finer Reimforca Concrete, Bitty D. Neetey and Edward F. O'Neil, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p113-122.
Road and Airfield Development in the Subarctic and Arctic, Alaska and Northwest Canada, James W. Rooney and Ted S. Vinson, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p1-22.

A Simulator to Study the Effects of Earthquakes on Seg-mental Paving, John Clifford, Rob Avenall and Don Brown, (Natural Disaster Reduction, George W. Hous-

Brown, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p1-2. Temporary Snow and Ice Pavement Structures, Robert L. Scher, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p87-120.

A Uniaxial Constitutive Model Accounting for Viscoelas-

A Uniaxial Constitutive Model Accounting for Viscoelasticity and Damage Evolution under Cyclic Loading, Hyun-Jong Lee and Y. Richard Kim, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996, p693-696.
A User's Experience in Design and Field Quality Control With the Superpave System, Gerald Huber, Xishun Zhang and Robin Fontaine, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p711-720.
Validation of Rutting in the CAL/APT Program, J. Harvey, S. Shatnawi and S. Weissman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p701-710.

California State Route 91 Variable Toll Express Lanes: Op-erational Aspects and Impact Assessment, Edward C. Sullivan and Jerry C. Porter, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p547-551

Comparing Contracts: Which Type is Best?, ME May/June 96, p10-11.

County Responsible for Bond, CE June 96, p24.

Electronic Signatures Are Revolutionizing Highway Programs, Michael J. Vecchietti and Lawrence I. Neff, CP Oct. 96, p264-266.

The Enforceability of "Pay When Paid" Clauses, Michael C. Loulakis and William L. Cregger, CE Sept. 96, p40.

Free Checking, ME Jan./Feb. 96, p13.

The Gaudi-Marseille Experiment: An Example of a Mul-The Cadul-Marsenile Experiment: An Example of a Mur-tiservice Remote Payment System, D. Danflous and G. Coquet, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p542-546. Insolvency Does Not Excuse From Payment, CE June 96,

p24.

Paid-When-Paid Clauses, Kenneth H. Lazaruk, Esq., ME May/June 96, p12-14. Pay When Paid, CE Mar. 96, p24.

Pay-When-Paid Risks are Limited, CE Aug. 96, p24.

Representing the City, CE Dec. 96, p24

State Agency Not Responsible for Performance Bond, CE Nov. 96, p28.

Subcontractor Gives His Side of Story, Charles J. Berkel, CE May 96, p29-30.

Bayesian Model for Fate and Transport of Polychlorinated Biphenyl in Upper Hudson River, Laura J. Steinberg, Kenneth H. Reckhow and Robert L. Wolpert, EE May 96, p341-349.

Editor's Note, Thomas L. Theis, EE May 96, p340.

Leaching of PCBs from a NAPL Entrapped in Porous Media, Zafar Adeel, Richard G. Luthy and David A. Dzombak, (Non-Aqueous Phase Liquids (NAPLs) in Sub-Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p649-660.

Sediment and Contaminant Transport in Green Bay, Zenitha Chroneer, Mary Cardenas, James Lick and Wilbert Lick, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p313-324.

Estimation of High Spring Floods Causing Inundation in Non-Studied Rivers of the West Siberian Plain, E. A. Asabina, (North American Water and Environment Congress & Destructive Water. Chenchayva Bathala, ed., 1996), p3702-3703.

Flood Quantiles for Small Watersheds Using Peak Eleva-tion to Volume Method, Michael C. Morgan and Eric D. Loucks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p146-151.

1930), p14617 [Joseph S. Walder, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2449.

How to Manage Floodwaves in the Dutch Meuse: Future Measures to Reduce the Inconvenience of Inundations, J. H. Gerretsen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3271-3272.

Mitigation of Flood Hazard on Alluvial Fans, Julianne J. Miller and Richard H. French, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2324-2329.

Peak flow

Debris Flow Events at Mountainous Creeks near Santiago, Chile- Hydrologic Analysis, X. Vargas and P. Lara, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1550-1551.

Expected Moments Alogrithms for Flood Frequency Analysis, William L. Lane and Timothy A. Cohn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2185-2190.

From Natural Disaster to Human-Caused Disaster, Antoni Palau and Jorge Alcázar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3497.

Modeling SSO's Resulting from Peak Conditions, Marc P. Walch, Kathleen S. Leo, Stephanie L. Ross and William M. Brant, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1777-1782.

Asinfall-Runoff Modeling for Watershed Stormwater Man-agement, Yuan Cheng, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2066-2071.

Rational-Method Equation and HEC TD-15, T. V. Hromad-ka, II and R. J. Whitley, IR Jan./Feb. 96, p15-18.

An Approximation Method for Estimating Extremes of Narrow-Band Non-Gaussian Random Vibration, Arvid Naess and Tor Espen Hagen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p90-93.

Peak Outflow from Breached Embankment Dam, David C.

Froehlich, WR Jan./Feb. 95, p90-97.

Peak-Load Method for Fracture Parameters of Two-Parameter Fracture Model, Tianxi Tang, Chengsheng Ouyang and Surendra P. Shah, (Engineering Mechanics,

Coryang and Surentra r. Shan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p584-587.

Time of Concentration and Peak Discharge Formulas for Planes in Series, Tommy S. W. Wong, IR July/Aug. 96, p256-258.

Peaking capacities

Probability Distributions for Peak Stage on Rivers Affected by Ice Jams, Andrew M. Tuthill, James L. Wuebben, Steven F. Daly and Kathleen D. White, CR Mar. 96, p36-57.

Pedestrian malls

Chicago Returns Traffic to Pedestrian Mall, CE June 96, p14.

Pedestrian safety

School Children as Pedestrians in Cairo: Proxies for Improving Road Safety, Khaled A. Abbas, Ibrahim Mabrouk and Khaled A. El-Araby, TE July/Aug. 96, p291-

Pedestrian traffic flow

Dynamic Service Actions for Floor Systems - Human Activity, Per-Erik Eriksson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p413-419.

Image Monitoring on Motorway: Pedestrian Detection using Image Processing, Salah Bouzar, Roland Glachet, Jean-Marc Blosseville and François Lenoir, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p124-128.

Pedestrian Flow Estimation in Urban Environment by Image Processing, P. Vannoorenberghe, C. Motamed, J.-M. Blosseville and J.-G. Postaire, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p119-123.

Providential Resurrection, CE May 96, p16.

BALANCE - A Method for Traffic Adaptive Signal Control Field Trial and Simulation Studies, Bernhard Friedrich and Hartmut Keller, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p615-619.

Bikers and Walkers Discuss Transit Issues, CE Mar. 96, p8. Control of Floor Vibrations, Linda Morley Hanagan, Cheryl Rottmann and Thomas M. Murray, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p428-

Engineers Cut a "Greenway" Through Atlanta, CE Oct. 96, p14,16.

Sacramento River Pedestrian Bridge, Charles Redfield and Jiri Strasky, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p153-160.

Terrestrial Applications of a Composite Lattice Space Structure, Arup K. Maji, Keith Donnelly and Michelle Salas, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1122-1126.

Trip Characteristics of Travelers without Vehicles, V. Thamizh Arasan, V. R. Rengaraju and K. V. Krishna Rao, TE Jan/Feb. 96, p76-81.

Guiding Principles, Narbey Khachaturian and John P. Gnaedinger, ME Nov./Dec. 96, p30-33.

Dynamic Behaviour of Masonry Church Bell Towers, Alan R. Selby and John M. Wilson, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p188-199.

Concrete Penetration by Eroding Projectiles: Experiments and Analysis, Vladimir M. Gold, George C. Vradis and James C. Pearson, EM Feb. 96, p145-152.

Constitutive Models for Concrete Penetration Analysis, Vladimir M. Gold, George C. Vradis and James C. Pear-son, EM Mar. 96, p230-238.

Models for Estimating Core-Cycle Rate of Penetration at Yucca Mountain, Nevada, Lawrence E. Barker and Dale D. Daffern, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p468-470.

Moisture Penetration of Concrete Floor Slabs, Basement Walls, and Flat Slab Ceilings, Robert W. Day, SC Nov. 96, p104-107.

Storm-Driven Trajectories of Rain near Balconies on Tall Building, Fillmer W. Ruegg, AE Sept. 96, p100-106.

Penetration resistance

Penetration resistance
Bayesian Liquefaction Resistance Analysis, Wilson H.
Tang and Mauricio Angulo, (Uncertainty in the Geologic
Environment: from Theory to Practice, Charles D.
Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.

Shackelford, ed., Priscilla P. Neison, ed. and artaly a. Roth, ed., 1996), pt 195-1209.

Damage Caused by Projectile Impact to High Strength Concrete Elements, A. N. Dancygier, (Worldwide Advances in Structural Concrete and Massorry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p484-495.

Effectiveness of Blast-Furnace and Gasifier Slags at Reducing Ingress of Chloride Ions into Portland Cement Concretes in Marine Environments, G. J. Osborne, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Theory and Practice of Projectile's Penetration in Soils, Yu. Boguslavskii, S. Drabkin, I. Juran and A. Salman, GT Oct. 96, p806-812.

Penetration tests

Strain Level and Uncertainty of Liquefaction Related Index Tests, D. Roy, R. G. Campanella, P. M. Byrne and J. M. O. Hughes, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1149-1162

The Use of Direct Push Technologies in Expedited Site Characterization, Greg A. Stenback, Bruce H. Kjartan-son, Al Bevolo and David Wonder, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p180-194.

Pennsylvania

Effects of Spatial Data Resolution and Subarea Size on a Distributed Runoff Model, Thomas A. Seybert and Chin Y. Kuo, (North American Water and Environment Conress & Destructive Water, Chenchayya Bathala, ed., 1996), p2701-2706.

Implementation of Watershed Planning in Chester County Pennsylvania, Robert G. Traver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3975-3980.

Penstocks

Going Down, CE July 96, p14.

Penstock Safety: Proactive or Reactive, EY Apr. 96, p2-9. Retrofit of Black Butte Hydroelectric Project Penstock, George A. Inverso, John A. Schwartz, Stephen M. Hart, Erik Bodholt and Billy Ferguson, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996), p469-476.

Percolation

Analytical Modelling of Damage Based on an Improved Percolation Model, A. Delaplace, S. Roux and G. Pijau-dier-Cabot, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1171-1174.

Managing Border Irrigation for Near-Zero Discharge, T. S. Strelkoff and A. J. Clemmens, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1711-1715.

Modified Oedometer for Arid, Saline Soils, Omar Saeed Baghabra Al-Amoudi and Sahel N. Abduljauwad, GT Oct. 94, p1892-1897.

Perforating

Local Damage Assessment of Metal Barriers under Turbine Missile Impacts, Amde M. Amde, Amir Mirmiran and Thomas A. Walter, ST Jan. 96, p99-108.

Asphalt Update, Rita Leahy, R. Gary Hicks and Carl L. Monismith, CE Apr. 96, p58-61.

Monismith, CE Apr. 96, p58-61.
Bridge Deck Performance and Rehabilitation: A Reliability-Based Analysis, Paul D. DeStefano and Dimitri A. Grivas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1072-1081.
Building Evaluation Techniques by George Baird et al. Frederick S. Merritt, AE Sept. 96, p122-123.
Case History of a Lined Wastewater Treatment Lagoon Failure, Kelly S. Merrill and Matt Stephl, (Cold Regions Engineering: The Cold Regions Infrastructure—An In-

Engineering: The Cold Regions Infrastructureternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p518-532. CERF Receives Award, CE Nov. 96, p8.

Cold Weather Testing of Outdoor Gas-Fired Heaters, De-bendra K. Das, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carison, ed., 1996), p410-423

Comparison of Construction Alternatives Using Matched Simulation Experiments, Photios G. Ioannou and Julio C. Martinez, CO Sept. 96, p231-241.

Comparison of Static and Dynamic Performance of Poly-carbonate Filled and Unfilled Gears, V. P. Gosavi and P. P. Chikate, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p338-347.

ite Materials Edge into Mainstream Construction,

CE Mar. 96, p16,19-20.

Construction Regulated by Performance Information, Dean T. Kashiwagi and Chad T. Halmrast, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p551-558.

Corps Opens Dam Center, CE June 96, p8.

Cost-Performance Criteria for Seismic Retrofitting, Alberto ost-reformance Criteria for seismic Retrofitting, Alberto L. Guzmán, Ali Saffar and Leandro Rodríguez Agrait, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p902-905

Creep Test Results Confirmed, Toby D. Leamon, P.E., CE

Sept. 96, p30.

Delivering the Project in Technical Consulting, James L. Hawley and John Frauenhoffer, AE June 96, p55-62.

Design and Performance Criteria for Inflatable Structures in Space, Marvin E. Criswell, Willy Z. Sadeh and Jenine Abarbanel, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1045-1051.

Development and Characterization of Cellular Grouts for Sliplining, C. Vipulanandan and V. Jasti, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p829-

Development of Performance Models for PMS, Kathryn A. Zimmerman and Margaret R. Broten, (Meeting the Challenge: Rebuilding Inner City Seneviratne, ed., 1996), p254-262. City Airports, Prianka

Diagnosis and Treatment of Structures in Distress by R. N. Raikar, Kenneth L. Carper, CF Feb. 96, p42.

Discussion of Environmental Engineering Forum: Long-Term Effects of Wetland Treatment of Mine Drainage (November/December 1993, Nov. 119, No. 6, by Thom-as M. Walski (Environmental Engineering Forum)), Robert S. Hedin, EE Jan. 96, p83-84.

Durability and Long Term Performance of Cementitious Composites, A. Bentur, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1502.

Eddy Pump Dredging Demonstration at Cresta Reservoir, Larry L. Harrison and Harry P. Weinrib, (North Ameri-Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2091-2096.

Effect of Concrete Workmanship on Strength Reliability of R/C Beams, E. H. Khor, D. V. Rosowsky and M. G. Stewart, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p238-241.

Expedition Applications to Long Duration Space Missions, Gloria R. Leon and Victor S. Koscheyev. (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p997-1001.

Fabrication and Testing of High Performance Steel I-Girders Research in Progress, William Wright, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1571-1578.

Field Performance of FRP Composite Prestressing Cables, Richard G. Lampo, David E. Hoy and Robert J. Odello, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p400-408.

Frequency Distributions and Bayesian Techniques for Esti-mating Performance in Composite Materials, John Miller and José Gomez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p492-501.

Go-Cart Proposal Won't Produce a Ferrari, Sam Bandi-mere, CE Mar. 96, p26,28.

Ground Improvement Salvation, Peter J. Nicholson, CE May 96, p6.

Guideline for Automatic Docking in Space, Samuel E. Moskowitz, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p164-170.

High-Performance Concrete in Bridge Structures in Virginia, Celik Ozyildirim and Jose Gomez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1357-1366.

High-Performance Metals for Civil and Marine Structures, John W. Fisher, Richard Sause and Robert J. Dexter, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p23-37.

High-Performance Pipe Products Fabricated with Reactive Powder Concrete, Edward F. O'Neil and William M. Dowd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1320-1329.

Improving the Performance of Epoxy-Coated Rebar, Robert D. Lampton, Jr. and Dieter Schemberger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1209-1218

Lateral Earth Pressures on Deep Braced Walls, Daniel O. Wong, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p746-

758.

Modeling Microtopography in Basin Irrigation, E. Playán, J. M. Faci and A. Serreta, IR Nov /Dec. 96, p339-347.

Modeling Project Performance for Decision Making, Luis F. Alarcón and David B. Ashley, CO Sept. 96, p265-273.

Modeling Reliability of Train Arrival Times, L. Ferreira and A. Higgins, TE Nov /Dec. 96, p414-420.

Nevada Test Site on Track, CE Mar. 96, p20-21.

A New, Low-Cost Ice Control Structure. Part 2: Construction and Performance, J. H. Lever, G. Gooch and C. Clark, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p629-639.

Optimization of a 550-690-MPa High-Performance Bridge Steel, A. B. Magee, J. H. Gross and R. D. Stout, (Materialian Marchael Park Park 1998).

Steel, A. B. Magee, J. H. Gross and R. D. Stout, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p1561-1570.

Partnering for Performance, Duke Nielsen, ME May/June 96, p17-19. Pavement Distress Caused by Deep Heave in Anchorage, Alaska, Rupert G. Tart, Jr., Mark R. Musial and Michael E. Krueger, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p923-934.

Performance Characteristics of a Smart Hinge for Solar Array Deployment, Dirk B. Warnaar and Rodney G. Galloway, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1162-1168.

Performance of Bridges during the Hanshin-Awaji Earth-quake, Eiichi Watanabe and Kunitomo Sugiura, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p926-933.

Performance of Chain Trenchers in Mixed Ground, Ian W. Farmer, CO June 96, p115-118.

Performance of Stabilized Base Course at DFW, William P. Grogan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p308-317.

Permanent Deformation and Fatigue Characteristics of SMA Mixtures, Louay N. Mohammad and Harold R. Paul, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p622-630.

Predicting the Service Lives of Materials of Construction,

Predicting the Service Lives of Materials of Construction, Geoffrey Frohnsdorff, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p38-53.
Probabilistic Modeling of Radiation Damage in Charge-Coupled Devices, D. H. Ebbeler, L. E. Newlin and N. R. Moore, (Probabilistic Mechanics & Structural Reliabili-ty, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p776-779.
Reactive Powder Concrete (RPC), A New Material for Pre-stressed Concrete Bridge Girders, Scott K. Gilliland, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p125-132.

1996), p125-132.

Recent Advances in the Development of High Performance Cement-Based Materials, J. Francis Young, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1101-1110.

Relationship Between Project Interaction and Performance Indicators, James B. Pocock, Chang T. Hyun, Liang Y. Liu and Michael K. Kim, CO June 96, p165-176.

Scour Around Circular Piers, Prabhata K. Swamee and Chandra Shekhar P. Ojha, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2550-2555.

Selection Among Aqueous and Off-Gas Treatment Tech-nologies for Synthetic Organic Chemicals, Bruce I. Dvorak, Christopher J. Herbeck, Claire P. Meurer, Desmond F. Lawler and Gerald E. Speitel, Jr., EE July 96, p571-580.

Sensitivity Analysis of Furrow-Irrigation Performance Parameters, Dawit Zerihun, Jan Feyen and J. Mohan Red-

dy, IR Jan./Feb. 96, p49-57.

A Simulator to Study the Effects of Earthquakes on Seg-mental Paving, John Clifford, Rob Avenall and Don Brown, (Natural Disaster Reduction, George W. Hous-

Brown, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p1-2. Spaceborne Fourier Transform Hyperspectral Imager, Leonard John Otten, III, Andrew D. Meigs and R. Glenn Sellar, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p224-230.

State Agency Not Responsible for Performance Bond, CE Nov. 96, p28.

Strategies for Achieving Excellence in Construction Safety Performance, Edward J. Jaselskis, Stuart D. Anderson and Jeffrey S. Russell, CO Mar. 96, p61-70.

Stress-Strain Behavior of High-Performance 70W Bridge Steel, E. M. Focht and S. J. Manganello, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1540-

- System Factors for Design of Wood Structural Assemblies, Bradford K. Douglas and Philip Line, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p798-
- Thermal and Vapor Performance of Insulated Assemblies Axel R. Carlson, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p384-

Performance characteristics

Conceptual Seismic Design Methods for Railroad Bridges, Zolan Prucz, Kenneth E. Bruestle and Vinaya Sharma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p191-198.

Performance Characteristics of Polyolefin Fiber Reinforced Concrete, V. Ramakrishnan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p93-102.

Performance evaluation

Application of Neural Networks for the Performance Eval-uation of Bridges, Augusto V. Molina and Karen C. Chou, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p298-301.

Assessment of Work Performance of Maintenance Contrac-tors in Saudi Arabia, Abdul-Mohsen Al-Hammad and

Sadi Assaf, ME Mar/Apr. 96, p44-49.

Benchmarking of a Total-System Performance Assessment Model for WIPP, Joseph E. Hachey and Dawn A. Shut-tle, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p322-324.

Benchmarking: Performance-Improvement Towards Competitive Advantage, N. M. Lema and A. D. F. Price, ME Jan/Feb. 95, p28-37.

Biosphere FEP List Development Specific to Yucca Moun-tain, Graham M. Smith, Barbara M. Watkins and Richard Little, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p244-246.

Comparison of Methods for Predicting Deficient-Network Performance, Rajesh Gupta and Pramod R. Bhave, WR

May/June 96, p214-217.

Compass: A Source Term Code for Investigating Capillary Barrier Performance, Wei Zhou and M. J. Apted, (High Level Radioactive Waste Management, Technical Pro-gram Committee, 1996), p.276-278.

Condition Assessment for Bridge Management, A. Emin Aktan, Daniel N. Farhey, David L. Brown, Vikram Dalal, Arthur J. Helmicki, Victor J. Hunt and Stuart J. Shelley, IS Sept. 96, p108-117.

Construction of Performance Contours on the Storage-Yield Plane of a Within-Year Reservoir System, K. Sudhir and K. Srinivasan, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2951-2957.

Critical Groups for Geological Disposal Performance Assessments, Graham M. Smith and John Kessler, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p234-236.

Dose Rates from Repository Performance Assessment, Robin K. McGuire and John A. Vlasity, (High Level Ra-dioactive Waste Management, Technical Program Com-mittee, 1996), p325-326.

Effect of Geogrid Reinforcement in Model Track Tests on Pavements, Fereidoon Moghaddas-Nejad and John C. Small, TE Nov./Dec. 96, p468-474.

Evaluating Efficiency of Rock Blasting Using Data-Envelopment Analysis, James Odeck, TE Jan./Feb. 96, p41-49

Evaluating the Performance of Construction Equipment Operators in Egypt, Ashraf M. Elazouni and Ismail M. Basha, CO June 96, p109-114.

Evaluation of the Performance of Sprayed Zinc Anodes for Protecting Reinforcing Bars, John S. Tinnea and R. P. Brown, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1531-1539.

Field Observations on Stabilization of Unpaved Roads with Geosynthetics, R. J. Fannin and O. Sigurdsson, GT July

96, p544-553.

Great Tips from Client Feedback Programs, Sylvia Wheel-er, ME Nov./Dec. 96, p10.

How Can Coupled Systems Evolve? A Scenario Simulation Methodology, H. Takase, P. Grindrod and S. P. Cromp-ton, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p258-260

Important Parameters in the Performance of a Potential Re-pository at Yucca Mountain (TSPA-1995), Joel E. At-kins, S. David Sevougian, Joon H. Lee, Robert W. Andrews and Jerry A. McNeish, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p291-292.

Innovative Evaluaton Methods for Bioremediation, Eric A. Seagren, David J. Hollander, David A. Stahl and Bruce E. Rittmann, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p381-392.

Low Temperature Performance Rating Criteria for Lubrication Greases, Jan Lundberg and Terry McFadden, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p153-172.

Mechanistic Evaluation of Fly Ash Asphalt Concrete Mix-tures, N. Ali, J. S. Chan, S. Simms, R. Bushman and A. T. Bergan, MT Feb. 96, p19-25. Millimetre Radar System for the On-Board Lateral Dis-

tance Acquisition: Performances Evaluation and Infrastructure Constraints, Corrado Cugiani and Luigi Giubbolini, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p656-660.

Minimizing Costs of Northern Highways by Using BST, D. R. MacLeod and Robin Walsh, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p935-946.

New Approach to Roadway Performance Indices, Chiu Liu and Robert Herman, TE Sept./Oct. 96, p329-336. Performance Evaluation of Dual-Level Versus Current De-

Performance Evaluation of Dual-Level Versus Current Design Using 1994 Northridge Earthquake Records, K. J. Elwood and Y. K. Wen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p796-799.Performance Evaluation of Overland Flow Wastewater Treatment System under Winter and Summer Conditions, R. Y. Surampalli, P.E., S. C. Chou and S. K. Banerji, P.E., CR Dec. 96, p163-177.

Performance Evaluation of the Aeration Curtain at Hill Air Force Base, Utah, Paul R. Bitter and David A. Hoffmar (Non-Aqueous Phase Liquids (NAPLs) in Subsurface En vironment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p776-787.

Performance Monitoring of Three Stress-Laminated Timber Bridges in Leon County, Nur Yazdani and Joy Orlando Kadnar, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p268-275.

Performance of a Triodetic Foundation Near Fairbanks, Alaska, Thomas C. Kinney, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p291-302.

Performance of Hot Mix Asphalt Using Coarse and Skip Graded Aggregates, Moses Karakouzian, Michael R. Dunning, Robert L. Dunning and Jerold D. Stegeman, MT May 96, p101-107.

Performance of Laminated Glass Units under Simulated Windborne Debris Impacts, Richard A. Behr and Paul A. Kremer, AE Sept. 96, p95-99.

Performance of Polyethylene Parting Strips in PCC Pave-ments, Samuel P. Lawrence, Awad S. Hanna and Jeffrey S. Russell, TE Mar./Apr. 96, p155-163.

Performance of Repair Materials Exposed to Fluctuation of Temperature, A. S. Al-Gahtani, Rasheeduzzafar and A. Al-Mussallam, MT Feb. 95, p9-18.

Performance-Based Seismic Design of Building Structures, Kevin R. Collins, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p792-795.

Potential Changes to Technical Issues in HLW Performance Assessment, N. A. Eisenberg and R. G. Wescott, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p288-290.

Practical Methods for Managing Uncertainties for Geosynthetic Clay Liners, David E. Daniel and Robert B. Gilbert, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1331-1346.

Probabilistic Simulation of Geologic Waste Disposal Facilities Using the Repository Integration Program (RIP), Ian Miller and Rick Kossik, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p944-964.

Reassessment and Requalification of Infrastructure: Application to Offshore Structures, R. G. Bea, IS June 96

p45-53

Review of the Performance Assessment in the WIPP Draft Compliance Application, William W.-L. Lee, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p228-230.

Screening, Combining and Tracking Features, Events and Processes in WIPP Performance Assessments, D. A. Galson, D. G. Bennett, R. D. Wilmot, D. R. Anderson and Peter N. Swift, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p231-

Systematizing Construction Project Evaluations, Mohan M. Kumaraswamy and Antony Thorpe, ME Jan./Feb. 96,

Testing of Abstractions for Total System Performance Assessment, Vinod Vallikat, Srikanta Mishra, Yanyong Xi-ang and David Sevougian, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p293-294.

Total System Performance Predictions (TSPA-1995) for the Potential High-Level Waste Repository at Yucca Moun-tain, S. David Sevougian, Robert W. Andrews and Jerry A. McNeish, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p295-297

Uncertainty Analysis of Dredge Production with Correlation, Said M. Easa, WW Sept./Oct. 94, p499-507.

Uniform Criteria for Level-of-Service Analysis of Free-ways, Feng-Bor Lin, Chang-Wei Su and Hsin-Hsiun Huang, TE Mar/Apr. 96, p123-130.

Use of Probabilistic Methods for Analysis of Cost and Duration Uncertainties in a Decision Analysis Framework, D. M. Boak and L. Painton, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p250-251.

Performance standards Expert Testimony Can Prove Negligence, CE June 96, p24.

Multi-Coupled Disordered Periodic Systems, Cindy X. Qiu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p539-542.

Permafrost

Air Convection Embankments for Roadway Construction in Permafrost Zones, Douglas J. Goering, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p1-12.

Behavior of a Sand in Frozen and Unfrozen States, Christo-

pher W. Swan, (Cold Regions Engineering: The Cold Reions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p483-493.

Comparison of Static and Dynamic Test Results for Driven Steel Pipe Piles in Highly Saline Permafrost, Kelly S. Merrill and Richard E. Riker, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p238-253.

CPT in Cold Regions Engineering: A Logging and Design Tool, Richard Fortier, Branko Ladanyi and Michel Alland Cold Regions Engineering: To Cold Regions Fortier, Branko Ladanyi and Michel Alland Cold Regions Fortiers and Michel Alland Cold Regions Alland Cold Regions Alland Cold Regions Alland Cold Regions Alland Col

1600, Richard Forner, Branko Ladanyi and Michel Allard, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p459-470.
Dam Construction in Northern Environment: A Numerical Study, Mu Shen and J.-M. Konrad, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative Cold Regions.

neering: the Cold Regions Influstration—In Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p736-744. Demonstrating Brine Water Wells and Toilets for Deering, Alaska, Robert H. Lundell, (Cold Regions Engineering:

perative for the 21st Century, Robert F. Carlson, ed., 1996), p558-569.

1990), p538-509.
Design and Construction for Asphalt Pavements in Permafrost Areas: Case Study of Qinghai-Tibet Highway, Ningyuan Li and Ralph Haas, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p866-877.

Disposal of Drilling Wastes in Permafrost Prudhoe Bay, Alaska, Paul Hansen, Michael Snyder and Per Wangstrom, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p327-338.

21st Century, Robert F. Carlson, ed., 1996), p327-338.
Driven Pile Capacities in Warm Permafrost in Komi Republic, Russia, Steven R. Thompson and Rupert G. Tart, Jr., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p254-265.
Environmental-Induced Longitudinal Cracking in Cold Regions Payements, Robert L. Scher, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p899-910.
Foundation Retrofit at Savoonga "A Retrospective Study", G. Scott Crowther, (Cold Regions Engineering: The Cold

G. Scott Crowther, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p278-290.

Foundations for Permafrost and Other Problem Soils, William J. Vangool, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p303-314

Geotechnical Study and Remediation Design for Coal Mine Spoil Instability in Discontinuous Permafrost—A Case Study, Andrew J. Hardy, Patrick G. Corser and Daniel C. Graham, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p712-723.

Guest Editorial, Pat Langhorne, CR Mar. 96, p1-5.

Long-Term Pile Load Testing System Performance in Sa-line and Ice-Rich Permafrost, K. W. Biggar, D. C. Sego

and R. P. Stahl, CR Sept. 96, p149-162.

Minimizing Costs of Northern Highways by Using BST, D. R. MacLeod and Robin Walsh, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p935-946.

1990), p935-940.
Modeling of Contaminant Transport in Groundwater in Areas of Discontinuous Permafrost, Ron Johnson, Doug Kane, Larry Hinzman, Greg Light and Ann Farris, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p82-93.

ROBERT F. Carlson, ed., 1990), pb2-93.
Performance of a Passively Refrigerated Gravel Pad Foundation in Fairbanks, Stephen Adamczak, Jr., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p13-22.

Performance of a Triodetic Foundation Near Fairbanks, Alaska, Thomas C. Kinney, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p291-302.

Permafrost Formation and Aggradation in a 23-m High Ho-mogeneous Dyke: A Case-Study, J.-M. Konrad and R. Ladet, (Cold Regions Engineering: The Cold Regions In-frastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p700-711.

Road and Airfield Design for Permafrost Conditions, David C. Esch, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas,

ed., 1996), p121-150.

Shakwak Highway Project—Construction Challenges, Robin Walsh, Donaldson MacLeod and Dennis Cook, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p640-651.

ary, Robert F. Carison, ed., 1996, post-oil.
A Strength Sensitivity Index for Assessing Climate Warming Effects on Permafrost, Branko Ladanyi, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p35-45.

Strengthening Railroad Roadbed Bases Constructed on Icy Permafrost Soils, V. G. Kondratjev, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p688-699.

Surface Modifications to Reduce Thaw Degradation of Permafrost, John P. Zarling and Jasper Rajesh, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p46-59.

Upheaval Buckling of a Pipeline in an Arctic Environment, T. Bartlett Quimby and Michael R. Fitzpatrick, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p215-225.

Approximate Theory for Radial Filtration/Consolidation, Frank M. Tiller, J. M. Kirby and H. L. Nguyen, GT Oct.

Coefficient of Permeability from AC Electroosmosis Ex-periments. I: Theory, J. Yin, R. J. Finno, J. R. Feldkamp and K. Chung, GT May 96, p346-354.

Coefficient of Permeability from AC Electroosmosis Ex-periments. II: Results, R. J. Finno, K. Chung, J. Yin and J. R. Feldkamp, GT May 96, p355-364.

Consolidation Characteristics of Phosphatic Clays, A. Naser Abu-Heileh, Dobroslav Znidarcic and Bobby L.

Darnes, GT Apr. 96, p295-301.

Corrosion and Hydrogen Permeation Inhibition by Thin Layer Zn-Ni Alloy Electrodeposition, D. H. Coleman, B. N. Popov and R. E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1281-1287.

Cracks in Poroelastic Materials with a Highly Anisotropic Fluid Response, C. Atkinson and R. V. Craster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p212-215.

Embankment Dams in the Piedmont/Blue Ridge Province, Chuck Wilson and Ray Martin, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p27-36.

Experimental Study of Durability of Reactive Powder Concretes, N. Roux, C. Andrade and M. A. Sanjuan, MT

Feb. 96, p1-6.

Geotechnical Properties of Paper Mill Sludges for Use in Landfill Covers, Horace K. Moo-Young and Thomas F. Zimmie, GT Sept. 96, p768-775.

High Performance Concrete for Giles Road Bridge, Amin Einea, Xiaoming Huo, Mohsen Saleh and Maher K. Tadros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi,

ed., 1996), p133-140. No-Fines Concrete Pavements, Nader Ghafoori and Shivaji Dutta, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1637-1646.

Permeability of High-Strength Concrete Containing Low Cement Factor, Tarun R. Naik, Shiw S. Singh and Mohammad M. Hossain, EY Apr. 96, p21-39.

Permeable Barriers to Remove Benzene: Candidate Media Evaluation, J. Rael, S. Shelton and R. Davave, EE May 95, p411-415.

Permeable Pile Groins, Arved J. Raudkivi, WW Nov./Dec. 96, p267-272

Representation of Compacted Clay Minifabric Using Ran-dom Networks, Lakshmi N. Reddi and S. Thangava-divelu, GT Nov. 96, p906-913.

Salt-Saturated Concrete Strength and Permeability, T. W. Pfeifle, F. D. Hansen and M. K. Knowles, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p173-

Significance of Particle Crushing in Granular Materials, Poul V. Lade, Jerry A. Yamamuro and Paul A. Bopp, GT Apr. 96, p309-316.

Venting Test Analysis Using Jacob's Approximation, Kenneth B. Edwards, EE Mar. 96, p232-234.

Analysis of Air Permeability Tests at Yucca Mountain, Nevada, Dave O. Cox and Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p160-162.

High-Performance Concrete in Bridge Structures in Virgin-ia, Celik Ozyildirim and Jose Gomez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1357-1366.

Permeability of Clay Liners with Contaminants, Puvvadi V. Sivapullaiah and Asuri Sridharan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p506-511.

Permeability, soils

Estimation of In Situ Hydraulic Properties of Saprolite, Gordon M. Matheson, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p66-73.

Permeameters

The Effect of Measurement Scale on the Worth of Hydraune Effect of Measurement Scale on the worth of rhydrau-lic Conductivity Data: Slug Tests and Pumping Tests, Willy Zawadzki and Roger Beckie, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1034-1051.

Infiltration Properties at Two Sites in the Konza Prairie, R. S. Govindaraju, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1267-1272.

30-Inch Gas Pipeline Crossing of the San Juan River: Open Cut Excavation in Quality Water Area, James D. Evanoff and Neil P. Stockholm, (Pipeline Crossings 1996, Law-rence F. Catalano, ed., 1996), p186-193.

ASCE Regulated Riparian Code and Florida's Regulated Riparian Experience: The Role for Voluntary Realloca-tion, Phyllis Park Saarinen and Mark D. Farrell, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2927-2932.

ASR Case Study - City of Salem, Oregon, Joe Glicker and Paul Eckley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2679-2684.

Bridge Rehabilitation Permits Higher Live Loads, Dennis W. Stolldorf, P.E. and Thomas A. Holm, P.E., (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p1082-1090.

Central Artery/Tunnel (CA/T) Project Environmental Permitting, Jeffrey M. Paul, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p2236-2241.

Comparison of General vs. Multi Sector NPDES Storm Water Permits, William H. Espey, John Whitescarver and Michael Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2810-2814.

Coping with EPA's Storm Water Permit for Hazardous Waste Facilities, Industrial Landfills, Wastewater Treat-ment Plants, and Recyclers, James P. Amick, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2631-2635.

Environmental Permitting for the Canal Electric Project, Gene F. Crouch, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p237-244.

How Did a California Dam Get a Section 404 Permit? Gary W. Darling and Joel B. Butterworth, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p976-981.

Record Breaking Bundled Pipeline Crossings, Gerald Donnelly and Mark W. Struss, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p37-47.

San Diego County Water Authority's Emergency Storage Project: A Major Planning Achievement, Ken Steele, Lee Judd, Richard Pyle and Uli Kappus, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2815-2819.

Storm Water General Industrial Permit Non-Filers Identification and Outreach, L. Donald Duke and Y. Jae Chung, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2619-2624.

A Stormwater Management Plan, Diana Harvey, (North American Water and Environment Congress & Destri tive Water, Chenchayya Bathala, ed., 1996), p2060-2065.

Transferable Discharge Permits as a Function of Fluctuating Stream Conditions, Norman J. Dudley, Michelle Coelli and John J. Pigram, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p272-

Utilizing Directional Drilling Techniques to Install Underwater Watermain, Timothy M. Stinson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p180-185.

Any New Address Stress? James Donald Strong, CE Nov. 96, p36.

Biosphere FEP List Development Specific to Yucca Mountain, Graham M. Smith, Barbara M. Watkins and Richard Little, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p244-246.

Biosphere Modelling for Radioactive Waste Disposal, Richard A. Klos and Frits Van Dorp, (High Level Radio-active Waste Management, Technical Program Committee, 1996), p237-239.

Characteristics of the Craft Workforce, James E. Rowings, Mark O. Federle and Sara A. Birkland, CO Mar. 96, p83-90.

Critical Groups for Geological Disposal Performance As-sessments, Graham M. Smith and John Kessler, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p234-236.

Development of a Pressure Suit Simulation System for Neutral Buoyancy Operations, David L. Akin and Claudia U. Ranniger, (Engineering, Construction, and Opera tions in Space, Stewart W. Johnson, ed., 1996), p552-558.

Hazards to Personnel from Tower EMFs, James B. Hatfield, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p499-504.

mau, ed., 1990), psys-30-.
Initial EPRI Reaction to the NAS Yucca Mountain Standards Recommendations, John H. Kessler, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p282-284.

490

Medical-Technical Problems of Human Protection, Victor S. Koscheyev, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1002-

The New Madrid Earthquake: Preparing Nurses, Stephanie K. VanArsdale and Roy B. VanArsdale, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p37-98.

Overview of International Space Station Extravehicular Activity System, Jeff Dutton, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p473-479.

Radwaste Management in Reracking of Korean Nuclear Power Plants, Seung Ick Yoo, Young Ho Shin, Chan Do Kim and Do Soon Jun, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p379-381.

Senior Engineers, Defining Their Place in an Electronic Office, James D. Miller, CP Oct. 96, p263.

WIPP TRU Waste Transportation—A Circle of Safety, J. J. Winkel and O. R. Spooner, (High Level Radioactive Waste Management, Technical Program Committee, 1996), 360-362.

Personnel development

Construction Forum, SC Aug. 96, p69-70.

Training of Highway Maintenance Personnel for Hazmat Incident Response, Eugene R. Russell, Sr., El Apr. 96, p83-85.

Personnel management
Human Resources Strategies for Successful Consulting Engineering Firms, Patricia A. Hecker, ME Sept./Oct. 96,

Merit Shop Recruitment and Selection Practices in Alabama, Roger S. Wolters and Rebecca C. Burleson, CO June 96, p152-157.

Partnering for Performance, Duke Nielsen, ME May/June 96, p17-19.

Moment Lyapunov Exponent and Stability Index for Linear Stochastic Systems with Small Diffusion, Nikolai Moshchuk and Rafail Khasminskii, (Probabilistic Mechanics Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p538-541.

Nonlinear Rocking Motions. I: Chaos under Noisy Periodic Excitations, H. Lin and S. C. S. Yim, EM Aug. 96,

Resonances in Nonlinear Stochastic Systems, Agnessa Kovaleva, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p736-739.

Role of Moment Exponent in Stochastic Bifurcation, S. T. Ariaratnam, (Probabilistic Mechanics & Structural Reli-ability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p554-557.

Stability Analysis of a Geometrically Imperfect Structure Using a Random Field Model, York Schorling and Christian Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p604-607.

Structural Consequences of Imperfection in Thin-Walled Components, Luis A. Godoy and John Carrasquillo, (En-gineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p997-1000.

Perturbation theory

Inverse Damping Perturbation for Stiffness Design of Shear Buildings, Tsuneyoshi Nakamura and Masaaki Tsuji, ST June 96, p617-625.

Wave Forces on an Array of Vertical Cylinders, Shohachi Kakuno, Yoshihiro Nakata and Philip L.-F. Liu, WW May/June 96, p147-149.

- Peru's Program for Disaster Mitigation 1992-1995, Julio Kuroiwa and Dusan Zupka, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p84-85.
- Plumbing the Hydraulic Secrets of Ancient Inca City Holds Great Fascination for Denver Civil Engineer, NE May 96, p16.

- Advanced Oxidation Processes for Removal of Natural Organics and Pesticides from Drinking Water, Badri N. Ba-driyha and Massoud Pirbazari, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3010-3016.
- Degradation of Carboxydiphenyl Ether via Bioaugmenta-tion, Rolf U. Halden, Barbara G. Fischer and Daryl F. Dwyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2396-2401.
- Mapping Groundwater Vulnerability to Nitrate and Pesti-cide Contamination in the Salinas Valley, Monterey County, California, Weibo Yuan, Joe LeClaire, Ali Diba, Michael Inada and Matt Zidar, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1099-1104.
- Neural Networks Predict Pesticide Leaching, Steven K. Starrett, Shelli K. Starrett, Yacoub M. Najjar and Judy C. Hill, (North American Water and Environment Conress & Destructive Water, Chenchayya Bathala, ed., 1996), p1693-1698.
- A Paradox at the rocky Mountai Arsenal, Colorado: Benefits of Applied Research, Robert D. Jarrett, Joseph P. Capesius and Mark A. Gonzalez, North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1553-1554.
- Phytoremediation: Plant Uptake of Atrazine and Role of Root Exudates, Joel G. Burken and Jerald L. Schnoor, EE Nov. 96, p958-963.
- Simulating Atrazine Transport with HSPF in an Agricultur-al Watershed, Anne-Marie Laroche, Jacques Gallichand, Robert Lagacé and Alain Pesant, EE July 96, p622-630.
- Simulation of Pesticide Transport for Verification of the DWRDSM, Christopher Enright and Paul Hutton, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3563-3568.
- Small Inocula Can Effect In Situ Biodegradation, Rolf U. Halden and Daryl F. Dwyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2402.
- Uncertainty in Comparative Analysis with Continuous Nonpoint Source Pollution Models, Dipmani Kumar and Conrad D. Heatwole, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1705-1710.

- Discovery of Abundant, Accessible Hydrocarbons Nearly Everywhere in the Solar System, A. Zuppero, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p791-799.
- Dry Deposition of Polycyclic Aromatic Hydrocarbons in Ambient Air, Hwey-Lin Sheu, Wen-Jhy Lee, Chun-Ching Su, How-Ran Chao and Yi-Chin Fan, EE Dec. 96, p1101-1109.

- Aquifer Transmissivity Computations Based on Data from Pump-and-Treat Facilities, Walter Z. Tang, Dean F. Ra-deloff and Vassilios A. Tsihrintzis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1273-1278.
- From Sediment to Solid, James R. Donnelly and William C. Webster, CE May 96, p41-43.
- Interference of Avian Guano in Analyses of Fuel-Contaminated Soils, David E. James, Tod E. Johnson and David K. Kreamer, EE Jan. 96, p74-76.
- New on the Web, CE Mar. 96, p8.

- Petroleum Hydrocarbon Removal via Volatilization and Bi-odegradation at McGrath, Alaska, Paul C. Ramert and Wayne L. Eberhardt, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996),
- Rehabilitating Arctic Tundra in Alaska, Jay D. McKen-drick, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p764-769.
- Reliability Based Design for Oil Country Tubular Goods, P. R. Brand, D. B. Lewis and M. A. Maes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p534-537
- Use of Remediated Petroleum Contaminated Soils in High-way Construction, Jay N. Meegoda, Robert T. Mueller and Frank Palise, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p1-16.

Petroleum products

- Evaporation of Petroleum Products from Contaminated Soil, Seon-Hong Kang and Charles S. Oulman, EE May 96, p384-387
- A Field Test of NAPL Removal by High Molecular Weight Alcohol Injection, Ronald W. Falta, Scott E. Brame, Cin-dy M. Lee, John T. Coates, Charles Wright, Sarah Price, Patrick Haskell and Eberhard Roeder, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Asand Remediation, Lakshmi N. Reddi, ed., 1996), p257-268.
- Wettability of NAPL-Contaminated Sands, Susan E. Pow-William H. Anckner and Thomas F. Seacord, EE Oct. 96, p889-896.

Petroleum refining

- Evaluation of Select Trade-Offs between Ground-Water Remediation and Waste Minimization for Petroleum Refining Industry, Craig D. Andrews, William F. McTer-nan and Keith D. Willett, EY Aug. 96, p41-60.
- Use of Reclaimed Water in Cooling Towers, William T. Bresnahan and Joseph D. Papia, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2660-2665.

Petroski, Henry

Engineers of Dreams Is Well Worth the Read as Petroski Zeroes in on Bridges, Augustine J. Fredrich, NE Nov. 96,

- Advanced Oxidation Processes for Removal of Natural Organics and Pesticides from Drinking Water, Badri N. Ba-driyha and Massoud Pirbazari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3010-3016.
- EDTA-Enhanced Electrokinetic Extraction of Lead, Albert T. Yeung, Cheng-non Hsu and Rajendra M. Menon, GT Aug. 96, p666-673.
- Long-Term Leaching of Metals from Concrete Products, Matthew T. Webster and Raymond C. Loehr, EE Aug. 96, p714-721
- The Nature of Passivity of Reinforcing Steel, Farrel Martin and Jan Olek, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1111-1120.
- Operational Strategy for Metal Bioleaching Based on pH Measurements, Y. G. Du, R. D. Tyagi and T. R.
- measurements, Y. G. Du, R. D. Tyagi and T. R. Sreckrishnan, EE July 95, 9257-535.

 Use of NaOH to Control pH for Solubilization of Waste Activated Sludge, Jih-Gaw Lin, Cheng-Nan Chang and Shih-Ling Hsu. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2468-2473.

Phase angles

Oblique Reflection Characteristics of Rubble-Mound Struc-tures, Michael Isaacson, David Papps and Etienne Man-sard, WW Jan./Feb. 96, p1-7.

Phenol

Biotransformation of Trichloroethylene by a Phenol-Induced Mixed Culture, Mathew M. Shurtliff, Gene F. Parkin, Lenly J. Weathers and David T. Gibson, EE July 96, p581-589.

Intraparticle Mass Transport Mechanism in Activated Car-bon Adsorption of Phenols, E. G. Furuya, H. T. Chang, Y. Miura, H. Yokomura, S. Tajima, S. Yamashita and K. E. Noll, EE Oct. 96, p909-916.

Phenol- and Thiocyanate-Based Wastewater Treatment in RBC Reactor, Goutam Banerjee, EE Oct. 96, p941-948.

Waste Using Organic-Clay Complex, Irene M.-C. Lo, EE Sept. 96, p850-855.

Philippine Islands

Wisconsin Engineer Designs Irrigation System in the Phil-ippines, NE June 96, p9.

Phosphate deposits

Dynamic Duo, John Prendergast, CE July 96, p40-43.
"Seepage Assessments and Control Associated with Florida's Phosphate Industry", Wayne A. Ericson, (Uncer-tainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p866-880.

Phosphoric acid

Microstructural and Phase Characteristics of Phosphogyp-sum-Cement Mixtures, Amitava Roy, Ramesh Kal-vakaalva and Roger K. Seals, MT Feb. 96, p11-18.

Phosphogypsum Slag Aggregate-Based Asphaltic Concrete Mixes, Paul T. Foxworthy, Raju S. Nadimpalli and Roger K. Seals, TE July/Aug. 96, 2300-307. Resilient Modulus of Cement-Stabilized Phosphogypsum,

M. I. Pericleous and J. B. Metcalf, MT Feb. 96, p7-10.

Feasibility of Modeling Phosphorus Dynamics in Stormwa-ter Wetlands, Karina T. Lopez Ivich, William James, Isobel W. Heathcote and John Fitzgibbon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p524-529.

Phosphorus removal

Assessment of AWT Systems in Tampa Bay Area, Richard O. Mines, Jr., EE July 96, p605-611.

Biological Phosphorus Removal: Effect of Low Tempera-ture, Pradeep Kurnar, Indu Mehrotra and T. Viraragha-van, CR June 96, p63-76.

Cold Temperature Nutrient Removal from Wastewater, Jan A. Oleszkiewicz and Shahnaz Danesh, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p533-544.

Constructed Wetlands for Metals Removal, Charles R. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1184-1189.

Effect of Biodegradable Carbon on Biological Phosphorus Removal, Syed R. Qasim, Walter Chiang, Guang Zhu and Rex Miller, EE Sept. 96, p875-878.

Photochemical reactions

Photocatalytic Degradation of Formic Acid via Metal-Supported Titania, Heung Yong Ha and Marc A. Ander-son, EE Mar. 96, p217-221.

Photoelastic studies

Photoelastic Determination of Contact Stresses of Foundations, G. U. Müller, GT Aug. 96, p692-696.

Photogrammetric surveys

Photogrammetric Mapping, U.S. Army Corps of Engineers, 1996, 0-7844-0143-8, 332pp.

Automated Knowledge-Based System for Stereo Video Metrology, Mohammed Taleb Obaidat and Kam W. Wong, SU May 96, p47-64.

Photogrammetric Mapping, U.S. Army Corps of Engineers, 1996, 0-7844-0143-8, 332pp.

Strain Localization and Undrained Steady State of Sand, Richard J. Finno, Wendell W. Harris, Michael A. Mooney and Gioacchino Viggiani, GT June 96, p462-473.

Photographic analysis Bed-Load Transport. I: Mechanical Characteristics,

Chunhong Hu and Yujia Hui, HY May 96, p245-254.

Bed-Load Transport. II: Stochastic Characteristics,
Chunhong Hu and Yujia Hui, HY May 96, p255-261.

Photography
The Human Side of L.A. Metro, Donald R. Ciandella, CE Dec. 96, p36-39

Particle Spinning Motion during Saltating Process, Hong-Yuan Lee and In-Song Hsu, HY Oct. 96, p587-590.

Photovoltaic effect

The Production of Photovoltaic Devices in Space, A. Ignatiev and A. Freundlich, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p287-292.

Physicians

New Option for ASCE Health Plan, CE Feb. 96, p70.

Piers

Bank Protection Toe-Downs and Local Pier Scour, Dennis L. Richards and Christopher J. Pauley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4172-4177

Connection of a Steel Cap Girder to a Concrete Pier, Joseph M. Ales, Jr. and Joseph A. Yura, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p475-482. Design Considerations for Post-Tensioned Integral Pier

Caps, Sami W. Tabsh, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p444-451.

Effects of Foundation Geometry on Bridge Pier Scour, Bruce W. Melville and Arved J. Raudkivi, HY Apr. 96,

Effects of Pier and Foundation Stiffness for Bridges Subjected to Nonstationary Seismic Input, Gongkang Fu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p708-711.

Environmentally Acceptable Piling for Use in Navy Pier Fender Systems, David Hoy, George Warren and Duane Davis, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1189-1198.

New Modeling Method Aims to Better Scout Scour, ET Mar/Apr. 96, p6. Pier Scour at Wide Piers, Peggy A. Johnson, (North Ameri-

can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2193-2201.

Pier Width and Local-Scour Depth, Robert Ettema, Bruce W. Melville and Brian Barkdoll, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p251-256.

Prestress Loss Due to Creep in Post-Tensioned Clay Ma-sonry, Subhash C. Anand and Naresh Bhatia, (World-wide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p49-60.

Response of Building Systems with Rocking Piers and Flexible Diaphragms, Andrew C. Costley and Daniel P. Abrams, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p135-140.

Scary Bridge Rehabbed for Economic Boon, CE Mar. 96, p12,14.

Start-Ups, CE Mar. 96, p8.

Piezometers

Cover-Subsidence Sinkhole Evaluation of State Road 434, Longwood, Florida, Jon Foshee and Brian Bixler, GT Nov. 94, p2026-2040.

The Effect of Measurement Scale on the Worth of Hydraulic Conductivity Data: Slug Tests and Pumping Tests, Willy Zawadzki and Roger Beckie, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1034-1051.

Geostatistical Assessment of Spatial Variability in Piezo-cone Tests, Yasser A. Hegazy, Mayne Paul W. and Shahrokh Rouhani, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p254-268.

Pigging Submarine Outfalls, Jonathan A. French, EE May 95, p396-401.

Pile bearing capacities

Comparing Three Techniques for Finding the Overall Lengths of Installed Timber Piles, Shunyi Chen, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), p780-783

A Practical Approach to Uncertainty Modeling in Geotechnical Engineering, C. Hsein Juang and David J. Elton, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1269-1283.

Setup and Relaxation in Glacial Sand, Donald L. York, Walter G. Brusey, Frank M. Clemente and Stephen K. Law, GT Sept. 94, p1498-1513.

Time Effects on Pile Skin Resistance, Juan M. Antorena and G. Thomas McDaniel, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p582-589.

Setup and Relaxation in Glacial Sand, Donald L. York, Walter G. Brusey, Frank M. Clemente and Stephen K. Law, GT Sept. 94, p1498-1513.

Time Effects on Pile Skin Resistance, Juan M. Antorena and G. Thomas McDaniel, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p582-589.

Comparison of Static and Dynamic Test Results for Driven Steel Pipe Piles in Highly Saline Permafrost, Kelly S. Merrill and Richard E. Riker, (Cold Regions Engineer-ing: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p238-253.

Forces in Pile Foundations under Seismic Loading, A. M. Kaynia and Saeed Mahzooni, EM Jan. 96, p46-53.

Foundation Retrofit at Savoonga "A Retrospective Study G. Scott Crowther, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p278-290

Hysteretic Response and Structural Reliability, Ricardo O. Foschi and Hong Li, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p882-885.

Nonlinear Pile Foundation Analysis Using Florida-Pier, M. I. Hoit, M. McVay, C. Hays and P. W. Andrade, BE

Nov. 96, p135-142.

Predicted and Observed Cyclic Performance of Piles in Calcareous Sand, Riadh H. Al-Douri and Harry G. Poulos, GT Jan. 95, p1-16.

Response of Pile Embedded in Stochastic Ground Media, Makoto Suzuki and Tsuyoshi Takada, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p612-615.

Scour Around Exposed Pile Foundations, Mohammad Salim and J. Sterling Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2202-2211.

The Taller the Deeper (Available only in the Geo/ Environmental Special Issue), Clyde N. Baker, Jr., Elliott E. Drumright, P.E., Leonard M. Joseph and Tarique Azam, CE Nov. 96, p3A-6A.

Behavior of Pile-Supported Dolphins in Marine Clay Under Lateral Loading, S. Narasimha Rao, V. G. S. T. Ramakr-ishna and G. Balarama Raju, GT Aug. 96, p607-612.

Difference between Load-Transfer Relationships for Later ally Loaded Pile Groups: Active P-Y or Passive P-δ, M. F. Bransby, GT Dec. 96, p1015-1018.

Forces in Pile Foundations under Seismic Loading, Amir M. Kaynia and Saeed Mahzooni, EM Jan. 96, p46-53.

Scour Around Exposed Pile Foundations, Mohammad Salim and J. Sterling Jones, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2202-2211.

Pile lateral loads

Computer Application of CLM Lateral Load Analysis to Piles and Drilled Shafts, Tracy Brettmann and J. Michael Duncan, GT June 96, p496-498.

Long-Term Pile Load Testing System Performance in Sa-line and Ice-Rich Permafrost, K. W. Biggar, D. C. Sego and R. P. Stahl, CR Sept. 96, p149-162.

Foundation Retrofit at Savoonga "A Retrospective Study", G. Scott Crowther, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p278-

Evaluation of Reliability of Pile-Supported Structures, Wil-liam M. Isenhower and Reed L. Mosher, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p666-684

Pile Wall Cuts Off Seepage (Available only in Geo/ Environmental Special Issue), Donald A. Bruce and Giovanni Dugnani, CE July 96, p8A-11A.

Reliability Analysis for Deep-Seated Stability of Pile-Supported Structures, William M. Isenhower, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p870-873.

West Dock Causeway Bridge Piers, A. B. Christopherson, T. Nottingham, J. W. Pickering and K. W. Braun, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p315-326.

Design Model Bias Factors for Driven Piles from Experiments at NGES-UH, Gil L. Yoon and Michael W. O'Neill, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p759-

Analysis of Behavior of Sand Surrounding Pile Tips, P. Simonini, GT Nov. 96, p897-905.

Arching in Piled Embankments, B. K. Low, S. K. Tang and V. Choa, GT Nov. 94, p1917-1938.

Environmentally Acceptable Piling for Use in Navy Pier Fender Systems, David Hoy, George Warren and Duane Davis, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1189-1198.

Field Investigation of Potential Contamination by Bitumen-Coated Piles, Albert T. Yeung, Rajan Viswanathan and Jean-Louis Briaud, GT Sept. 96, p736-744.

Influence of Foundation Nonlinearity on Offshore Towers Response, Mohamed H. El Naggar and Milos Novak, GT Sept. 96, p717-724.

Jet Scour around Vertical Pile, C. O. Chin, Y. M. Chiew, S. Y. Lim and F. H. Lim, WW Mar./Apr. 96, p59-67.

Lateral Capacity of Helical Piles in Clays, Yenumula V. S. N. Prasad and S. Narasimha Rao, GT Nov. 96, p938-941. LATWAK: Impact Test to Obtain Pile Lateral Static

Stiffness, Jean-Louis Briaud and Marc Ballouz, GT June

96, p437-444.

Long Term Behavior of Concrete Columns with CFRP, M. Arockiasamy, Ahmed Amer, S. Chidambaram and M. Shahawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1050-1053.

Modeling the Dynamic Nonlinear Response of Single Piles, Deepak Badoni and Nicos Makris, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1091-1098.

Negative Skin Friction on Piles in Layered Soil Deposits, K. S. Wong and C. I. Teh, GT June 95, p457-465. Nonlinear Lateral Pile Deflection Prediction in Sands, Shamsher Prakash and Sanjeev Kumar, GT Feb. 96, p130-138.

Response of Pile Embedded in Stochastic Ground Media, Makoto Suzuki and Tsuyoshi Takada, (*Probabilistic Me-chanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p612-615.

Scour Protection in Bottomless Culverts, D. V. Halvorson and F. J. Laumann, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3932-3941.

Simplified Method for Design of Underpinning Piles, Makarchian and H. G. Poulos, GT Sept. 96, p745-751.

Masarchian and H. G. Poulos, GT Sept. 96, p745-751.
 Studies on Wave, Current and Suspended Sediment Characteristics at the Surf Zone, Chien-Kee Chang and Ching-Her Hwang. (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p728-738.
 Unique Pile Combination Supports New Tennis Complex, CE Pro. 6 et al. 12.

CE Dec. 96, p10,12.

Design of Microtunneling and Jacking Pipe, Alan Atalah, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p395-402.

1990), p395-402.
Design of Pressure Class Ductile Iron Pipe on Supports, L. Gregg Horn, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p222-229.
Determining Rehabilitated Sewer Flow Capacity, Joseph Barsoom, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p97-104.

talano, ed., 1996), p97-104.

Precast Concrete Low-Head Pressure Pipe Significant in Historic Irrigation Canal Rehab, John J. Meyer and Steven K. Wagner, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p265-274.

San Diego's Historic Dulzura Conduit: New Solutions, Hans H. Torabi and Harold B. Tennant, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p340-347.

Tags 1996, Lawrence F. Catalano, ed., 1996), p340-347.

Technological Advances in the Design and Construction of Water Mains for Crossing Under Rivers and Other Barriers, Donald E. Eckmann and William F. Nabak, (Pipeline Crossing 1996, Lawrence F. Catalano, ed., 1996), p403-408.

Pipe flow

Comparison of Methods for Predicting Deficient-Network Performance, Rajesh Gupta and Pramod R. Bhave, WR May/June 96, p214-217.

Design of Sediment-Transporting Pipeline, Prabhata K. Swamee, HY Jan. 95, p72-76.

Determining Rehabilitated Sewer Flow Capacity, ASCE Task Committee on Flow Characteristics of Pipeline Infastracture Committee of the Pipeline Division, TE May/June 96, p258-261.

Determining Rehabilitated Sewer Flow Capacity, Joseph Barsoom, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p97-104.

Numerical Model for Sea Outfall Hydraulics, Zhen-Ren Guo and James J. Sharp, HY Feb. 96, p82-89.

Reliability-Based Design of Water-Distribution Systems, Rajesh Gupta and Pramod R. Bhave, EE Jan. 96, p51-54.

Rajest Outpu and Framou K. Brave, E. p. 2nn. 90, p. 51-34.

Tilt of Stationary Capsule in Pipe, Chih-Chiang Cheng and Henry Liu, HY Feb. 96, p. 90-96.

WLS Method for Parameter Estimation in Water Distribution Networks, P. V. Niranjan Reddy, K. Sridharan and P. V. Rao, WR May/June 96, p. 157-164.

Pipe jacking

Design of Microtunneling and Jacking Pipe, Alan Atalah, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p395-402.

Microtunneling Database for the USA and Canada From 1984 to 1995, Alan Atalah and Paul Hadala, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p332-339.

Pipe joints

Seismic Design Issues of Water Pipelines at the Hayward Fault Crossing, Luke Cheng and Lota D. Nuguid, (Pipe-line Crossings 1996, Lawrence F. Catalano, ed., 1996), p147-154.

Pipe laying
CISC-Computer Integrated Spatial Control for Autonomous
Trenching and Pipe-Laying, Xiaodong Huang and
Leonhard E. Bermold, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p502-509.
Honolulu's Street Relief, Gregory L. Raines, P.E. and
James K. Honke, P.E., CE Sept. 96, p70-72.
Mapping History, Rebecca Balcom, CE Oct. 96, p54-56.

Technological Advances in the Design and Construction of Water Mains for Crossing Under Rivers and Other Barri-ers, Donald E. Eckmann and William F. Nabak, (Pipeline Crossing, 1996, Lawrence F. Catalano, ed., 1996), p403-408.

Buckling Behavior of Polyethylene Liner System, Surya Chunduru, Michael E. Barber and Reda M. Bakeer, MT Nov. 96, p201-206.

Development and Characterization of Cellular Grouts for Sliplining, C. Vipulanandan and V. Jasti, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p829-

PVC Lined Steel Pipe Bridges for Gravity Sewers, Andrew E. Romer, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p441-448.

ipe networks

Inverse Transient Analysis in Pipe Networks, James A. Liggett and Li-Chung Chen, HY Aug. 94, p934-955.

Numerical Methods for Modeling Water Quality in Distri-bution Systems: A Comparison, Lewis A. Rossman and Paul F. Boulos, WR Mar./Apr. 96, p137-146.

Object Orientation in Hydraulic Modeling Architectures, D. P. Solomatine, CP Apr. 96, p125-135.

Optimization and Pipe-Sizing Decisions, Thomas M. Wal-ski, WR July/Aug. 95, p340-343.

Pipe Network Analysis and Design in Developing Regions. Case Study: Novokuznetsk, Siberia, Dan Gessler, Johannes Gessler and Randy Hoffman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1255-1260.

Water Distribution Network Reliability: Connectivity Anal-ysis, Shu-li Yang, Nien-Sheng Hsu, Peter W. F. Louie and William W-G. Yeh, IS June 96, p54-64.

Pipeline bridges

Crossing Bridges with Ductile Iron Pipe—Update 1995, Michael S. Tucker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p120-129.

Design Parameters of Pipeline Suspension Bridges, Ralph Alan Dusseau and Irfan Ahmed, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p112-119

PVC Lined Steel Pipe Bridges for Gravity Sewers, Andrew E. Romer, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p441-448.

Pipeline design

Achieving Reliable Designs for Pipelines Traversing Un-stable Slopes, Dimitri A. Grivas, Chakravarthy Bhagvati, B. Cameron Schultz, Venne C. McGuffey, Gregg O'Neil and Gordon Simmonds, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p426-433.

Buckeye Water Transmission Main Keswick Dam Crossing, D. Todd Kotey, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p194-201.

Crossing Fault Lines with Large Diameter Water Pipelines in the Houston Area, John M. Olden, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p155-162.

Crossing of MacDonald Ranch Wash in Southern Nevada, Roger Beieler, Alvin R. Anderson, Russ Snow and Carol Tate, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p282-289.

Crude Oil Pipe Line Crossing Western Panama, Hugh Lacy and Brant Brown, (Pipeline Crossings 1996, Lawrence

F. Catalano, ed., 1996), p356-364.

Design of a 610-mm Water Pipeline Across Providence Harbor, David E. Hairston, Pasquale DeLise and William Skerpan, Jr., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p387-394.

The Effects of Natural Hazards on Pipeline Safety, Betty Bonn, Myles Powers, Andy Chernoff, Alan Gregory, Dan Phillips and Donna Roy, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p68-69.

Optimal Design of Water-Distribution Networks with GIS, Saud A. Taher and John W. Labadie, WR July/Aug. 96,

p301-311.

Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996, 0-7844-0180-2, 510pp.

Record Breaking Bundled Pipeline Crossings, Gerald Donnelly and Mark W. Struss, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p37-47.

The Secondary Inlet of the Eastside Pipeline Project, An-The Secondary Intel of the Eastside Pipeline Project, Antonio J. Perez and Aida G. Garabetian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p702-707.
Site Selection for Pipeline Waterway Crossings, Brian J. Doeing and David T. Williams, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p365-372.

Acoustic Monitoring to Enhance Pipeline Safety at Crossings, Will Worthington and William J. DiMarco, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), pl-13.

Application of Regime Theory in Practice: A Case Study, James A. Turpin and Martin J. Teal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1663-1668

Berkeley Fights Fire with Salt Water, CE Dec. 96, p18 Buckling Behavior of Polyethylene Liner System, Surya Chunduru, Michael E. Barber and Reda M. Bakeer, MT Nov. 96, p201-206

Canal Crossing of High-Pressure Pipelines, Hiroya Kishi-no, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p434-440.

Case History - Outfall Pipeline Failure - Burlington, VT, Nelson L. Thibault and Eugene J. Forbes, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996),

Conference Tracks Progress of Trenchless Technologies,

CE June 96, p10,12.
Cross-Flow Vibrations of Cylinder in Irregular Oscillatory Flow, Andrzej Kozakiewicz, B. Mutlu Sumer and Jørgen Fredsøe, WW Nov./Dec. 94, p515-534.

Design Alternatives for Protection of the Santa Ana River Interceptor Sewer, Thomas Dawes, Chenchayya T. Ba-thala and Carl Nelson, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2378-2383.

Design of Multistage Pumping Main, Prabhata K. Swamee, TE Jan./Feb. 96, p1-4.

Design of Pressure Class Ductile Iron Pipe on Supports, L. Gregg Horn, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p222-229.

Design of Sediment-Transporting Pipeline, Prabhata K. Swamee, HY Jan. 95, p72-76.

Determining Rehabilitated Sewer Flow Capacity, ASCE Task Committee on Flow Characteristics of Pipeline Infrastructure Committee of the Pipeline Division, TE May/June 96, p258-261.

Effect of Welding on a High-Density Polyethylene Liner, Reda M. Bakeer and Michael E. Barber, MT May 96, p94-100.

The Effects of Natural Hazards on Pipeline Safety, Betty Bonn, Myles Powers, Andy Chernoff, Alan Gregory, Dan Phillips and Donna Roy, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p68-69.

Efficient Pump Representation for Fixed-Grid MOC in Pipeline Systems, David H. Axworthy and Bryan W. Karney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p370-375.

1990), B310-3310, B700 productivity Using Neural Networks, Simaan AbouRizk, Brenda McCabe and Wissam Saadi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p220-226.
Expert System for Assessing Main Pipeline Reliability and Residual Lifetime, Sviatoslav A. Timashev and Inessa L. Yablonskikh, (Probabilistic Mechanics & Structural Reliability Dan M. Espaged ed and Misesa D. Grigoriu.

liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p322-325.

ed., 1996), p322-325. Fault Crossing Design and Seismic Considerations for the South Bay Ocean Outfall, Jon Y. Kaneshiro, Gregory E. Korbin and James D. Hart, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p477-486. Filling of Pipelines with Undulating Elevation Profiles, Chyr Pyng Liou and William A. Hunt, HY Oct. 96, p534-539.

The French Experience in Bursting Rehabilitation for Pipe-line Crossings, Y. G. Diab and P. Perrotin, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996),

Grade Control Structures for Pipeline Crossings in the Arid Southwest, Martin J. Teal, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p830-835.

Investigation of Pipeline Buckle Failure in a Horizontally Directionally Drilled Installation, Hugh W. O'Donnell, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p163-172.

Medium Span Gravity Sewer Aerial Crossings, Curtis W. Swanson and Glenn E. Hermanson, (Pipeline Crossings) 1996, Lawrence F. Catalano, ed., 1996), p457-468.

Optimal Pipeline Sizing Technique, Helmi M. Hathoot, Ahmed I. Al-Amoud and Fawzi S. Mohammad, TE May/ June 96, p254-257.

Pigging Submarine Outfalls, Jonathan A. French, EE May 95, p396-401.

Pipeline Beam Models Using Stiffness Property Deforma-tion Relations, Zhilong Zhou and D. W. Murray, TE Mar/Apr. 96, p164-172.

Pipeline Crossing Accidents and Leak Detection Opportu-nities, Diane J. Hovey and Edward J. Farmer, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p22-

Pipeline Crossings (M&R No. 89), Task Committee on Pipeline Crossings of the Technical Committee on Pipe-line Crossings of the Pipeline Division of the American Society of Civil Engineers, (Randy Robertson, chmn.), 1996, 0-7844-0183-7, 140pp.

Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996, 0-7844-0180-2, 510pp.

Pipeline Crossings and the Corps Regulatory Process in New England, Karen Kirk Adams and David H. Killoy, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p409-417.

The Pre-Planning Phase and the Use of Multipurpose Construction Equipment in Pipeline Crossings, V. L. Khazanet, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p494-501.

Reliability Analysis of Pipeline on Elastic Seafloor, H. Y. Yeh and Hengyun Li, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p752-755.

Reliability and Restoration of Water Supply Systems Fol-lowing Earthquakes, Donald Ballantyne, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p203-204.

Reliability of Underground Pipelines Subject to Corrosion, M. Ahammed and R. E. Melchers, TE Nov./Dec. 94, p989-1002.

Remote Pipeline Routing with Application to Space Opera-tions, Sandra C. Feldman, Ramona E. Pelletier, Wm. Edward Walser, James C. Smoot and Douglas Ahl, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p231-236.

Shrinkage Control in Acrylamide Grouts and Grouted Sands, V. Jasti, C. Vipulanandan, David Magill and Don Mack, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p840-850.

Site Selection for Pipeline Waterway Crossings, Brian J. Doeing and David T. Williams, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p365-372.

Smithfield Interceptor Force Main River Crossings, Fredrick M. Muncy, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p173-179.

Statistical Dynamics of Pipe-Line with One-Side Contact Supports Under Turbulence of Cross-Wind Loads, Ana-toly I. Menyailov and Christian G. Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p986-989.

Structural Aspects of Pipeline Crossings, R. C. Prevost, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p449-456.

Tilt of Stationary Capsule in Pipe, Chih-Chiang Cheng and Henry Liu, HY Feb. 96, p90-96.

To Know or Not to Know: The Site Characterization Process and Its' Role in Horizontal Directionally Drilled Pipeline River Crossings, Charles W. Hair, III, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p56-

Ultimate Strength of Underwater Pipe-Soil Systems, Mehdi

Ultimate Strength of Underwater Pipe-Soil Systems, Mendi S. Zarghamee, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p230-236.
Uncertainty Analysis of Dredge Production with Correlation, Said M. Easa, WW Sept./Oct. 94, p499-507.
Unsteady Flow in Hydraulic Capsule Pipeline, C. W. Lenau and M. M. El-Bayya, EM Dec. 96, p1168-1173.

Crossing the Cape Cod Canal; A Natural Gas Pipeline Interconnection, Charles A. Pickering, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p48-55.

Genetic Algorithm Design of Piped Irrigation Systems, Graeme Dandy, Angus Simpson and Laurie Murphy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p.504-309.

High-Performance Pipe Products Fabricated with Reactive Powder Concrete, Edward F. O'Neil and William M. Dowd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1320-1329.

HPFRCC - Extruded Pipes, Henrik Stang and Carsten Pedersen, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p261-270.

Innovative Drilling Brings Potable Water to Islanders. CE

Innovative Drilling Brings Potable Water to Islanders, CE

June 96, p87.

Measures of Water Distribution System Reliability, Rafael G. Quimpo, (Risk-Based Decision Making in Water Re-sources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p388-395. On the Web, CE Oct. 96, p11.

Optimization and Pipe-Sizing Decisions, Thomas M. Wal-ski, WR July/Aug. 95, p340-343. Redesign of Vendor-Data Processes for Industrial Projects,

H. Y. Goucha and J. T. O'Connor, ME Sept./Oct. 96, p53-61.

Reliability Tester for Water-Distribution Networks, D. Khomsi, G. A. Walters, A. R. D. Thorley and D. Ouazar, CP Jan. 96, p10-19. Replace or Repair? Pipe Study Will Tell, ET Mar/Apr. 96,

A Stochastic Model for Elastic-Plastic Fracture of Cracked Pipes, Sharif Rahman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p764-767.

Electronic Modeling of Underground Piping Systems, Har-old G. Thayne, Jr. and Joseph A. Bohinsky, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p825-831. On the Web, CE Nov. 96, p8.

Polyethylene Piping Eases Drought, CE Nov. 96, p94. Reliability of a Cast Duplex Stainless Steel Elbow by Using Probabilistic Fracture Mechanics, P. Hornet and P. Le Delliou, (Probabilistic Mechanics & Structural Reliabiliry, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p756-759.

Synthesis of Correlated and Vector-Valued Time Series Based on Random Vibration for Nuclear Piping, Yong Zhao and D. A. Gasparini, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-

cea D. Grigoriu, ed., 1996), p748-751.

Piping, erosion

South American Dam Failure Studied, CE Aug. 96, p18.

Pisetzner, Emanuel (Fellow, ASCE)

Emanuel Pisetzner Dies at 69; Top Engineer with New York City Firm, NE Apr. 96, p7.

Pitch-Based Carbon Fibre Reinforced Concretes, A. M. Brandt and L. Kucharska, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p271-280.

Plane strain

Development of Localization in Undrained Deformation, J. W. Rudnicki, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p939-942.

Effects of Stress Ratio on Behavior of Quasi-Preconsolidated Compacted Clay under Plane Strain Compression, Hoe I. Ling and Fumio Tatsuoka, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p151-165.

Generalized Plane Strain Finite Element Analysis: Geome-chanical Applications, V. N. Kaliakin, L. Cui and A. H-D Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p289-292.

Influence of Axial Stress and Dilatancy on Rock Tunnel Stability, Xiao-Dong Pan and Edwin T. Brown, GT Feb. 96, p139-146.

Strain Localization and Undrained Steady State of Sand, Richard J. Finno, Wendell W. Harris, Michael A. Moo-ney and Gioacchino Viggiani, GT June 96, p462-473.

Three-Dimensional Finite Element Analysis of Deep Excavations, Chang-Yu Ou, Dar-Chang Chiou and Tzong-Shiann Wu, GT May 96, p337-345.

Analysis Tools of Transitioning and Turbulent Flows, M. R. Hajj, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p434-437.

Diffraction of SH-Waves by Subsurface Inclusions of Arbitrary Shape, Michael E. Manoogian and Vincent W. Lee, EM Feb. 96, p123-129.

Plane Waves and Pore Pressure in a Saturated Sand, R. Staroszczyk and L. W. Morland, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p943-946.

Variability Response Functions for Plane Elasticity Problems with Multiple Stochastic Material/Geometric Properties, Lori Graham and George Deodatis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p174-177.

Beach Nourishment: Planform Considerations, Robert G. Dean, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p533-546.

Potential Microbial Impacts on Groundwater Quality, D. Roy Cullimore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p40-45.

3-D Graphical Simulation for Temporary Facility Planning using Object-Oriented Building Product Model, Kenji Ito, Yuji Kano, Jun Ueda and Shinichi Setoguchi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p49-55.

3D & 4D CAD Modeling on Commercial Design-Build Projects, Frank Vaugn, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

p390-396.

Adaptation of a Layout Design System to a New Domain: Construction Site Layouts, Bongjin Choi and Ulrich Flemming, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p711-717.

Advanced Traveller Information Systems: Experience from the PLEIADES and ROMANSE Projects, D. J. Jeffery and R. J. Meekums, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p296-304.

Air Transportation: A Systems Approach, Harry A. Kinnis-on, (Meeting the Challenge: Rebuilding Inner City Air-ports, Prianka Seneviratne, ed., 1996), p246-253.

ALPS: The Automated Lift Planning System, williams and Craig Bennett, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p812-817.

Anaheim State-of-the-Art Water Treatment Plant - Six years from Conception to Completion, Isaac Pai, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2654-2659. Anatomy of a Wetland, Jim Renner, CE Jan. 96, p58-60.

Annual Delivery Decisions in the Simulation of the California State Water Project and Federal Central Valley Pro-ject using DWRSIM, Robert T. Leaf and Sushil K. Arora, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p812-817.

Application of Artificial Neural Network to Guideway Demand Modeling, Young-Kyun Lee and Federico Frigerio, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p214-219.

Application of Mathematical Models for Flood Forecasting

in Sri Lanka, G. T. Dharmasena, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1549.

Automated Constructibility Analysis of Work-Zone Traffic-Control Planning, Deborah J. Fisher and Naveen Rajan, CO Mar. 96, p36-43.

Business Plans Live and Grow, Jack E. Reinhard, P.E., ME Nov./Dec. 96, p3-4.

Challenges and Opportunities in Egypt's Integrated Water Resources Strategy, Mona El-Kady, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1051-1056.

Combined Flood Hazard Mitigation Techniques for Com-prehensive Planning - the Saugus River Coastal Flood Risk Reduction Plan, Barbara D. Hayes, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2312-2317.

Conjunctive Water Use Transforms a California Desert, Tom Levy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2672-2678.

Connecting Random Acts of Quality: Global System Stan-dard, William M. Hayden, Jr., ME May/June 96, p34-44.

Constraint Logic Programming Contribution for Fleet Man-agement System in Freight Transport, Etienne Gaudin and Gérard Scémama, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Construction Planning through Multi-Agent Constraint Sat-isfaction, Milorad Sucur and Francois Grobler, (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p240-246.

Chinowsky, ed., 1970, p.240-240. CSO Planning Model Development and Verification Strategy, Edward H. Burgess, Thomas Day, James T. Smullen and Larry A. Roesner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl230-1235.

Decision Process for Mitigating Seismically Vulnerable Water Facilities, Walter J. Bishop and Ernesto A. Avila, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p209-210.

and Riey M. Chung, ed., 1997), p.209-210.

A Decision Support System for Dynamic Pre-Trip Route Planning, Nagui M. Rouphail, S. Ranji Ranjithan, Wael El Dessouki, Timothy Smith and E. Downey Brill, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p325-329.

Development of a Robotic Bridge Painting System, Yong Bai and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p185-191.

Earthquake Hazard Mitigation in Iran (Its Progress and Prospect), Mohsen Ghafory-Ashtiany, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p27-28.

Eastern San Joaquin County Groundwater Resource Planning Alternative Analysis, Najmus Saquib, Alex Chen, Umesh Lalwani, Mike Cornelius, Jeff Kishel, Gary Nuss Umesh Laiwani, Mike Cornelius, Jeff Kishel, Gary Nuss and Mark Williamson, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3515-3520.
Education and Research Needs for Appropriate Technolo-gy, Maurice L. Albertson, (North American Water and Environment Congress & Destructive Water, Chen-change Bathala, ed. 1008, p3766-3765.

chayya Bathala, ed., 1996), p2760-2765.

Estimating Trenching Productivity Using Neural Networks, Simaan AbouRizk, Brenda McCabe and Wissam Saadi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p220-226. Fast and Robust Algorithm for General Inequality/Equality Constrained Minimum Time Problems, B. Driessen and N. Sadegh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1215-1224.

FEMA Conference Stresses Preplanning for Natural Disas-

FEMA Conference Stresses Preplanning for Natural Disasters, CE Feb. 96, pl.4,16.
Flexible Dynamic Scheduling: A Major Improvement for Public Transport, Antonio Marqués, Manuel Torregrosa, Arturo Camarena, K. Darby-Dowman, Shirley Moody and James Little, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), n134-138.

Flood Control in the Brazilian Electric System Reservoirs at Parana River Basin, A. L. Lopes and V. F. Rocha, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

GIS Application for Miami Transportation System Hurri-cane Emergency Preparedness, Kangming Xu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p107-108.

A GIS Sewer Database for a University Campus, D. J. Schuller, D. I. Pusey and A. R. Rao, (North American Water and Environment Congress & Destructive Water,

water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1765-1770.
Graphic-Based Interactive Path Planning for Large-Scale Bridge Maintenance Cranes, Sungwoo Moon and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p79-85.

Graphical Simulation for Project Planning: 4D-Planner™, Mike Williams, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p404-409.

The Importance of Plant Community Structure on Form and Function of Created Wetland Systems, Richard A. Or-son, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1197-1202.

Incorporating Terrain Uncertainties in Autonomous Vehicle Path Planning, Kevin K. Gifford and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p15-21.

Integrated Infrastructure Maintenance Management, Carol Subick and Ilker Adiguzel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p207-213.

1996), p207-213.

An Integrated Intelligent Planning Approach for Modular Construction. Nashwan Dawood, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p410-416.
Integrated Planning Decision Support System (IPDS), Mario Mejía-Navarro and Luis A. García, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p189-190.
Integrating Drainage, Water Quality, Wetlands, and Habitat in a Planned Community Development, Michael R. Galuzzi and John M. Pflaum, UP Sept. 96, p101-108.
Interactive 4D-CAD, Kathleen McKinney, Jennifer, Martin Fischer and Craig Howard, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p383-389.
International Space Station (ISS) Assembly Sequence Planternational Space Station (ISS) Assembly Sequence Planternational Space Station (ISS) Assembly Sequence Planternational Space Station (ISS)

International Space Station (ISS) Assembly Sequence Planning, R. E. Gates, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p435-

Joint Development Planning for Inner City Airport Capital Improvements, Orikaye G. Brown-West, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p199-211.

Lessons for Rail Access to Airports, Hanan A. Kivett, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p96-105.

Lessons Learned from Planning and Developing New Denver International Airport, Norman D. Witteveen, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p45-52.

Long Term Scenarios for Europe in Space, Klaus Pseiner, Angelo Atzei and David Raitt, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p145-154.

Marketing and Selling A/E and Other Engineering Services, Scott C. Gladden and Arnold Olitt, 1996, 0-7844-0100-4.

Motion Planning of a Robotic Arm on a Wheeled Vehicle on a Rugged Terrain, Yong K. Hwang, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p8-14.

MPO's Conform to ISTEA Requirements, CE Oct. 96,

p12,14.

Neural Networks for the Identification and Control of Quantity Variance in Construction Projects, Hashem Al-Tabtabai, Nabil Kartam and Alex P. Alex, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p227-232.

on-Line Motion Planning for the Three-Link Revolute Arm in an Unknown Three-Dimensional Environment, Sanjay Tiwari and Brandon Kroupa, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), pl-7.

Optimization and Pipe-Sizing Decisions, Thomas M. Wal-ski, WR July/Aug. 95, p340-343.

Organizing a Local Water Resources Technical Group, Thomas G. Sands, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2254-2258.

Overview of the US Army Corps of Engineers Flood Con-trol Channels Research Program, Ronald R. Copeland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1501-1506.

Planning an International Moon Mission: Lessons Learned, Joan Johnson-Freese, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

p109-115.

Planning and Analysis of Airport Access Using GIS: SLCIA Example, John Bergener, Massoud Javid and Pri-anka Seneviratne, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p89-95.

Planning for Intermodal Access at American Airports, Phillip S. Shapiro, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p78-88.

The Pre-Planning Phase and the Use of Multipurpose Construction Equipment in Pipeline Crossings, V. L. Khazanet, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p494-501.

Preparing for Project Management, David J. Williams, 1996, 0-7844-0175-6, 94pp.

Real Time Planning & Total Risk Management, Ali Jaafari, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p193-199.

Reconstruction of Bergstrom Air Force Base to Austin-Bergstrom International Airport, James P. Amick and John Almond, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), pl-11.

Record Breaking Bundled Pipeline Crossings, Gerald Don-nelly and Mark W. Struss, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p37-47.

A Regional Management Plan to Improve Water Cuality in the Grassland Basin, Dennis Wichelns, Laurie Houston, Dan Nelson and Joseph McGahan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p655-660.

Reliability-Based Optimum Bridge Repair Strategy, Allen C. Estes, Dan M. Frangopol and George Hearn, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p372-375.

Relocation of Existing Pipelines at New Highway Crossings, Karl J. Rubenacker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p290-297.

Requirements for Industry Applicability of Knowledge-Based Schedulers, Florian Aalami and Martin A. Fischer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p774-780.

Risk Communication: Guidelines and Commentary, Clifford S. Russell and Duane D. Baumann, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p396-400.

Risk Management for Response Planning, Roozbeh Kan-Risk Management for Response Franming, Roozbert Amgari and Jacob Kovel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p42-48.
Risk-Based Planning and Management of Maintenance Dredging, L. Leigh Skaggs and David A. Moser, (North Western M. Expone

Dreuging, L. Leigh Skaggs and David A. Rosset, Urban-American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2403-2408. Roanoke Valley Flood Hazard Mitigation, Edward G. Beadenkopf, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1976-1977.

SCOOT Control of a Simulated Road Network, J. P. Silcock and D. A. Crosta, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p583-587

A Simplified Process Audit to Design an Affordable Pollution Prevention and Waste Management Plan - Part 1, Ronald Zaloum and Pierre Sylvestre, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p87-92.

Space Infrastructure Planning, J. Michael Snead, (Engi-

Space Intrastructure Planning, J. Michael Snead, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p360-366.
Space Planning Tools for Multi-Story Construction, David R. Riley and Iris D. Tommelein, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p718-724.

Spheres of Influence: Federalism, Politics, and Engineering Design, Todd Shallat, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p136-143.

A Stormwater Management Plan, Diana Harvey, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2060-2065.

Stormwater Management Plan Updated for Climate System Changes, Yuan Cheng, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1846-1851.

Bathala, ed., 1996), p1846-1851.
Subjective Probability Assessment in Water Resources
Planning, Charles Yoe, (Risk-Based Decision Making in
Water Resources VII, Yacov Y. Haimes, ed., David A.
Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p294-314.
System Integration in Traffic Management Centres, Jorge
Navas, (Applications of Advanced Technologies in
Transportation Engineering, Yorgos J. Stephanedes, ed.
and Francesco Filippi, ed., 1996), p485-489.
This Is Not Good News, Percival A. Miller, CE May 96,

Training for the Big One - A Proactive Approach, Andrew M. Hui and David R. Putnam, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p43-44.

The Treatment Train Detention Concept, Charles G. Boehm, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2270-2275.

Uncertainty Model is a Redundancy, William Hayden, CE Aug. 96, p31. University Arts Building Presents Structural Challenge, CE

Nov. 96, p10.

Utilities and Systems for the New U.S. South Pole Station, Amundsen-Scott Station, Antarctica, Steven Theno and Dick Armstrong, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p424-435

Utilizing Communications Strategies to Educate the Public on a Major Program, David L. Pratt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p99-100.

Cnung, ed., 1997), p99-100.
A Verification System for Probabilistic Hydrograph Forecasts, Edwin Welles and Momcilo Markus, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p223-224.
Visual Mosaicking of the Ocean Floor and its Relation to Three-Dimensional Occlusions, Sanjay Tiwari, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p29-35.

Vollmer, Engineer and Architect, Dies at 80, CE Apr. 96,

Water Quality Improvement Program in Ventura County at Port Hueneme, Lynn M. Takaichi, Sachiko Itagaki and Dennis D. Wolfe, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p412-417.

Watershed Management for a Limited Coastal Aquifer Sys-tem, James P. Rhodes, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1087-1092.

White River Fish Screen Project - Hydraulic Modeling, Dennis Dorratcague, Wayne Porter and Larry Swenson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., p310-315.

Yields from Ground-Water Storage for California State Water Project, L. Jeffrey Lefkoff and Donald R. Kendall, WR Jan./Feb. 96, p72-74.

"SPS 2000" and its Internationalisation, Patrick Collins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p269-279.

Plant engineering

Achieving Industrial Facility Quality: Integration is Key, Kelly Jean Fergusson and Paul M. Teicholz, ME Jan. Feb. 96, p49-56.

New Trends in Biomechanics, Y. C. Fung, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1-15.

Plastic deformation

Cumulative Plastic Deformation for Fine-Grained Subgrade Soils, Dingqing Li and Ernest T. Selig, GT Dec. 96, p1006-1013.

A Family of Invariant Stress Surfaces, Steen Krenk, EM

Mar. 96, p201-208.

Response of Lime Mortar Joint Arches to Moving Loads, Barry T. Rosson, Thomas E. Boothby and Ketil Søyland, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p223-232.

Plastic design

Kentucky Researchers Complete Composite Foot Bridge, CE Dec. 96, p14-15.

An Approximate Method for Assessment of Seismic Dam-age on Buildings, Mario Paz and Jeffrey S. Janover, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p428-434.

Editor's Note, David Darwin, ST Apr. 96, p349.

Practical Advanced Analysis for Steel Frame Design, Seung-Eock Kim and Wai-Fah Chen, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p19-30. Revised Rule for Concept of Strong-Column Weak-Girder Design, Han-Seon Lee, ST Apr. 96, p359-364.

Plastic pipes

1500 mm Corrugated HDPE Pipe Installation and Performance, David J. Mailhot, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p69-76.

Greenville Installs 1st 1.5m Annular CPE Pipe in the USA, Douglas Hinken and Stephen Matheny, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p88-96.

High Density Polyethylene Pipe under High Fill: A Continuing Study, John J. Meyer and J. L. (Jack) Hilfiker, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p77-87.

Utilizing Directional Drilling Techniques to Install Underwater Watermain, Timothy M. Stinson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p180-185.

Piastic properties

Inelastic Local and Lateral Buckling in Design Codes, Alan

R. Kemp, ST Apr. 96, p374-382.

Lining the Line, Walter Mergelsberg, Vojtech Gall and Gerhard Sauer, CE Mar. 96, p50-52.

Plasticity

Analysis of Cone Pressuremeter Tests in Sands, H. S. Yu, F. Schnaid and I. F. Collins, GT Aug. 96, p623-632.

Analysis of Work-of-Fracture Method for Measuring Fracture Energy of Concrete, Zdeněk P. Bažant, EM Feb. 96,

Anisotropic Plasticity with Anisotropic Hardening and Rate Dependence, Raymond D. Krieg and Kevin H. Brown, EM Apr. 96, p316-324.

Buckle Propagation: Steady-State Finite-Element Analysis, André C. Nogueira and John L. Tassoulas, EM Sept. 94, p1931-1944.

Class of Masing Models for Plastic Hysteresis in Struc-tures, James L. Beck and Paramsothy Jayakumar, (Build-ing an International Community of Structural Engineers, K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1083-1090.

Critical State Model at Finite Strains, Ronaldo I. Borja and Claudio Tamagnini, (Engineering Mechanics, Y. K. Lin

and T. C. Su, 1996), p148-151.

An Effective Characteristic Method for Plastic Plane Stress Problems, Zongda Yan and Xiaoming Bu, EM June 96,

Effectiveness Factor of Concrete in Continuous Deep Beams, A. F. Ashour and C. T. Morley, ST Feb. 96, p169-178 Elastic Moduli of a Bond Model for Reinforced Concrete,

James V. Cox, (Engineering Mechanics, Y. K. Lin and

T. C. Su, 1996), p84-87.

C. Su. 1996), 984-87.
 Energy Dissipation in Concrete Materials Due to Viscoelastic and Damage Mechanisms, Vassilis P. Panoskaltsis, Saurabh Bahuguna and Dimitris Soldatos, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p857-860.
 Implicit Integration Procedures and Consistent Tangent Operators for Bounding Surface Plasticity Models, P. Rahulkumar and S. Saigal, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p140-143.
 Improving Robustness of Alegrithms to Implement HiSS

K. Lin and T. C. Su, 1990, p140-143.
Improving Robustness of Algorithms to Implement HiSS models in FEM, G. W. Wathugala and S. Pal, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p144-147.

Mechanical Response of Woven Graphite/Copper Compos-ites, Brett A. Bednarcyk, Christopher C. Pauly and Marek-Jerzy Pindera, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p628-631.

A Refined Numerical Approach for the Limit-Load Analysis of 3-D Steel Rod Structures, Norbert Gebbeken, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p92-95

Shock Compression in Granular Media Using DFEM, Abdolreza Joghataie and Jamshid Ghaboussi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p426-429.

State Parameter from Self-Boring Pressuremeter Tests in Sand, H. S. Yu, GT Dec. 94, p2118-2135.

Strength and Ductility of Rectangular Concrete Columns: A Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Mar. 96, p267-274.

A Unified Description of Soil Behavior, Juan M. Pestana, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p281-284.

dasticizing

Rheology of Fresh Concrete, Leslie Struble and Richard Szecsy, (Materials for the New Millennium, Ken P. Chong, ed., 1996), pl 121-1128.

Cellular Rigid Pavement, John K. Bright and John R. Mays, TE Sept./Oct. 96, p381-387.

A Cost Effective Rehab Scheme for URM Structures, M. Ala Saadeghvaziri, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p262-263

Design Considerations for the Use of Plastic Lumber in Structural Applications, Richard G. Lampo, Thomas J. Nosker and Richard W. Renfree, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1492-1500. A Plastic Tomb for DOE's Mixed Waste, CE May 96, p19.

Strength Properties of Polyester Mortar Using PET and Fly Ash Wastes, Karim S. Rebeiz, Julia W. Rosett and Andrew P. Craft, EY Apr. 96, p10-20.

Loading Tests on Circular and Ring Plates in Very Dense Cemented Sands, Nabil F. Ismael, GT Apr. 96, p281-

Plate girders

Barriers to the Use of High Performance Steel in I-Girder Highway Bridges, Richard Sause, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p108-115.

Improved Analysis Techniques for the Capacity and Fatigue Assessment of TPG Railway Bridges, Terrence W. Philbrick, Jr. and Scott D. Schiff, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p199-206.

Load Testing and Strength Evaluation of a Non-Composite Steel Plate Girder Bridge, Y. Edward Zhou, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p884-

J. Zhu and A. H. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1159-1162.

Analysis of Branch Crack in Compression, Chiheb Chaker and Michel Barquins, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p366-374.

Analysis of Concrete Pavements by Rectangular Thick-Plate Model, T. F. Fwa, X. P. Shi and S. A. Tan, TE Mar/Apr. 96, p146-154.

Analysis of Eigenvalue Variability for 2D Stochastic Struc-tural Systems Using Variability Response Functions, George Deodatis and Lori Graham, (*Probabilistic Me*chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p600-603.

Bearing Capacity of a Prestressed Cracked Plate, Leonid I. Slepyan and John P. Dempsey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p989-992.

The Boundary Integral Equation Method for Plates, Eduard S. Ventsel, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1005-1009.

Buckling and Vibration of Thick Laminates on Pasternak Foundations, Y. Xiang, S. Kitipornchai and K. M. Liew, EM Jan. 96, p54-63.

Buckling of Composite Panels with Central Holes, David H. Farnham and Walter J. Horn, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p374-377.

Complex Crack Interaction in Composite Plate, Wieslaw K. Binienda, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p408-411.

Concrete Beams and Slabs Retrofitted with CFRP Lam-inates, M. Arockiasamy, Ahmed Amer and M. Shahawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Delamination Modes in Composite Plates, H. Luo and S. Hanagud, AS Oct. 96, p106-113.

Dynamic Responses of Shallow-Buried Flexible Plates Subjected to Impact Loading, Hung-Liang (Roger) Chen and Shen-En Chen, ST Jan. 96, p55-60.

Dynamic Stability of Conducting Beam-Plates in Transverse Magnetic Fields, J. S. Lee, EM Feb. 96, p89-94.

Effect of Fiber Waviness on the Buckling of Composite Plates, Raouf A. Raouf, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pi 102-1107.

Elastic Stability of Composite Plates with Wavy Fibers, Raouf A. Raouf, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1167-1170.

An Experimental Investigation of Sandwich Flat Panels Under Low Velocity Impact, Anthony N. Palazotto, Eric J. Herup and Timberlyn Harrington, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p402-407. Generalized Differential Quadrature Method for Buckling Analysis, H. Du, K. M. Liew and M. K. Lim, EM Feb.

96, p95-100.

Peculiarities of the Mode Shapes of Two-Dimensional Spinning Bodies, Marc P. Mignolet and Chris D. Eick, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Postbuckling of Moderately Thick Circular Plates With Edge Elastic Restraint, G. Venkateswara Rao, N. Ra-jasekhara Naidu and K. Kanaka Raju, EM Oct. 94, p2232-2238

Probabilistic Framework to Detect and to Identify Anoma-lies in Structures, Nabil Fares and Roula Maloof, (Prob-abilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Probabilistic Modeling of Metal Plate Connections, Robert N. Emerson and Kenneth J. Fridley, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p330-333.

Rectangular Plates Resting on Tensionless Elastic Foundation: Some New Results, Ramesh C. Mishra and Sekhar K. Chakrabarti, EM Apr. 96, p385-387.

Reliability Analysis of Bolted Wood Connections, William M. Bulleit and Dennis B. Decator, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p326-329.

Reliability Design of Laminated Plate for Buckling, Nozo-mu Kogiso, Shaowen Shao and Yoshisada Murotsu, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p627-634.

A Review of Dynamic Behavior of Sector Plates and Curved Bridge Decks, H. R. Molaghasemi and I. E. Harik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p993-996.

Seismic Performance of Confined Sill Plate Connections, Joseph M. Bracci, Rebecca F. Stromatt and David G.

Pollock, ST Nov. 96, p1357-1363. Simplified Analysis of Rectangular Plates with Stepped Thickness, Hideo Takabatake, Takayuki Imaizumi and Kunihiro Okatomi, ST Jan. 95, p28-38.

Solution to Reissner Plate with Clamped Edges, M. M. Aghdam, M. Shakeri and S. J. Fariborz, EM July 96,

p679-682. Static Analyses of Beams and Plates by Spline Collocation Method, Charles W. Bert and Youngkwang Sheu, EM

Apr. 96, p375-378. Steady-State Thermal Bending of Thick Rectangular Plates, Isamu A. Okumura, EM June 96, p512-520.

Structural Consequences of Imperfection in Thin-Walled Components, Luis A. Godoy and John Carrasquillo, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p997-1000.

Ultimate Behavior of Tie Plates at High-Speed Tension, Makoto Obata, Yoshiaki Goto, Sei Matsuura and Hideyuki Fujiwara, ST Apr. 96, p416-422.

Ultimate Strength of Steel Outstands in Compression, Han-bin Ge and Tsutomu Usami, ST May 96, p573-578.

Vibrations of Clamped Rectangular Plates on Elastic Foundations Subjected to Uniform Compressive Forces, S. Sacit Tameroğlu, EM Aug. 96, p714-718.

Pletta, Dan H.

Dan Pletta, Prominent Engineering Educator, Dies at 92, NE Oct. 96, p6.

Addressing Non-Aqueous Phase Liquids and Dissolved Plumes at Two Adjacent Superfund Sites with Commingled Groundwater Contamination, Jeffrey A. Dhont and Udai P. Singh, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p812-823.

Analysis of the Gasoline Spill at East Patchogue, New York, James W. Weaver, Joseph E. Haas and John T. Wilson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p707-718.

Biopolymers for Geotechnical Applications, Teh Fu Yen, Iris C. Y. Yang, Shiva Karimi and Geoffrey R. Martin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1602-1607.

Buoyant Plumes from Multiport Diffuser Discharge in Deep Coflowing Water, María M. Méndez-Díaz and Gerhard H. Jirka, HY Aug. 96, p428-435.

Characteristics of Radial Jets and Mixing under Buoyant Conditions, Zhen-Ren Guo and James J. Sharp, HY Sept. 96, p495-502.

501

Characterization and Remediation of a Fuel Oil Plume, Do-rinda L. Clause and Stacey R. Leake, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed.,

1996), p762-775.

Comparison of Near-Field Dilutions Derived from In Situ Measurements and Simulated Dilutions at the Sand Is-Jand Sewage Outfall Plume, HI, A. A. Petrenko, B. H. Jones, T. D. Dickey and P. J. W. Roberts, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3886-3891

Comparison of Stochastic Programming and Robust Opti-mization Models for Groundwater Plume Containment, David W. Watkins, Jr. and Daene C. McKinney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p612-617.

Dilution of Dense Bottom Plumes, Ole Petersen and Torben Larsen, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p906-909.

Dissolution of Toluene Residuals: 3-D Laboratory Experiments, David A. Reynolds, Philippe Lamarche and Michel Tétreault, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remedia-tion, Lakshmi N. Reddi, ed., 1996), p607-618.

Experimental Studies of Merging Plumes, G. A. Daviero and P. J. W. Roberts, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p918.

Impact-Generated Atmospheric Plumes: The Threat to Sat-ellites in Low-Earth Orbit, M. B. Boslough and D. A. Crawford, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p88-94.

In Situ Plume Interception and Treatment Technologies: An Overview, George P. Korfiatis and Alexandros Makarigakis, (Non-Aqueous Phase Liquids (NAPLs) in Subsur-face Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p66-88.

Model Uncertainty for the Advection-Dispersion Equation, Wade E. Hathhorn, (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth,

ed., 1996), p881-896.

Modeling Outfall Plume Behavior Using Far Field Circula-tion Model, Alan F. Blumberg, Zhen-Gang Ji and C. Kirk Ziegler, HY Nov. 96, p610-616.

Near Field Modeling, Philip J. W. Roberts, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3892-3897.

Probabilistic Analysis of Ocean Outfall Mixing Zones, Hening Huang, Robert E. Fergen, John R. Proni and John J. Tsai, EE May 96, p359-367.

Regional Groundwater Management with Health Risk As-sessment, Susan D. Pelmulder and Yung-Hsin Sun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1291-1296.

Review of Factors Affecting In Situ Air Sparging, Daniel M. Baker and Craig H. Benson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p292-

310

Sediment Transport in a Thermally Stratified Bay, Kai-Ping Wang, Zenitha Chroneer and Wilbert Lick, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p466-477.

Seepage from Surface Canals by Boundary Element Meth-od, Alexander C. Demetracopoulos and Christos Had-jitheodorou, IR Jan./Feb. 96, p40-48.

Successful Free Product Removal of NAPLs, Daniel S. Sauvé and Jeffrey L. Pintenich, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p233-244.

Turbulent Line Momentum Puffs, Joseph H. W. Lee, Wolfgang Rodi and C. F. Wong, EM Jan. 96, p19-29.

The Modelling of Plunging Breakers by the Introduction of a K-I Turbulence Closure Model, Michele Drago and Luigi Iovenitti, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p317-328.

Pipe Plunge Pool Energy Dissipator, Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323.

Pneumatic systems

Biomechanics and Testing of Mechanical Circulatory Sup-port Devices, Harvey Borovetz, James Antaki, William Wagner, Marina Kameneva, John Pristas, Stephen Winowich, William Mandarino, Philip Litwak, Robert Kormos and Bartley Griffith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p35.

Engineering a Novel Intravenous Oxygenator, William Federspiel, Frank Walters, Pat Sawzik, Gary Reeder, Harvey Borovetz and Brack Hattler, (Engineering Me-

chanics, Y. K. Lin and T. C. Su, 1996), p43

Engineering Design Considerations for Artificial Lungs, L. F. Mockros and K. E. Cook, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p33-34.

Fracturing for In-situ Bioremediation (Available only in Focus on Geo/Environmental Special Issue), Sankar N. Venkatraman, John R. Schuring, Thomas M. Boland and David S. Kosson, CE Mar. 96, p14A-16A.

Telerobotic Pavement Marker Application, Rami A. Rihani and Leonhard E. Bernold, (Robotics for Challenging En-vironments, Laura A. Demsetz, ed., 1996), p171-177.

Poisson density functions

Probability Density Function of Linear Systems Subjected Ocaaniny Density Function of Linear systems subjection to a Random Stream of Poisson Pulses, G. Muscolino and G. Ricciardi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p388-391.

Poisson ratio

Buckeye Water Transmission Main Keswick Dam Crossing, D. Todd Kotey, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p194-201.

Modelling of Hydro- and Lithodynamic Processes in Kolłobrzeg Region, Leonard Gajewski, Elżbieta Zawadzka, Juliusz Gajewski and Andrzej Lewandowski, (Coast-al Dynamics '95, William R. Dally, ed. and Ryszard B.

all Dynamics 32, William R. Dally V. Zeidler, ed., 1996), 891-902.

Remote Sensing of the Polish Coasts Morphology, Kazimierz Furmańczyk and Stanisław Musielak, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p1018-1023.

Optimal Design of Prestressed Concrete Transmission Poles, Fatma Y. Kocer and Jasbir S. Arora, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p111-122 Optimal Design of Steel Transmission Poles, Fatm Kocer and Jasbir S. Arora, ST Nov. 96, p1347-1356.

Environmental Concerns for High-Voltage Transmission Lines in UNIPEDE Countries, E. C. Kalkani and L. G. Boussiakou, EE Nov. 96, p1042-1045.

Environmental Policy Making in Today's Political Environ-ment, Warren M. Lee, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2805-2809.

Bathala, ed., 1996), p2803-2809.

Major Changes to the AAA's Construction Arbitration Rules, George H. Friedman, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p10-20.

On the Process and Products of Project Space Vision, Pär Edin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p155-161.

Spheres of Influence: Federalism, Politics, and Engineering Design, Todd Shallat, (Civil Engineering History: Engi-neers Make History, Jerry R. Rogers, ed., Donald Ken-non, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p136-143.

State Engineers as Policymakers: Apolitical Experts in a Federalist System, Bruce E. Seely, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p123-135.

Statewide Programming: Implementing Transportation-Policy Objectives, Debbie A. Niemeier, Tracy L. Reed, G. Scott Rutherford and Pat Morin, IS Mar. 96, p30-39.

Tobin Preaches 'Covenant' for Seismic Safety, NE July 96,

"Fifteen Years of Commercial Space in Retrospect", M. Brian Barnett, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p162-169

Political factors

1996 Elections: Get Involved, Casev Dinges, CE Apr. 96,

Changing Conditions and Water Elections, Charles H. Lawrance, James M. Stubchaer and Jon A. Ahlroth, WR July/Aug. 94, p458-475.

The Engineering Profession as a Major Role Player in the New South African Political Order, Kevin Wall, El Apr.

96, p73-77.

Environmental Policy Making in Today's Political Environ-ment, Warren M. Lee, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2805-2809.

Legal Principles Applicable to Sharing Transboundary Waters, William E. Cox, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3218-3223.

Aspects of River House Cleaning During Floods, Parviz Monadjemi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2192.

Best Management Practices and Community Education, Richard Boon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2648-2653.

COASTMAP: An Integrated System for Environmental Monitoring, Modeling and Management, Thomas Op-ishinski, Malcolm L. Spaulding and Craig Swanson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2528-2532

Comparison of General vs. Multi Sector NPDES Storm Water Permits, William H. Espey, John Whitescarver and Michael Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2810-2814.

Electrode Placement for Subsurface Electric Field Genera-tion, William O. Rasmussen and Muniram Budhu, EE

Aug. 96, p764-768.

Aug. 96, p764-768.
An Experimental Study on the Use of Constructed Wetlands for Stormwater Management, Shih-long Liao, Shaw L. Yu and Stephen J. Long, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2462-2467.
Experiments on Resuspension of Fluid Mud Using an Oscillating-Grid Tank, Panagiotis D. Scarlatos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p808-811.
Modeling Natural Hydrodynamic Systems with a Differential-Turbulence Column, Brett Brunk, Monroe Weber-Shirk, Anna Jensen, Gerhard Jirka and Leonard W. Lion, HY July 96, p373-380.

W. Lion, HY July 96, p373-380.

W. Lion, HY July 96, p373-380.
Pollutant Transport Across Porous Stream Beds, C. Mendoza and D. Zhou, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1581-1586.
Preparation of Notification Models Using Continuous Modeling Techniques, Mark TenBroek, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2474-2479.
A Screening Level Model for Estimation of Vadose Zone Leaching and Saturated Zone Mixing: VLEACHSM, Sang B, Lee, (North American Water and Environment

Leaching and Saturated Zone Mixing: VLEACHSM, Sang B. Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1736-1741.

Source Apportionment Study of Nitrogen Species Meas-ured in Southern California in 1987, Meng-Dawn Cheng, Ning Gao and Philip K. Hopke, EE Mar. 96, p183-190. Storm Water General Industrial Permit Non-Filers Iden-

tification and Outreach. L. Donald Duke and Y. Jae Chung, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2619-2624.

A Stormwater Management Plan, Diana Harvey, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2060-2065. Take-Home Toxin Pathway, John Zirschky, EE May 96, p430-436.

ps.30-30.
Three-Dimensional Tidal Currents and Water Quality in Stratified Omura Bay, Tadashi Fukumoto, Akihide Tada, Takehiro Nakamura and Hiroyoshi Togashi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p707-721.

Transferable Discharge Permits as a Function of Fluctuating Stream Conditions, Norman J. Dudley, Michelle Coelli and John J. Pigram, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p272-222. 293

Upper Chehalis River Pollutant Capacity and Load Allocations, Paul J. Pickett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1045-1050.

502

The Budget-Blame Battle at Superfund Conference, CE Jan. 96, p18,20.

The Changing Role of the Civil Engineer in the Past 25 Years, F. Thomas Young, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p55-62. Membrane Technology Helps Shopping Center Clean Wastewater, CE Dec. 96, p89.

Pollution abatement

California Unveils Fuel Cell Plant, CE Nov. 96, p20-21.

A Simplified Process Audit to Design an Affordable Pollu-tion Prevention and Waste Management Plan - Part 1, Ronald Zaloum and Pierre Sylvestre, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p87-92.

Pollution control

A Boom in Thailand, Charles R. Heidengren, CE Nov. 96, p64-67.

Carbon Bags Help Trash Burn Cleaner, CE Jan. 96, p77. Controlling Brazil's Pollution: Federal versus State Taxes and Fines, Antonio Estache and Kangbin Zheng, IS June

and Pines, Altonio Source Program, Deborah G. Nagle, Gregory W. Currey and Will Hall, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3580-3585.

water, Chenchayya Banana, ed., 1996), p330-3983.
Swirl Technology: Enhancement of Design, Evaluation, and Application, Richard Field and Thomas P. O'Connor, EE Aug. 96, p741-748.
Watershed Riparian Management and Its Benefits to a Eutrophic Lake, R. Bruce Williamson, Christine M. Smith and A. Bryce Cooper, WR Jan/Feb. 96, p24-32.

Pollution control agencies

The Direction of the Point Source Program, Deborah G. Nagle, Gregory W. Currey and Will Hall, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3580-3585.

Friction Characteristics of Cohesionless Soil Penetrated by Polymer and Mineral Slurries, Kamal Tawfiq, P.E. and Hubert Lee Broughton, III, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1170-1178.

Shrinkage Control in Acrylamide Grouts and Grouted Sands, V. Jasti, C. Vipulanandan, David Magill and Don Mack, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p840-850.

Polyethylene

1500 mm Corrugated HDPE Pipe Installation and Performance, David J. Mailhot, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p69-76.

Buckling Behavior of Polyethylene Liner System, Surya Chunduru, Michael E. Barber and Reda M. Bakeer, MT Nov. 96, p201-206.

Corrections, CE Aug. 96, p31.

Effect of Welding on a High-Density Polyethylene Liner, Reda M. Bakeer and Michael E. Barber, MT May 96,

Greenville Installs 1st 1.5m Annular CPE Pipe in the USA, Douglas Hinken and Stephen Matheny, (Pipeline Cross-ings 1996, Lawrence F. Catalano, ed., 1996), p88-96.

POLYOLEFIN

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HDPE Geomembrane/Geotextile Interface Shear Strength, Timothy D. Stark, Thomas A. Williamson and Hisham T. Eid, GT Mar. 96, p197-203.

High Density Polyethylene Pipe under High Fill: A Contin-uing Study, John J. Meyer and J. L. (Jack) Hilfiker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed.,

1996), p77-87.

Medium Span Gravity Sewer Aerial Crossings, Curtis W. Swanson and Glenn E. Hermanson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p457-468.

Performance of Polyethylene Parting Strips in PCC Pave-ments, Samuel P. Lawrence, Awad S. Hanna and Jeffrey S. Russell, TE Mar./Apr. 96, p155-163.

A Plastic Tomb for DOE's Mixed Waste, CE May 96, p19. Polyethylene Piping Eases Drought, CE Nov. 96, p94.

Seismic Isolation of Bridges Using Sliding Isolation Sys-tems, Paul F. Bradford and Ronald J. Watson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p41-47.

Transport of Organic Compounds in Thermoplastic Geomembranes. I: Mathematical Model, Jae K. Park, Joni P. Sakti and John A. Hoopes, EE Sept. 96, p800-

Utilizing Directional Drilling Techniques to Install Underwater Watermain, Timothy M. Stinson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p180-185.

Polymer concretes

Behavior of Fiber Reinforced Polymer Concrete, C. Vipulanandan and S. K. Mantrala, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1160-1169.

Flexure for Polymer Concrete Using PET Waste, K. S. Re-beiz and D. W. Fowler, P.E., (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1037-1044.

Polymers

Acoustic Emission Monitoring of Pultruded Bridge Members, Arup K. Maji. (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p963-966.

Age, Deformation, and Temperature Effects of Viscoelastic Materials Under Large Deformations, Ashok Guijar, Tianxi Tang, Dan Zollinger and Kenneth Slavick, (Mate-rials for the New Millennium, Ken P. Chong, ed., 1996), p1398-1407.

Aging Effects on Temperature Susceptibility of Polymer Modified Asphalts, Shin-Che Huang, Jung-Do Huh, Ray-mond E. Robertson and Mang Tia, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1367-1378.

Analysis of Branch Crack in Compression, Chiheb Chaker and Michel Barquins, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p366-374.

Biopolymers for Geotechnical Applications, Teh Fu Yen, Y. Yang, Shiva Karimi and Geoffrey R. Martin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Characterization of a Nonlinear Polymer-Based Composite Material System, R. M. Hackett and P. I. Rodriguez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p771-780.

Comparison of Static and Dynamic Performance of Poly-carbonate Filled and Unfilled Gears, V. P. Gosavi and P. P. Chikate, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p338-347.

Evaluation of Bond Strength with Polypropylene Fiber Re-inforced Concrete, R. C. Zellers, V. Ramakrishnan, V. N. Rajpathak and S. Yu. (*Materials for the New Millennium*, Ken P. Chong, ed., 1996), p123-132.

Friction Characteristics of Cohesionless Soil Penetrated by Polymer and Mineral Slurries, Kamal Tawfiq, P.E. and Hubert Lee Broughton, III, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1170-1178.

Fundamental Thermal Mechanical Modeling of Gas-Filled Porous Composites, N. J. Salamon and Ramnath Ganesan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p52-55.

Improved Characterization of Mixing for Sludge Condition-ing, Jimmy Roland Christensen, George Lee Christensen and Jens Aage Hansen, EE Mar. 95, p236-244.

Investigation of the Use of Carpet Waste PP Fibers in Con-crete, Antoine E. Naaman, Sandra Garcia, Marwan Kork-maz and Victor C. Li, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p782-791.

New Block Copolymers for Membrane Materials, Francis A. DiGiano, Ying Chu, Joseph M. DeSimone, Benny D. Freeman, Camille Kassis and Doug Betz, (North Ameri-

Freeman, Camille Rassis and Doug Betz, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1638-1644. Non-Accelerated Creep-Rupture of Fiber-Reinforced-Plastics in a Concrete Environment, Andrew Hundley and Charles Dolan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p519-526.

Polymer Impregnation to Assist Undisturbed Sampling of

Cohesionless Soils, Kevin G. Sutterer, J. David Frost and Jean-Lou A. Charneau, GT Mar. 96, p209-215.

Polyolefin Fiber Reinforced Concrete, Billy D. Neeley and Edward F. O'Neil, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p113-122.

Property Deterioration of Composites, Charles E. S. Ueng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p416-419.

Recent Advancements in Smart Tagged Composites for Infrastructure, Robert F. Quattrone and Justin B. Berman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1045-1054.

Recent Advances in the Development of High Performance Cement-Based Materials, J. Francis Young, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1101-1110.

Strength Properties of Polyester Mortar Using PET and Fly Ash Wastes, Karim S. Rebeiz, Julia W. Rosett and An-drew P. Craft, EY Apr. 96, p10-20.

Thermogravimetric Analysis of Fiber Reinforced Plastics, Luca Prian, Ritsuko Pollard and Aaron Barkatt, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p54-62.

Ultrasonic Characterization of FRP Composites for Bridge Applications, Jerrol W. Littles, Jr., Laurence J. Jacobs and Abdul-Hamid Zureick, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p959-962.

Use of Fibers to Improve Cracking Characteristics of Concrete, P. Balaguru, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p183-192.

A Comparative Analysis of FORM/SORM and Polynomial Chaos Expansions for Highly Nonlinear Systems, R. Ghanem and D. Ghiocel, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p535-538.

Conservative Characteristics-Based Schemes for Mass Transport, C. W. Li and T. S. Yu, HY Sept. 94, p1089-

Crossing Rate Analysis of NonGaussian Response of Linear Systems, M. D. Pandey and S. T. Ariaratnam, EM June 96, p507-511.

Hybrid Stochastic Finite Elements and Generalized Monte Carlo Simulation, R. Ghanem, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p182-185.

Moment Equations for Linear Systems Subjected to Poly-nomials of Filtered Poisson Processes, M. Grigoriu and F. Waisman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p262-265.

Optimal Polynomial Control of a Duffing System, Anil K Agrawal and Jann N. Yang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p890-893.

Optimal Polynomial Control of Seismically Excited Linear Structures, Anil K. Agrawal and Jann N. Yang, EM Aug.

Stable Forced Vibrations Near Unstable Positions, Michael Zakrzhevsky, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p384-387.

Construction Applications of Polyolefin Fiber Reinforced Concrete, D. Strand, C. N. MacDonald, V. Ramakrish-nan and V. N. Rajpathak, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p103-112.

Performance Characteristics of Polyolefin Fiber Reinforced Concrete, V. Ramakrishnan, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p93-102.

Polyolefin Fiber Reinforced Concrete, Billy D. Neeley and Edward F. O'Neil, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p113-122.

Polystyrene

Bike Trail Gets Lift, CE Nov. 96, p23-24.

Waterproofing An Expanded Convention Center, CE Dec.

Polyurethane

Developments in Sandwich Beam Theory and Practice, James C. LaBelle, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1017-1026.

Recover Inorganic Solids from Obsolete Propellants, Frank J. Y. Shiu, Iris C. Y. Yang and T. F. Yen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1373-1378.

Polyvinyl chloride

Engineers Outfox Nature to Bury Sewer Line, CE Dec. 96, p87,89

An Innovative Plastic Housing System, E. Burnett, A. Arenja and L. Holroyd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p545-554. Pipe-Soil Interaction Analysis of Field Tests of Buried

PVC Pipe, Senro Kuraoka, Balvant Rajani and Caizhao Zhan, IS Dec. 96, p119-120.

PVC Lined Steel Pipe Bridges for Gravity Sewers, Andrew E. Romer, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p441-448.

Sanitary District Brings in the Sleeves to Enlarge Sewer, CE Aug. 96, p78.

Transport of Organic Compounds in Thermoplastic Geomembranes. I: Mathematical Model, Jae K. Park, Joni P. Sakti and John A. Hoopes, EE Sept. 96, p800-

Ponding Study of January 1993 Storm Event within Airport Industrial Park, Oceanside, California, George Hsu and Yen-Hsu Chen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2282-2287.

Portable Flumes with Adjustable Throats, John Replogle and Brian Wahlin, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2409-2414.

Analytical Solutions of Seepage Into Ditches From Ponded Fields, Gautam Barua and K. N. Tiwari, IR Nov/Dec. 95, p396-404.

Drainage Ponds and Demonstration Wetlands, Joseph Skorupa, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p394-399.

Editor's Note, Thomas L. Theis, EE Nov. 96, p956.

From Wasteland to Paradise, CE Feb. 96, p10,12. From wastenant to Paradise, C. Peb. 96, pto 12.
Spray Freezing to Treat Oil Sands Tailings Pond Water, W. Gao, D. C. Sego and D. W. Smith, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p60-70.

A Study into Effectiveness of Urban Best Management Practises, Robert G. Traver, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1852-1857.

Systematic Evaluation of Pollutant Removal by Urban Wet Detention Ponds, Jy S. Wu, Robert E. Holman and John R. Dorney, EE Nov. 96, p983-988.

Wetlands Score at Coors Field, CE Apr. 96, p26.

"Seepage Assessments and Control Associated with Flori-da's Phosphate Industry", Wayne A. Ericson, (Uncer-tainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p866-880.

Case History of Swimming Pool Foundation Failure, Bernard H. Hertlein, CF Feb. 96, p33-34.

Population growth

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Analyzing Water Balances and Ranking Maryland's Water-sheds Related to Growth, Development and Loss of Habitat, Marcia Smith, David Bleil and James Ahl, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4365-4370.

Development and Implementation of a Capital Improve-ment Program for a Small Water Utility, Benito Avalos, Jorge Garcia, Louis Grijalva and Antonia M. Romero, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3236-3240. EPA Targets Suspected Fertility Disrupters, CE July 96,

p25.

Transboundary Diversions, Water Law and Property Rights, George William Sherk, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3224-3229.

Water Use "Recession" in San Diego Region, James Zhou, Kenneth A. Steele and Richard C. Pyle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2958-2963.

Population statistics

Development of Islandwide Groundwater Pollution Potential for Taiwan, Wen-Sen Chu, Chin-Hwa Chiang, Mei-Hui Chang and Cheh-Ming Lee, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3164-3169.

Anelastic Strain Recovery of Deep Cores with Presence of Pore Pressure, Y. Abousleiman and A. H-D. Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p935-938.

Anisotropy Effect on One-Dimensional Consolidation, L. Cui, Y. Abousleiman, A. H-D. Cheng and J.-C. Roegiers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p471-474.

Development of Localization in Undrained Deformation, J. W. Rudnicki, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p939-942.

Measurement of the Undrained Pore Pressure Response of

a Shale in Triaxial Tests, Tomoyuki Aoki, Chee P. Tan, Rory H. T. Cox and William E. Bamford, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1086-1089.

Modelling of a Heater Experiment in a Saturated Granite with Thermoporoelastic Source Singularities, Emmanuel Detournay and Ilya Berchenko, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p44-47.

Moisture-Induced Pressures in Concrete Airfield Pavements, C. A. Kodres, MT Feb. 96, p41-50.

Plane Waves and Pore Pressure in a Saturated Sand, R. Staroszczyk and L. W. Morland, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p943-946.

Posttesting Correction Procedure for Membrane Compli-ance Effects on Pore Pressure, Atilla M. Ansal and Ayfer Erken, GT Jan. 96, p27-38.

Erken, G. J. Jan. 90, p.27-36.
Seismic Signatures of Patchy Saturation, Jack Dvorkin and Amos Nur, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p645-648.
Simulation of Pore Pressures in Triaxial Creep Tests, Horst G. Brandes and Armand J. Silva, (Measuring and Model-

ing Time Dependent Soil Behavior, Thomas C. Sheahan,

ing Time Dependent Soil Benavior, Thomas C. Silvanian, ed. and Victor N. Kaliakin, ed., 1996), p96-108.

Some Thoughts on Thermoporoclastic Coupling, M. Bai, Y. Abousleiman and J.-C. Roegiers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p48-51.

Undrained Sand Behavior in Axisymmetric Tests at High Pressures, Poul V. Lade and Jerry A. Yamamuro, GT Feb. 96, p120-129.

Pore size distribution

Pore size distribution
Artificial Neural Networks and Durability of Sphinx Limestone, Jayanta K. Bandyopadhyay, Srinivas S. Yerrapragada and K. Lai Gauri, MT Aug. 95, p174-177.
A Pore-Scale Study of the Stability of Nonaqueous Phase Liquid Ganglia under the Influence of Vibrations, Sunil Menon, Arun Pant and Lakshmi N. Reddi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p328-550. 1996), p538-550.

Random Network Modeling for Determination of Representative Specimen Size of Compacted Clays, Suri Thangavadivelu, Lakshmi N. Reddi and Sunil Menon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1303-1317.

Research Program for Reducing Frost Heave with Geosynesearch Program for Reducing Frost Heave with Geosynthetic Capillary Barriers, Karen S. Henry and Earl Ellis, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p266-277.

Upscaling of Pore-Scale Concepts to Develop Models of NAPL Ganglion Dynamics, Rao S. Govindaraju and Lakshmi N. Reddi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p454-465.

Diffusive Transport of Organic Colloids from Sediment Beds, K. T. Valsaraj, S. Verma, I. Sojitra, D. D. Reible and L. J. Thibodeaux, EE Aug. 96, p722-729.

Pore Structure Evolution and State of Pore Water in Hy drating Cement Paste at Cryogenic Temperatures, J-Y. Jehng, D. T. Sprague, S. Bhattacharja and W. P. Halperin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p600-607.

Pore water pressure

Analysis of Rainfall-Induced Debris Flows, Scott A. Anderson and Nicholas Sitar, GT July 95, p544-552.

Behavior of Pressure Tunnels and Guidelines for Liner Design, Gabriel Fernández, GT Oct. 94, p1768-1791.

Coefficient of Permeability from AC Electroosmosis Ex-periments. I: Theory, J. Yin, R. J. Finno, J. R. Feldkamp and K. Chung, GT May 96, p346-354.

Coefficient of Permeability from AC Electroosmosis Ex-periments. II: Results, R. J. Finno, K. Chung, J. Yin and J. R. Feldkamp, GT May 96, p355-364.

Pore-Water Pressures in Freezing and Thawing Fine-Grained Soils, K. Dieter Eigenbrod, Sven Knutsson and Daichao Sheng, CR June 96, p77-92.

Anisotropic Coefficients of Poroelasticity, A. H-D. Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Anisotropy Effect on One-Dimensional Consolidation, L. Cui, Y. Abousleiman, A. H-D. Cheng and J.-C. Roegiers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Coupled and Uncoupled Poroelastic Solutions to Land Subsidence due to Groundwater Withdrawal, Giuseppe Gambolati, Mario Putti and Pietro Teatini, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p483-486.

Cracks in Poroelastic Materials with a Highly Anisotropic Fluid Response, C. Atkinson and R. V. Craster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

lastic Media, Gary F. Dargush and Manoj B. Chopra, EM July 96, p623-632. Dynamic Analysis of Axisymmetric Foundations on Poroe-

Further Application of Dynamic Poroelasticity to Geotechnical Engineering Via BEM, Jianming Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p479-482.

Normal Modes of a Poroelastic Soil Layer on a Rigid Bed Rock, Terumi Touhei and Nimal Rajapakse, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p475-478.

A Proposed Poroelastic Model for Hydraulic Fracturing Breakdown Pressure in Porous Rocks, Xiaofeng Huang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p208-211.

Two Classical Elasticity Problems Revisited by a Quasi-static Poroelastic BEM Implementation, João C. B. de Campos and Euclides de Mesquita Neto, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1078-1081.

Approximate Theory for Radial Filtration/Consolidation, Frank M. Tiller, J. M. Kirby and H. L. Nguyen, GT Oct. 96, p797-805.

Effect of Copper Slag on the Hydration of Blended Cementitious Mixtures, B. Mobasher, R. Devaguptapu and A. M. Arino, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1677-1686.

Effects of Media Characteristics on Performance of Upflow Anacrobic Packed-Bed Reactors, Joo-Hwa Tay, Kuan-Yeow Show and S. Jeyascelan, EE June 96, p469-476. Experimental Study of Durability of Reactive Powder Con-cretes, N. Roux, C. Andrade and M. A. Sanjuan, MT

Feb. 96, p1-6.

Geostatistical Simulation, Parameter Development and Property Scaling for GWTT-95, Sean A. McKenna and Susan J. Altman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p181-

Grain-Size Distribution for Smallest Possible Void Ratio, B. Aberg, GT Jan. 96, p74-77

No-Fines Concrete Pavements, Nader Ghafoori and Shivaji Dutta, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1637-1646. Normal Modes of a Poroelastic Soil Layer on a Rigid Bed

Rock, Terumi Touhei and Nimal Rajapakse, (Engineer

ing Mechanics, Y. K. Lin and T. C. Su, 1996), 4475-478. Sound Absorption of Dry Porous Media with Single and Double Porosity, C. Boutin, P. Royer and J. L. Auriault, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p796-799.

The Use of an Equivalent Porosity Method to Model Flow in Marshes, Ian P. King and Lisa C. Roig, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3734-3739.

orous materials

Brittle-Ductile Transition in Porous Rocks by Cap Model, Vlado A. Lubarda, Sreten Mastilovic and Jaroslaw Knap, EM July 96, p633-642.

Cracks in Poroelastic Materials with a Highly Anisotropic Fluid Response, C. Atkinson and R. V. Craster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p212-215.

Earthquake Response of Gravity Dams Including Effects of Porous Sediments, José Domínguez and Rafael Gallego, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Equivalent Strength of Porous Fractured Rock, William G. Pariseau, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p216-219.

Su, 1990), p210-219.
Fluid Pressure Polarization and Effective Response of Fluid-Saturated Materials with Cavities of Various Shapes, Mark Kachanov and Boris Shaftor, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p487-490.

Pundamental Thermal Mechanical Modeling of Gas-Filled Porous Composites, N. J. Salamon and Ramnath Ganesan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p52-55.

The Thermodynamic Structure of a Fluid-Saturated Com-pressible and Incompressible Elastic Porous Solid, Reint de Boer, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p56-59.

Adaptive Diffuse Element-Finite Element Technique for Transient Analysis in Porous Media, Hormoz Modaressi and Philippe Auben, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1082-1085.

An Adaptive Finite Element Model for Saturated and Unsaturated Porous Media, D. W. Pepper, M. L. Lytle and D. B. Carrington, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p105-

Analytical Model for Heterogeneous Reactions in Mixed Porous Media, K. Hatfield, D. R. Burris and N. L. Wolfe, EE Aug. 96, p676-684.

Analytical Study and Verification of a Coupled Theory of Mixtures for Application in Cone Penetration and Tunnel Boring in Soils, George Z. Voyiadjis, Murad Y. Abu-Farsakh and Mehmet T. Tumay, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p543-546.

Capillary Pressure-Saturation Relationships in Fracture, Zi-tong Ye, Bing Han, Sishen Li and Jiafa Zhang, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3869-3873.

Compositional Modeling Study of Alcohol Flooding for Recovery of DNAPL, Stanley Reitsma and Bernard H. Kueper, (Non-Aqueous Phase Liquids (NAPLs) in Sub-surface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p526-537.

Consolidation of Elastic Porous Media Saturated by Two Immiscible Fluids, Kagan Tuncay and M. Yavuz Corap-

cioglu, EM Nov. 96, p1077-1085.

Constitutive Relations for Compressible Elastic Porous Solids, J. Bluhm, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1090-1093.

Contaminant Transport in Nonisothermal Fractured Porous Media, Mao Bai, Jean-Claude Roegiers and Hilary I. In-

vang, EE May 96, p416-423.

Jones Sanay 20, pr.10-423.

Jones Sanay 20, pr.10-423.

Filtration in Saturated Porous Media, Alexey Maksimov, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Dissolution of NAPLs Entrapped in Heterogeneous Porous Media, Indumathi Manivannan, Susan E. Powers and Garrey W. Curry, Jr., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p563-574.

Distribution of Reynolds Stress above a Packed Bed in Open Channel Flow, Mahesh Balakrishnan, Clinton Dan-cey, Thanais Papanicolaou and Panos Diplas, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p665-668.

Drying of a Heated Porous Medium at Sub-Residual Satu-rations, Y.-T. Chen, A. K. Sathappan and R. Boehm, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p119-121.

Editor's Note, Thomas L. Theis, EE Aug. 96, p675.

Factors Limiting Microbial Activity in Volcanic Tuff at Yucca Mountain, Thomas L. Kieft, William P. Kovacik and Jennifer Taylor, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Framework for a Screening Model for DNAPL Contamina-tion of Porous Media, Clinton S. Willson, James W. Weaver, Tissa Illangasekare and Randall J. Charbeneau, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p407-418.

Inelastic Strains of Porous Saturated Media, Victor N. Ni-kolaevskiy, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p927-930.

Laboratory Experiments with Heterogeneous Reactions in Mixed Porous Media, David R. Burris, Kirk Hatfield and

N. L. Wolfe, EE Aug. 96, p685-691.

Leaching of PCBs from a NAPL Entrapped in Porous Media, Zafar Adeel, Richard G. Luthy and David A. Dzombak, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p649-660.

Localization of Inelastic Deformation in Elasto-Plastic Pore Solids Saturated by Liquid, Igor A. Garagash, (Engineer ing Mechanics, Y. K. Lin and T. C. Su, 1996), p931-934.

Mechanisms of Removal of Residual Dodecane Using Surectaanisms of Recinoval of Residual Douecame Using Surfactant Foam, HsienShen S. Chu, Amir Salehzadeh, Avery H. Demond and Richard D. Woods, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p269-280.

Modulated Waves in Porous Media Saturated by Liquid and Gas, Inna Edelman, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p653-656.

Multiphase Flow in Deforming Porous Media by the Finite Element Method, Pedro Arduino and Emir J. Macari, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Numerical Simulation of DNAPL Emplacement and Redis-tribution in Heterogeneous Porous Media at the M Area of the Savannah River Site, Rex A. Hodges and Ron W. Falta. (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p619-627.

One-Dimensional Finite-Element Model for High Flow Ve-locities in Porous Media, Blair T. Greenly and Douglas

M. Joy, GT Oct. 96, p789-796.

A Pore-Scale Study of the Stability of Nonaqueous Phase Liquid Ganglia under the Influence of Vibrations, Sunil Menon, Arun Pant and Lakshmi N. Reddi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p538-550.

Potential Microbial Impacts on Groundwater Quality, D. Roy Cullimore, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p40-45.

506

A Proposed Poroelastic Model for Hydraulic Fracturing Breakdown Pressure in Porous Rocks, Xiaofeng Huang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p208-211.

Relating the Wettability of Contaminated Sands to NAPL Composition, William H. Anckner, Jr. and Susan E. Composition, William Phase Liquids (NAPLs) in Sub-surface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p502-512.

Release Rates of Radionuclides through a Porous Material-Filled Borehole in a Radioactive Waste Repository, Kun Jai Lee and Heui-Joo Choi, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p279-281.

Representation of Compacted Clay Minifabric Using Ran-dom Networks, Lakshmi N. Reddi and S. Thangava-

divelu, GT Nov. 96, p906-913.

Scaling Bacterial Filtration Rates in Different Sized Porous Media, Michael J. Martin, Bruce E. Logan, William P. Johnson, David G. Jewett and Robert G. Arnold, EE May 96, p407-415.

Seismic Signatures of Patchy Saturation, Jack Dvorkin and Amos Nur, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p645-648.

Soil Type Effect on NAPL Removal by Surfactant, Olubunmi M. Ogunsola and Mark A. Tumeo, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lukshmi N. Reddi, ed., 1996), p281-291.

Sound Absorption of Dry Porous Media with Single and Double Porosity, C. Boutin, P. Royer and J. L. Auriault, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p796-799.

Statistical Analyses of Acoustical Wave Velocity in Porous Seafloor, M. Badiey, A. H-D. Cheng and Y. Mu, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), p800-803.

Stochastic Analysis for Movement of Fine Particles in Porous Media, Rao S. Govindaraju, HE Oct. 96, p161-168.

Stochastic Finite Element Analysis for Multiphase Flow in Random Porous Media, S. Dham and R. Ghanem, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p661-669.

Three-Fluid Phase Flow in Heterogeneous Subsurface: Per-turbation and Numerical Analyses, Alaa E. Abdin and Jagath J. Kalurachchi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p513-525.

Unsaturated Flows Around a Horizontal Hole with Con-stant Heat Input, Y.-T. Chen and R. F. Boehm, (High Level Radioactive Waste Management, Technical Pro-gram Committee, 1996), p125-127.

Porous media flow

A 3-D NAPL Flow and Biodegradation Model, Phillip C. de Blanc, Daene C. McKinney, Gerald E. Speitel, Jr., Kamy Sepehrnoori and Mojdeh Delshad, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Asand Remediation, Lakshmi N. Reddi, ed., 1996), p478-489.

A Comparative Study of the Transformed Methods for Solving Richards' Equation, M. Rashidul Islam, (North American Water and Environment Congress & Destruc tive Water, Chenchayya Bathala, ed., 1996), p1748-1753.

Numerical Modeling of Water Flow over Porous Media, Christopher Y. Choi, Peter M. Waller and Fukumura Ka-zunari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2433-2438.

Portland cements

Detection of ASR in PCC Using Ultrasonic Waves, N. M. Al-Akhras, I. L. Al-Qadi and M. R. Hajj, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p897-904.

Effectiveness of Blast-Furnace and Gasifier Slags at Reducing Ingress of Chloride Ions into Portland Cement Concretes in Marine Environments, G. J. Osborne, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1503.

Fast-Track Concrete Paving—Overview of Key Components, Lawrence W. Cole and Gerald F. Voigt, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p446-455.

HMA Overlays to Rehabilitate PCC Pavements, Dale S. Decker and Matthew W. Witczak, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1418-1428.

Measuring Dielectric Properties of Concrete over Low RF, Rami H. Haddad and Imad L. Al-Qadi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1139-1149.

Performance of Polyethylene Parting Strips in PCC Pavements, Samuel P. Lawrence, Awad S. Hanna and Jeffrey S. Russell, TE Mar/Apr. 96, p155-163.

S. Russell, TE Mar/Apr. 96, p155-163.

Recycling of Spent Abrasive Media in Nonstructural Concrete, Matthew T. Webster and Raymond C. Loehr, EE Sept. 96, p840-849.

Use of Recycled Aggregates for Pavement, S. Abdol Chini, Timothy J. Sergenian and Jamshid M. Armaghani, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p154-162.

Using NDT to Fasttrack Pavements, James K. Cable, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p475-481.

Port

Austin Brant, Retired Chairman of TAMS, Dies at 66, NE Feb. 96, p14.

Design Criteria for Fenders at Ferry Landings, Charles T. Jahren and Ralph Jones, WW July/Aug. 96, p187-194. Experimental Studies of Merging Plumes, G. A. Daviero

Experimental Studies of Merging Plumes, G. A. Daviero and P. J. W. Roberts, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p918.

History of Coastal Engineering in Mexico, J. Antonio Maza, Rodolfo Silva and Carlos Sánchez, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p375-389.

Hyogo-Ken Nanbu Earthquake of January 17, 1995: A Post-Earthquake Reconnaissance of Port Facilities, Stephen E Dickenson, Vice-Chairman, Committee on Ports and Harbors Lifelines of the Technical Council on Lifeline Earthquake Engineering of ASCE, (Stuart D. Werner, chmn.), 1996, 0-7844-0161-6, 111pp.

Modelling of Hydro- and Lithodynamic Processes in Kolłobrzeg Region, Leonard Gajewski, Elżbieta Zawadzka, Juliusz Gajewski and Andrzej Lewandowski, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p891-902.

U.S. Engineers See the Before and After in Kobe a Year after the Big Earthquake, NE June 96, p8.

Vulnerability of Pacific Northwest Port-Related Lifeline Structures Based on Observations from the Kobe Earthquake of January 17, 1995, David B. Swanson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p9-10.

Portugal

History of Coastal Engineering in Portugal, F. Vasco Costa, F. Veloso Gomes, F. Silveira Ramos and Claudino M. Vicente, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), 9413-428.

Positioning

Error Mohr Circle and Invariants of Cofactor Coefficient, Xinjian Kou and Jimian Song, SU Nov. 96, p158-167.

Real Time Positioning and Equipment Control for Hostile Environments, Yvan J. Beliveau, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p64-70.

Post tensioning

Creeping Suspicion, Michael P. Bruen, Nicholas Pansic and M. I. Schwartz, CE May 96, p60-63. Design Considerations for Post-Tensioned Integral Pier Caps, Sami W. Tabsh, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p444-451.

Design Methodology for Strengthening of Continuous-Span Composite Bridges, H. A. El-Arabaty, F. W. Klaiber, F. S. Fanous and T. J. Wipf, BE Aug. 96, p104-111.

Dome-Shaped Space Trusses Formed by Means of Posttensioning, G. Dehdashti and L. C. Schmidt, ST Oct. 96, p1240-1245.

Economical Long-Span Spliced Bridges, Leo Spaans, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p147-152.

First Post Tensioned Deck Bridge with Composite Cables, Srinivasa L. Iyer and Gopi Sripathy, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p375-385.

High Performance Highway Bridge Substructures, Robert W. Barnes and John E. Breen, (Worldwide Advances in Structural Concrete and Massony, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p176-187.

Hybrid Moment Resisting Precast Beam-Column Connections, John Stanton, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p266-277.

Precasting Long Spans for the Northumberland Strait Crossing, Gerard Sauvageot and Joe Showers, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p141-146.

Prestress Loss Due to Creep in Post-Tensioned Clay Masonry, Subhash C. Anand and Naresh Bhatia, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p49-60. Roosevelt Bridge Spans Florida River, CE Jan. 96, p10.

ROSEVER Dridge Spains Fronta River, C.E. Jan. 30, pin VSL's Experience with Post-Tensioned Masonry, Hans Rudolf Ganz, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p25-36.

Windsor Bridge Pier Repairs, Phillip Pierce and Joseph Mieczkowski, SC May 96, p79-81.

Postbuckling behavior

Buckling Analysis of Elastic Space Rods under Torsional Moment, Yoshiaki Goto, Xiao-Song Li and Toshihiro Kasugai, EM Sept. 96, p826-833.

Large Deformation Analysis of Inelastic Space Truss Structures, George E. Blandford, ST Apr. 96, p407-415.

Postbuckling of Moderately Thick Circular Plates With Edge Elastic Restraint, G. Venkateswara Rao, N. Rajasekhara Naidu and K. Kanaka Raju, EM Oct. 94, p2232-2238.

Recent Advances in Sensitivity Analysis for Thermomechanical Postbuckling of Composite Panels, Ahmed K. Noor, EM Apr. 96, p300-307.

Potable water

Back to Bacteria: A More Natural Filtration, Bruce E. Rittmann, CE July 96, p50-52.

Beneficial Aspects of Flood and Rain in Countries Where the Drinking Water is Naturally Contaminated with Fluoride Where Fluorosis is a Major Public Health Problem, Susheela Andezhath Kumaran, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2191.

Construction Forum, SC Nov. 96, p99-103.

Corrosion Control of Drinking Water Using Tray Aerators, Enrique J. La Motta and Srinivas Chinthakuntla, EE July 96, p640-648.

Denitrification of Ground Water/Waste Water using the Aquacel System, Peter Hall and Jerry Shapiro, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p577-581.

Drinking Water Quality in Small Northern Communities, Daniel W. Smith, Stephen J. Stanley and Dennis S. Prince, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p570-581.

Drying Sludge Saves Costs, CE Oct. 96, p11

EPA Requires Cryptosporidium Watch, CE July 96, p20.

Establishing the Relative Process Risks for Chlorination and Ozonation - A Case Study Illustrates the Need to Evaluate the Process Hazard Implications of a Change in Drinking Water Disinfection Process due to D/DBP Regulations, Paul G. Beswick, Craig E. Brackbill and L. Donald Duke, (North American Water and Environment) Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1021-1026.

Evaluation of Nitrate Treatment Methods Under Uncertainty, Crystal C. Tannehill, M. F. Dahab and W. E. Woldt, (North American Water and Environment Congress & Destructive Water, Chenchayva Bathala, ed., 1996),

p1003-1008

Fluidized Bed Denitrification of Secondary Effluent During Wastewater Reclamation in Southern California, Roger w. Babcock, Jr., Kapal Madireddi and Michael K. Stenstrom, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p788-793.

From Cholera to Cancer to Cryptosporidiosis, Daniel A.

Okun, EE June 96, p453-458.

Impacts of Improved Water Supply and Sanitation on the Rural Population of India, Padmavathy Bogabathini, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p781.

Innovative Drilling Brings Potable Water to Islanders, CE

June 96, p87

June 90, ps. 7.

Management of Water Treatment Plant Residuals, AWWA Technology Transfer Handbook U.S. EPA/625/R-95/008 (M&R No. 88), American Society of Civil Engineers, American Water Works Association, and the U.S. Environmental Protection Agency, 1996, 0-7844-0181-0,

Milwaukee's Ozone Upgrade, James C. Kaminski, P.E. and Paul W. Prendiville, P.E., CE Sept. 96, p62-64.

Modeling the Lake Decatur Watershed in Illinois to Evalu-ate Effects of Best Management Practices on Nitrate Loading, Deva Borah, Misganaw Demissie and Laura Keefer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1681-1686.

New Block Copolymers for Membrane Materials, Francis A. DiGiano, Ying Chu, Joseph M. DeSimone, Benny D. Freeman, Camille Kassis and Doug Betz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1638-1644.

Water, Chenchayya Bathala, ed., 1996), p1638-1644.
Occurrence and Significance of Cryptosporidium parvum and Giardia lamblia in Surface Waters on Alaska's North Slope, Michael R. Pollen, Cindy L. Christian, Craig D. Nordgren and Jonathan D. Pollen, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), 9494-505.
Physical Distribution System Models for Assessing the Insect of Water Quality on Research and Corrosion Anne-

lysical Distribution Systain Regrowth and Corrosion, Anne Boact of Water Quality on Regrowth and Corrosion, Anne K. Camper, Warren L. Jones and Calvin Abernathy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1437-1441.

Predicting Dynamic Response of Adsorption Columns with Neural Nets, Imad A. Basheer and Yacoub M. Najjar, CP Jan. 96, p31-39.

Predicting THM Formation with Artificial Neural Net-works, Paul H. Hutton, Nicky Sandhu and Francis I. Chung, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3551-3556.

Probabilistic Approach for Cancer Risk Assessment, Paul S. Watkins, Timothy L. Jacobs, Rory B. Conolly and Warren T. Piver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2366-2371.

In. ed., 1996), p.2506-2371.
Protecting Drinking Water: Rapid Detection of Human Fecal Contamination, Injured, and Non-Culturable Pathogenic Microbes in Water Systems, D. C. White, D. E. Nivens, A. A. Arrage, B. M. Appelgate, S. R. Reardon and G. S. Sayler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1645-1650.

Remote Monitoring and Technical Support for Drinking Water Systems in Remote Communities, Daniel W. Smith, Stephen J. Stanley and Dennis S. Prince, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p545-557.

Removal of Arsenic From Ground Water Using Granular Activated Carbon, Brock D. Buche and Lawrence P. Owens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p1173-1177.

Risk Analysis of Drinking Water Treatment and Supply Fa-cilities Handling Highly Hazardous Chemicals, Krishna Nand, Bruno Loran and Morley Male, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p776-780.

Slim Environmental Outlook, Casey Dinges, CE Aug. 96,

Students Aid Bolivian Village, CE Sept. 96, p14,19.

Studies on Herbal Desalination, Godavarthy Ramprasad and Varanasi Kaliprasad, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1015-1020.

Survival of Coliform Microorganisms in Sediments from a Treated Water Reservoir, Heesong Yoon and Joseph S. Devinny, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1626-1631.

US/Mexico Border Drinking Water Study, Blake L. Atkins, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2120-2125.

Wastewater Reuse: An Alternative for Potable Water, S. A. Mohsin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2976-2981.

Water and Sanitation Intervention in Flood Mitigation Proare and Santation Intervention In Proof with Gallon Pro-grams, Bilquis A. Hoque, Bradley R. Sack, Nahid A. Ali and J. T. A. Chowdhury, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3916.

Water Wisdom of the Ancients, L. Michael Trapasso, CE

Jan. 96, p64-65.

Water-Treatment Plant Helps Clean the Air of Jupiter, CE Mar. 96, p82.

Wellhead Protection Area Predictions and Implications for the Biscayne Aquifer in Miami, Florida, Hector R. Fuentes, Vassilios A. Tshrintzis and Jose H. Olivo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p960-965.

Wellhead Protection: Local and Community Efforts, Sharon Lien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p966-969.

River Dnister Pollution with Toxic Waste as a Result of Accident at Potassium Fertilizers Factory, Valeriu Ropot, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3499.

Interactive RANS/Laplace Method for Nonlinear Free Surface Flows, Hamn-Ching Chen and Sing-Kwan Lee, EM Feb. 96, p153-162.

Potential Flow Instability Theory and Bed Forms, Stephen E. Coleman and John D. Fenton, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p442-447.

Potential theory

Ditch Drainage Theories for Homogeneous Anisotropic Soil, Gautam Barua and K. N. Tiwari, IR Sept/Oct. 96, p276-285.

A Melnikov Theoretic Bound on Probability of Escape from a Potential Well, Michael R. Frey, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p510-513.

Power

New Transmission Line Lets Power Come Cheaper, CE Aug. 96, p14,16.

TDA Profiles Opportunities in European Market, CE July

Power spectrum analysis

Numerical Simulation of Flow Field Around Buildings, Da-hai Yu and Ahsan Kareem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p490-493.

A Simulation Procedure for First Passage Problems of Non-linear Structures, Veit Bayer and Christian Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p816-819

Strange Attractors and Chaos in Wastewater Flow, Donald I. Angelbeck and Rafic Y. Minkara, EE Jan./Feb. 94, p122-137

Power supplies

California Unveils Fuel Cell Plant, CE Nov. 96, p20-21.

Review of the Solar Power Satellite, James McSpadden and Kai Chang, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p254-259.

Self Deployable Mechanism for Large Disk Antenna Using Centrifugal Force, Takanori Sato, Shinji Matsumoto, Haruyuki Namba, Kenji Takagi, Hisashi Tadokoro, Hiroshi Yamakawa, Takao Oura, Kenji Nozaki and Nobuyuki Kaya, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1155-1161

Solar Power Satellites, Rebecca Kluck, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1281-1284.

"SPS 2000" and its Internationalisation, Patrick Collins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p269-279.

Advanced Seawater Desalination Plant, David W. Dean and Earl B. Lindquist, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p685-690.

Alfalfa Power, CE Nov. 96, p8.

Automation-Related Quality Improvements in Power Plant Design and Operation, George V. Jones, Phillip W. Gar-rett, Jones Randall E. and Carl K. Toner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p487-493.

California Unveils Fuel Cell Plant, CE Nov. 96, p20-21. Coal's Clean Comeback, Donald E. Pless and Stephen D.

Jenkins, CE Sept. 96, p46-49. Decision Support, R. B. Allen, CE July 96, p53-55.

Mixer Viscometer Characterization of AFBC Ash Grout, Donald D. Gray and Scott J. Putnam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p816-819.

Precipitation

Estimation of Annual Storm Runoff Coefficients by Continuous Simulation, Ashok Pandit and Ganesh Gopalakrishnan, IR July/Aug. 96, p211-220.

First Interactive Drought Atlas Released, CE Oct. 96, p17,19

Hydrologic Impact of Great Flood of 1993 in South-Central Kansas, Marios Sophocleous, A. J. Stern and S. P. Per-kins, IR July/Aug. 96, p203-210. Nonhomogeneous Markov Model for Daily Precipitation, Balaji Rajagopalan, Upmanu Lall and David G. Tarbo-ton, HE Jan. 96, p33-40.

Precipitation and Water-Table Effects on Agricultural Production and Economics, Jorge A. Ramírez and Bryce Finnerty, IR May/June 96, p164-171.

Threshold Precipitation Events and Potential Ground-Water Recharge, Richard H. French, Roger L. Jacobson and Brad F. Lyles, HY Oct. 96, p573-578.

Flood Destruction and Abatement in China, Zhixin Liang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Precipitation, atmospheric

Analysis of Exceptional Meteorological Conditions on July and August in Conakry, Mamadou Tounkara, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1144.

California Probable Maximum Precipitation, John L. Vogel, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p55-56.

Flood Trends in Austria, F. Nobilis and P. Lorenz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p917.

Flooding of an Underground Facility at Yucca Mountain: A Summary of NRC Review Plans, Neil M. Coleman, Rex G. Wescott and Terry L. Johnson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p205-207.

Incorporation of Time-Intensity and Spatial Variability Into Probable Maximum Precipitation (PMP) Estimates, Ana Paula Barros, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p64-65.

Non-Growing Season Water Budgets for a Shortgrass Steppe, Shusen Wang, William J. Parton and Gigi A. Richard, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p237-242.

The Part of Precipitation in Some Ecological Problems of the Dnister Basin, L. Gueiko, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2447-2448.

The Predictability of Extreme Floods and the Role of the Coupled Land-Atmosphere-Ocean System, Ana Paula Barros and Rajat Bindlish, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p229-230.

Probabilistic Flood Forecast-Warning System, Roman Krzysztofowicz, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p231-

Regionalization of Annual Precipitation Maxima in Montana, Charles Parrett, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p57-58.

Precipitation, chemistry

Effects of Transport Model Alternatives Incorporating Precipitation on the Performance of Engineered Barriers, Takao Ohi, Kaname Miyahara, Morimasa Naito and Hiroyuki Umeki, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p274-275.

Predictions

The 1995 Floods of Rhine and Meuse - How Predictable are Water Levels in the Netherlands, Bart Parmet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p249-250.

3D Numerical Modeling of Cohesive Sediments, Scott A. Yost and Nikolaos D. Katopodes, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p478-489.

Accurate Asphalt Mixture Tensile Strength, William G. Buttlar, Reynaldo Roque and Namho Kim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p163-

Acoustic Efficiency Analysis Using Infrasound from NEOs, Douglas O. ReVelle and Rodney W. Whitaker, (Engi-neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p102-108.

Applicability of Scour Equations in Tidal Areas, J. R. Richardson, E. V. Richardson and B. L. Edge, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1980-1989.

Application of High-Resolution Schemes to Free Surface Flows in Irregular Channels, Ke-Qiang Zheng and Eddy J. Langendoen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p201-206.

Application of Kalman Filter to Short-Term Tide Level Prediction, Pei-Hwa Yen, Chyan-Deng Jan, Youe-Ping Lee and Hsiu-Fang Lee, WW Sept./Oct. 96, p226-231.

Average and Peak Traffic Volumes: Neural Nets, Regression, Factor Approaches, Pawan Lingras and Mario Adamo, CP Oct. 96, p300-306.

Adamo, CP Oct. 96, p300-306.
Bridge Abutment Scour in Floodplain with Backwater,
Terry W. Sturm and Aftab Sadiq, (North American
Water and Environment Congress & Destructive Water,
Chenchayya Bathala, ed., 1996), p921-930.
Capacity Predictions for Full Scale Transmission Line Test
Foundations, Robert E. Kondziolka and Peter M. Kandaris, (Uncertainty in the Geologic Environment: from
Theory to Practice, Charles D. Shackelford, ed., Priscilla
P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p695-700

 709.
 Comparative Assessment of Prediction Strategies for Adaptive Control, R. Ghanem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p134-137.
 A Comparison of Geological and Stochastic Approaches to Characterization of Heterogeneity and their Effects on Simulations of Pump-and-Treat Systems, Peter E. Riemersma, Jean M. Bahr and Mary P. Anderson, (Uncertaints in the Geological Environment) from Theory to Property for Theory of Theor tainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-

Procence, Charles D. Shackelord, ed., Prischia F. Nei-son, ed. and Mary J. S. Roth, ed., 1996), p1003-1018.

Damage Estimation Using Substructural Identification in Time Domain, Chung-Bang Yun and Hyeong-Jin Lee, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p846-849.

p846-849.
Database Preparation for Pavement Modeling—Virginia's Experience, Adel W. Sadek, Thomas E. Freeman and Michael J. Demetsky, TE Nov./Dec. 96, p454-461.
Determination of Post-Liquefaction Strength: Steady State vs Residual Strength, S. Thevanayagam, C. C. Wang and K. Ravishankar, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1210-1224.

Development and Testing of Riverbank-Stability Analysis, Stephen E. Darby and Colin R. Thorne, HY Aug. 96,

p443-454.

Development of Performance Models for PMS, Kathryn A. Zimmerman and Margaret R. Broten, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p254-262. Development of Probabilistic Earthqake Damage Estima-

Development of Probabilistic Earthquae Damage Estimation Models, D. Mirfendereski and C. Scawthorn, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p243-244.
Discharge Measurements and Predictions in Wetlands,

Vassilios A. Tsihrintzis, David A. Sikkema, Marcia Levinson and Jose L. Oliveros, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p274-279.

Distributions of Return Flow in Navigable Waterways, Ta Wei Soong, Renjie Xia and Nani Bhowmik, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2855-2860.

Earthquake-Induced Landsliding Analyzed and Predicted With a Geographic Information System, James P. McCalpin, (Natural Disaster Reduction, George W.

Housner, ed. and Riley M. Chung, ed., 1997), p3-4.

An Enhanced Kalman Filtering Algorithm for Dynamic Freeway OD Matrix Estimation and Prediction, Samer Madanat, James Krogmeier and Shou-Ren Hu, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p423-428.

Estimation of Frequency-Dependent Reflection Coefficients
Using Current and Elevation Sensors, David A. Huntley,
David J. Simmonds and Mark A. Davidson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

namics '93, william K. Daily, ed. and Ryscate J. Zeidler, ed., 1996), p57-68. An Evaluation of Tidal Predictions in the Yellow and East China Seas, Cheryl Ann Blain, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Raiph T. Cheng, 1996), p429-441.

Fatigue Evaluation of Bridges, George E. Tsiatas and Shane M. Palmquist, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p302-305.

Fatigue Lifetime Prediction of Steel Bridge Details, Peter J. Massarelli and Thomas T. Baber. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p450-453.

Field Validation and Application of a Coastal Profile Model, J. A. Roelvink, Th. J. G. P. Meijer, K. Houwman, R. Bakker and R. Spanhoff, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996).

p818-828

indeast Simulations of Ocean Currents in the Norwegian Coastal Waters. Part 1: Model Set Up and Sensitivity Tests, Harald Engedahl, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p379-390.

Hydrodynamic Simulations in Sediment-Carried Contami-nant Modeling for the Buffalo River, New York, Ruo-chuan Gu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1039-1044.

Inhomogeneous Interfacial Transition Zone Model for the Elastic Moduli of Concrete, Melanie P. Lutz, Paulo J. M. Monteiro and Robert W. Zimmerman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1246-1255.

Investigation into the Possibilities of Using Bristol Channel Models for Tidal Predictions, M. Amin and R. A. Flath-er, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p41-52.

Spaulung and Raiph 1. Cheng, 1990, p41-32.
A Knowledge-Based System For International Hurricane Risk Management, Surya K. Gunturi, Chris Austin, Aida RiveraMarzan, Ping Zhang, John Lieberman, Paul Van-derMarck, Mark Broido and Auguste C. Boissonnade, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p15-16.

and Rief M. Chung, ed., 1977, p15-10. Lateral Earth Pressures on Deep Braced Walls, Daniel O. Wong, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p746-

758

A Layer-Wise Formulation for Progressive Failure Analysis of Laminated Composite Beams, Julio F. Davalos and Youngchan Kim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1150-1159.

Lightning Safety: A Risk Management Approach, Richard Kithil, (Natural Disaster Reduction, George W. Housner,

ed. and Riley M. Chung, ed., 1997), p17-18. Linkages Between the El Nino-Southern Oscillation and

Linkages Between the El Nino-Southern Oscillation and U.S. Droughts, John A. Dracup and Thomas C. Piechota, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p373-374.
Meteoroid Hazards in the Lunar Environment, Frank J. Ronney and John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p653-662.

Method of Non-Linear Stochastic Dynamics - A Comparative Discussion, G. I. Schuëller and H. J. Pradlwarter, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996).

Micromechanics Based Design of FRCC Components, Christopher K. Y. Leung and Y. Philip Geng, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p419-425.

Model Uncertainty for the Advection-Dispersion Equation, Wade E. Hathhorn, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth,

ed., 1996), p881-896.

Model Uncertainty in Anchorage Design for Anchored Bulkheads, Anurag Varde, Thomas C. Sandford and Ha-bib J. Dagher, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed. Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p727-745.

1990), p121-143.
Modeling Contaminated Sediments, Robert K. Simons and Daryl B. Simons, CE Sept. 96, p73-75.
Modeling SSO's Resulting from Peak Conditions, Marc P. Walch, Kathleen S. Leo, Stephanie L. Ross and William M. Brant, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1777-1782.

A Morphology Model to Predict Erosion Near a Seawall, K. A. Rakha and J. W. Kamphuis, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p879-890.

Neural Networks Predict Pesticide Leaching, Steven K. Starrett, Shelli K. Starrett, Yacoub M. Najjar and Judy C. Hill, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1693-1698. Nongrowing Season Evaporation in Northern Utah, Richard

G. Allen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p225-230.

NPC Integrator and Its Unconditional Stability for Re-sponse Analysis of Constrained Structures, David W. Begg and Xiaojian Liu, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1237-1244.

Numerical Modeling of Turbidity Currents, Scott F. Bradford and Nikolaos D. Katopodes, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng,

1996), p404-415.

Oil Spills: Prevention, Prediction, and Preparation, Richard E. Burke, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p770-775.

Overcoming Soil Uncertainty in Prediction of Construction and Industrial Vibrations, Mark R. Svinkin, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1178-1194

Performance-Based Seismic Design of Building Structures, Kevin R. Collins, (Probabilistic Mechanics & Structural

Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p792-795. Potential Flow Instability Theory and Bed Forms, Stephen E. Coleman and John D. Fenton, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p442-447.

Chayya Balman, ed., 1990, past2-447.
The Predictability of Extreme Floods and the Role of the Coupled Land-Atmosphere-Ocean System, Ana Paula Barros and Rajat Bindlish, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p229-230.

1991), p.259-250.

Fredicting Breakup Ice Jams Using Logistic Regression, Kathleen D. White, CR Dec. 96, p.178-189.

A Predicting Method of Typhoon Wind Damages, Yasushi Mitsuta, Takeshi Fujii and Ichiro Nagashima, (Probabilistic Mechanics & Structural Reliability, Dan M. Franschi, M. P. P. Grissich (2006) 2020. gopol, ed. and Mircea D. Grigoriu, ed., 1996), p970-973.

resulting the Level of Frost Penetration into Landfill Covers, Horace K. Moo-Young, Jr., Thomas F. Zimmie and Morris H. Morgan, Ill. (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p745-756. Predicting the Level of Frost Penetration into Landfill Cov-

Predicting the Mode, Susceptibility, and Rate of Weather-ing of Shales, Paul M. Santi and Engin C. Koncagul, (Design with Residual Materials: Geotechnical and Con-struction Considerations, Gordon Matheson, ed., 1996), p12-26.

Predicting the Service Lives of Materials of Construction, Geoffrey Frohnsdorff, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p38-53.

Imm. Jean F., Chong, ed., 1990), p38-53.
Predicting Transport of Organics through Soil Columns using Distributed Mass-Transfer Rates, Teresa B. Culver and Stephen P. Hallisey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2005-2010.
Prediction of Cavitation Demana. for Scilling Management of Cavitation Demana.

Bathala, ed., 1996), p2005-2010.
Prediction of Cavitation Damage for Spillways, Wenping Lee and John A. Hoopes, HY Sept. 96, p481-488.
Prediction of Concrete Cracking Under Coupled Shrinkage and Creep Conditions, Wei Yang, Kejin Wang and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p564-573.
Prediction of Storm Induced Flows in Great Lakes Estuarine Inlets, James H. Riley and William L. Wood, (Estuarine and Coastal Modeline, Macolym L. Spaulding and

arine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p583-595.

Reader Questions Sea Level Prediction, Leland B. Jones, CE Sept. 96, p32,35.

Scour in Erodible Rock II: Erosive Power at Bridge Piers, Steven P. Smith and George W. Annandale, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1349-1357.

Seismic Hazard Assessment of the NPPS in the ČR, Dana Procházková, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p179-180.

Selection of Sediment Transport Relations Part III: Numerical Ranking of Sediment Transport Relations, David T. Williams and Pierre Y. Julien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2843-2848.

Shake, Rattle and Map, Stephanie A. King and Anne S. Kiremidijan, CE June 96, p50-52.

Shear Stresses and Hydrodynamics of Combined Waves and Currents, R. D. Maclver, R. R. Simons and A. J. Grass, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p676-685.

Stochastic Dynamics of Non-Linear Systems Excited by Parametric Delta Correlated Processes, Mario Di Paola and Antonina Pirrotta, (*Probabilistic Mechanics & Struc-tural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p930-933.

Stochastic Prediction and Control of Uncertain Nonlinear Dynamical Systems, R. Ghanem and M. Grigoriu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996). p277-280

Streamflows Prediction Models for the Colombian Generatreaminows reduction students in the Conformat General tion System Considering El Niño Effect, Oscar J. Mesa, Ricardo A. Smith, Pedro J. Restrepo, José E. Salazar, Luis F. Carvajal and Juan D. Velásquez, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1477-1482.

Study of Wind Waves in Gulf Intracoastal Waterway at Aransas National Wildlife Refuge, Darla A. Hershberger and Francis C. K. Ting, WW Sept./Oct. 96, p239-244.

Towards Predicting Sediment Transport in Combined Wave-Current Flow, Zhihong Li and Alan G. Davies, WW July/Aug. 96, p157-164.

Trip Mode Recommendation Using Travel Time Predic-tion, Michael Cremer, Carsten Holtmann and Stefan Schrieber, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p330-334.

Uncertainty Analysis of Reservoir Sedimentation, Hyun Suk Shin and Jose D. Salas, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2294-2299.

A Unified Viscoplastic Model for the Inelastic Behavior of Ice, Jonah H. Lee and Michel Aubertin, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p828-836.

The Use of Artificial Neural Networks in Advanced Travel-er Information and Traffic Management Systems, Gaetano Fusco and Stefano Gori, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p341-345.

Use of SID Method for Site Characterization, P. W. Jayawickrama, K. G. K. Jayakody and K. A. Rainwater, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p897-911.

Variability in Site-Specific Seismic Ground-Motion Design Predictions, C. J. Roblee, W. J. Silva, G. R. Toro and N. Abrahamson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1113-1133.

Wave Stress and Longshore Current on Barred Profiles, T. C. Lippmann, E. B. Thornton and A. J. H. M. Reniers, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p401-412.

Waves with Two-peaked Spectrum in the Gdańsk Bay, Barbara Paplińska, (Coastal Dynamics '95, William Dally, ed. and Ryszard B. Zeidler, ed., 1996), p33-44.

Wellhead Protection Area Predictions and Implications for the Biscayne Aquifer in Miami, Florida, Hector R. Fuentes, Vassilios A. Tsihrintzis and Jose H. Olivo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p960-965.

'A Comprehensive Strategy for Mitigation', R. T. Severn, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p13-14.

Automation-Related Quality Improvements in Power Plant Design and Operation, George V. Jones, Phillip W. Gar-rett, Jones Randall E. and Carl K. Toner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p487-493.

Finite Element Analysis of Precast Concrete Box Culverts, K. M. Tarhini, G. R. Frederick and M. Mabsout, (Com puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p677-682.

Innovative Development of Prestressed Masonry, G. Shaw, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p13-24.

An Integrated Intelligent Planning Approach for Modular Construction, Nashwan Dawood, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p410-416.

Prefabricated Concrete Walls. Influence of Prestressload on Vertical Joints, J. P. Straman, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p147-153.

Prefabricated Epoxy-Coated Rebar for the U.S. Navy, Douglas F. Burke, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1199-1208.

Wind-Resistant Tie-Downs for Mobile Homes, Anatol Lon-ginow, Donald F. Meinheit and John E. Pearson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p966-973.

Preliminary design

Information Models for Integrated Building Design at the Preliminary Stage, Claude Bédard, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p246-252.

Uncertainty Modeling for Preliminary Design of Structures, Yung-Ching Shen and Larry J. Feeser, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p565-571.

Creep Deformation and Stress Relaxation in Preloaded/ Prestressed Geosynthetic-Reinforced Soil Retaining Walls, Fumio Tatsuoka, Taro Uchimura, Masaru Tateyama and Katsumi Muramoto, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p258-272.

Deterministic and Probabilistic Analyses of Preload Design at a Hydraulic Fill Site, S. Thevanayagam, E. Kavazan-jian, Jr., A. Jacob and S. Nesarajah, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1417-1431.

Author Responds to Accusations of Carelessness, Mark L. Peckham and David A. Sutter, CE July 96, p28-29.

Decision-Support System for Infrastructure Preservation, Yung-Ching Shen and Dimitri A. Grivas, CP Jan. 96, p40-49.

Dynamic Response of Hagia Sophia, A. S. Cakmak, C. L. Mullen and M. N. Natsis, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p200-210.

McCabe, etc., 1970, palerative Electrophoretic Mobility of Cryptosporidium Oocysts and Giardia Cysts, Jerry E. Ongerth and Julie Proctor Pecoraro, EE Mar. 96, p228-231. Grounded by History: Airports and Historic Resources, Charlene K. Roise, (Meeting the Challenge: Rebuilding Charlene K. Roise, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p223-233

Structural Studies of Historical Buildings IV, Frederick S. Merritt, AE Mar. 96, p42-43.

Vermont to Inventory Historic Bridges Prior to Project Initiation, CE Jan. 96, p12.

Compression of Bonded Blocks of Soft Elastic Material: Variational Solution, Katerina-D. Papoulia and James M. Kelly, EM Feb. 96, p163-170.

Modeling Overfalls Using Vertically Averaged and Mo-ment Equations, Abdul A. Khan and Peter M. Steffler, HY July 96, p397-402.

Parallel Performance of a Meshless Method for Wind Engineering Simulations, George Turkiyyah, Dorothy Reed, Cecile Viozat and Calvin Lin, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p177-187.

Vertically Averaged and Moment Equations Model for Flow over Curved Beds, Abdul A. Khan and Peter M. Steffler, HY Jan. 96, p3-9.

Pressure gages

Field Determination of Flow through a Pressure Regulating Valve, Jorge A. Garcia and Antonia M. Romero, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3610-3616.

Pressure measurement

Inverse Transient Analysis in Pipe Networks, James A. Liggett and Li-Chung Chen, HY Aug. 94, p934-955.

Soil-Limiting Flow from Subsurface Emitters. I: Pressure Measurements, U. Shani, S. Xue, R. Gordin-Katz and A. W. Warrick, IR Sept./Oct. 96, p291-295.

Pressure pipes

Challenges of an Advance Utility Contract for a Major Highway Widening Project in Norfolk, Virginia, Gary M. Hart, Peter S. Fortin and Gary L. Heisler, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p348-355.

Design of Pressure Class Ductile Iron Pipe on Supports, L. Gregg Horn, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p222-229.

Precast Concrete Low-Head Pressure Pipe Significant in Historic Irrigation Canal Rehab, John J. Meyer and Steven K. Wagner, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p265-274.

PVC Lined Steel Pipe Bridges for Gravity Sewers, Andrew E. Romer, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p441-448.

Pressure polarization

Fluid Pressure Polarization and Effective Response of Fluid-Saturated Materials with Cavities of Various Shapes, Mark Kachanov and Boris Shafiro, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p487-490.

ure responses

Borehole UE-25 ONC #1 Drilling at Yucca Mountain, Nevada, Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Development of a Pressure Suit Simulation System for Neutral Buoyancy Operations, David L. Akin and Clau-dia U. Ranniger, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p552-

Techniques to Obtain Orbital Debris Encounter Speeds in the Laboratory, Lalit C. Chhabildas, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p8-12.

Westbay/MOSDAX Instrumentation of UE-25 ONC #1 and USW NRG-4 at Yucca Mountain, Nevada, Nick Stella-vato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p163-165.

Probabilistic Fracture Mechanics of Nuclear Pressure Vessels, M. A. Khaleel and F. A. Simonen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p54-57.

Pressuremeter tests

Estimation of In-Situ Test Uncertainty, Fred H. Kulhawy and Charles H. Trautmann, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p269-286.

State Parameter from Self-Boring Pressuremeter Tests in Sand, H. S. Yu, GT Dec. 94, p2118-2135.

Pressuremeters

Analysis of Cone Pressuremeter Tests in Sands, H. S. Yu, F. Schnaid and I. F. Collins, GT Aug. 96, p623-632.

In Situ Measurement of Rockfill Properties, Anne Eckert Clift, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p37-48.

Minimizing Uncertainties in Geotechnical Investigations, Yakov M. Reznik, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p149-166.

Buckle Propagation: Steady-State Finite-Element Analysis, André C. Nogueira and John L. Tassoulas, EM Sept. 94, p1931-1944.

Enhancing Performance of Soundless Chemical Demolition Agents, Jimmie Hinze and Andrew Nelson, CO June 96,

Modified Janssen Theory for Flexible Circular Bins, Y. T. Feng and Y. L. Hua, ST Apr. 96, p454-456.

Prestressed concrete piles

Field Testing & Evaluating Carbon Cable Prestressed Pile, Srinivasa L. Iyer, Sivakumar Ramabhadran and Brian S. Vulcan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p386-393.

Prestressing
Algebraic Methods For Creep Analysis of Continuous
Composite Beams, Luigino Dezi, Graziano Leoni and
Angelo Marcello Tarantino, ST Apr. 96, p423-430.

Bearing Capacity of a Prestressed Cracked Plate, Leonid I. Slepyan and John P. Dempsey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p989-992.

Creep Deformation and Stress Relaxation in Preloaded/ Prestressed Geosynthetic-Reinforced Soil Retaining Walls, Fumio Tatsuoka, Taro Uchimura, Masaru Tateya ma and Katsumi Muramoto, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p258-272.

Economic Preliminary Design of Bridges with Prestressed I-Girders, Sami M. Fereig, BE Feb. 96, p18-25.

Field Performance of FRP Composite Prestressing Cables, Richard G. Lampo, David E. Hoy and Robert J. Odello, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p400-408.

1996), p400-408.

First Post Tensioned Deck Bridge with Composite Cables, Srinivasa L. Iyer and Gopi Sripathy, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p375-385.

Grouted Anchors for Carbon FRP Tendon, Antonio Nanni and Jay Thomas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p527-534.

Innovative Development of Prestressed Masonry, G. Shaw, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p13-24.

Looping Behavior and Strength of Prestressed Arches, Zefang Xu and Amir Mirmiran, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p366-369.

Monitoring Prestressed Structures, Jack F. Elliott, CE July 96, p61-63.

Notes on Prestressed Structures, Morris Schupack, CE Nov. 96, p30.

Prestress Loss Due to Creep in Post-Tensioned Clay Ma-sonry, Subhash C. Anand and Naresh Bhatia, (World-wide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p49-60.

Proposed Prestressed Masonry Design Provisions, Matthew J. Scolforo, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p355-364.

Stress-Laminated Timber Decks Using Glass FRP Ten-dons, H. J. Dagher, B. Abdel-Magid, S. Iyer and W. Lu, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p.1458-1468.

Testing of Prestressed Clay-Brick Walls, Gary L. Krause, Ravi Devalapura and Maher K. Tadros, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p37-48.

Economical Long-Span Spliced Bridges, Leo Spans, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p147-152.

Field Study of Pretension in Large-Diameter A490 Bolts, Charles J. Oswald, Robert J. Dexter and Steven K.

Brauer, BE Aug. 96, p121-126.

High Performance Highway Bridge Substructures, Robert W. Barnes and John E. Breen, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p176-187.

Thinking Ahead with Forward Pricing, Brian E. Kasen and Victor C. Oblas, ME Mar./Apr. 96, p12-16.

Multijurisdictional Project Evaluation in Chattanooga Urban Area, Catherine L. Ross and W. Jeffrey Davis, UP June 96, p71-81

Ranking Models Used for Condition Assessment of Civil Infrastructure Systems, L. E. Chouinard, G. R. Andersen and V. H. Torrey, III, IS Mar. 96, p23-29.

Statewide Programming: Implementing Transportation-Policy Objectives, Debbie A. Niemeier, Tracy L. Reed, G. Scott Rutherford and Pat Morin, IS Mar. 96, p30-39.

21st Century Earth Observing Systems: Emerging Role for Spaceports, Stanley A. Morain, (Engineering, Construction) tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p245-253.

Analysis of Alternative Governance Models for Space Business Parks, Charles J. Lauer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p177-185.

Application of BOT System for Infrastructure Projects in China, Liyin Shen, Rowson K. H. Lee and Zhihui Zhang, CO Dec. 96, p319-323.

ASCE Opposes California Amendment on A/E Services, CE July 96, p70.

Commercial Mining Activities for the Space Frontier, David M. Neil, Russell J. Miller, David S. McKay and Brad R. Blair, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p800-

Company and Project Evaluation Model for Privately Promoted Infrastructure Projects, Antonio Dias, Jr. and Photios G. Ioannou, CO Mar. 96, p71-82.

CSFs in Competitive Tendering and Negotiation Model for BOT Projects, Robert L. K. Tiong, CO Sept. 96, p205-

Government Actions to Enable Space Business Parks, Brent Sherwood, Charles J. Lauer and Joseph P. Hop-Shewood, Chaires J. Lauter and Obseph F. Hopkins, Jr., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p186-193.

An Irresistible Offer, Max D. Crumit, P.E., Wafic M. Arnoush, P.E. and Scott L. Montgomery, P.E., CE Aug. 96,

p40-43.

Lunar Settlement Foundation: A Private Community, Dallas G. Bienhoff, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p942-

Partnering for Quality Projects, ME July/Aug. 96, p11-12. Pathfinder: Commercial Payload Service on the Russian Mir Space Station, Brent Sherwood and Thomas J. Walmsley, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p170-176.

Positive Outlook in Construction Industry, CE May 96, p8. Private Company Bypasses Clogged Highway, CE Mar. 96,

Privatization: A Cure for Our Ailing Infrastructure? Charles R. Rendall, CE Dec. 96, p6.

Pub-Priv Partnership for New JFK Terminal, CE Oct. 96, p12.

p12...
Sea Launch: Commercial Launch Competitiveness, Derek
E. Lang, Darrel L. Choate and Marcus L. Nance, (Engi-neering, Construction, and Operations in Space, Stewart
W. Johnson, ed., 1996), p419-425.

"Fifteen Years of Commercial Space in Retrospect", M. Brian Barnett, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p162-

Changing Times for Engineers Is Focus of Triennial Con-clave between U.S., Britain, Virginia Fairweather, NE Dec. 96, p1,10.

Company and Project Evaluation Model for Privately Promoted Infrastructure Projects, Antonio Dias, Jr. and Pho-tios G. Ioannou, CO Mar. 96, p71-82. EPA in Limelight at WEFTEC Meeting, CE Dec. 96, p10.

Management Buys Back HDR From French Parent, CE Nov. 96, p27.

Nov. 76, p2.7 Managerial Fuzzy Optimal Planning for Solid-Waste Management Systems, Ni-Bin Chang and S. F. Wang, EE July 96, p649-658. Minnesota DOT Pursues Privatization Projects, CE Feb. 96,

p10.

Privatization and Water Supply/Treatment Projects, Brantley Liddle, (North American Water and Environm Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4136-4141.

Privatization: A Cure for Our Ailing Infrastructure? Charles

R. Rendall, CE Dec. 96, p6.

Recasting a Foundry (Available only in Structures Special Issue), Gary W. Loomis and Dave P. Knepper, CE May 96, p14A-16A.

Study Concludes Feds Should Exit Water Business, CE June 96, p12.

U.S. Looks to Mexico for New Infrastructure Projects, CE Oct. 96, p28.

Probabilistic methods

Achieving Reliable Designs for Pipelines Traversing Un-stable Slopes, Dimitri A. Grivas, Chakravarthy Bhagvati, B. Cameron Schultz, Verne C. McGuffey, Gregg O'Neil and Gordon Simmonds, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p426-433.

Approximated Correlations Response of Nonlinear Systems Under Normal White Noise Inputs, M. Di Paola and G. Falsone, (Probabilistic Mechanics & Structural Reliabil-ity, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., A Combined Essent Processing Structural Reliabil-

A Combined Fuzzy and Random-Set Approach to the Mul-tiobjective Optimization of Uncertain Systems, Alberto Bernardini and Fulvio Tonon, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p314-317.

Combining Snow and Earthquake Loads for Limit States Design, Bruce Ellingwood and David Rosowsky, ST

Nov. 96, p1364-1368.

Comparison of Worst-Case and Probabilistic Approaches to Ocean Outfall Mixing Zone Analysis, Hening Huang and Robert E. Fergen, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3674-3679.

Conditional Linearization in Nonlinear Random Vibration,

Conditional Linearization in Nonlinear Kandom Vibration, R. N. Iyengar and D. Roy, EM Mar. 96, p197-200. Defects in Soft Clays: A Challenge to Site Characterization for Stability Analysis, G. A. Leonards and R. J. Deschamps, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), 21347 (2018). p1347-1366.

Design Synthesis: Transcending to Stochastic Realm Part 3: Optimization, Jean M. Parks, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), pl 30-133.

Deterministic and Probabilistic Analyses of Preload Design at a Hydraulic Fill Site, S. Thevanayagam, E. Kavazan-jian, Jr., A. Jacob and S. Nesarajah, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1417-1431.

Double-Layer Grids: Review of Dynamic Analysis Methods and Special Topics, Ramesh B. Malla and Reynaud L. Serrette, ST Aug. 96, p882-892.
DSHA Versus PSHA for Critical Structures, Ellis L. Krinitzsky, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p241-242.

Earthquake Hazard Assessment Through Geographic Infor-mation Systems, Stephanie A. King, Anne S. Kirem-idjian and Kincho H. Law, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

George W. Housner, etc. and Kincy J. 1997), p123-124.

Extreme Winds as a Component of Catastrophic Risk, Gregory L. F. Chiu, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p498-501.

Grigoriu, ed., 1996, p498-501.

Fatigue Evaluation of Bridges, George E. Tsiatas and Shane M. Palmquist, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p302-305.

ed., 1996), p302-305.
A Finite Element Based Probability Contouring Method for Structural Analysis, David S. Riha, Harry R. Millwater, George Vellathottam and P. R. Perumalswami, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p922-925.
Implementation and Application of Parallel Processing Computer Methods for Probabilistic Analysis, Harry R. Millwater, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed. 1996), p266-269.

ed., 1996), p266-269.

Including Inspection Imperfection in Optimizing Structural Management Policies, Mingxiang Jiang, Ross B. Corotis and J. Hugh Ellis, (*Probabilistic Mechanics & Structural* Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p368-371.

Land-Use Policy Decisions Based on a Probabilistic As-sessment of Landslide and Debris Flow Risks after the 1991 Oakland Hills Firestorm, Scott R. Huntsman and Ram B. Kulkarni, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p535-549.

space Formulation for Reliability Estimation of Complex Structures, X. L. Guan and R. E. Melchers, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p688-691. Load Space Formulation for Reliability Estimation of Com-

Mathematical Techniques & Software for Stochastic De-sign Optimization, Jean M. Parks and Chun Li, (Probabilistic Mechanics & Structural Reliability, Dan M. Fran-gopol, ed. and Mircea D. Grigoriu, ed., 1996), p118-121.

Monitoring Stable Crack Propagation in Metals, Luis A. de Bejar, (Probabilistic Mechanics & Structural Reliability,

Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p890-893.
 A New Method for Efficient Reliability-Based Design Optimization, Y.-T. Wu and W. Wang, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed.

chamics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p274–277.
Nonlinear Finite Element Reliability Analysis of Concrete, Dan M. Frangopol, Yong-Hak Lee and Kaspar J. Willam, EM Dec. 96, p1174–1182.
Optimum Reliability-Based Design Earthquake Load, Jun Kanda and Khaled A. Ahmed, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p194–197.
Creatizing and Evaluating Uncertainty in Geotechnical En.

Organizing and Evaluating Uncertainty in Geotechnical En-gineering, Robert V. Whitman, (Uncertainty in the Geo-logic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1-28.

Practical Probabilistic Approach Using Spreadsheet, B. K. Low, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1284-

1302

Probabilistic Analysis of Foundation Settlement, Gordon A. Fenton, G. M. Paice and D. V. Griffiths, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p651-665.

Probabilistic Analysis of Tendon Loads for a TLP in Deep Water, Charles G. Acquaah and Robert B. Gilbert, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996). p162-165.

Probabilistic Assessment of Miter Gates, Nathan M. Kathir, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Probabilistic Assessment on Variability of Mechanical Properties of Rock Masses, Hang Gao, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p934-937.

Probabilistic Cervical Spine Injury Analysis Methods, Ben H. Thacker, Y.-T. (Justin) Wu, Daniel P. Nicolella and Ronald C. Anderson, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p270-273.

Probabilistic Creep Analysis of Underground Structure in Salt, A. F. Fossum and D. E. Munson, EM Mar. 96, p209-217.

Probabilistic Diagnosis of Seismic Design Load-To Harmonize Seismic Design Codes of Various Engineering Structures, Tsuyoshi Takada, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p190-193.

Probabilistic Durability Analysis of Reinforced Concrete Bridge Decks, Paul C. Hoffman and Richard E. Weyers, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p290-293.

p. 20-293.

Probabilistic Fatigue Life Analysis of High Density Electronics Packaging, N. R. Moore, E. A. Kolawa, S. Sutharshana, L. E. Newlin and M. Creager, (Probabilistic Mechanics & Structural Reliability, Dan M. Frango-

pol, ed. and Mircea D. Grigoriu, ed., 1996), p886-889. Probabilistic Fatigue Models for Bridge Evaluation, Jeffrey A. Laman, (*Probabilistic Mechanics & Structural Relia*bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996, p.286-289.
Probabilistic Finite Element Analysis of Aerospace Structures, M. R. Khalessi, H.-Z. Lin, T. Y. Torng, Y. Zhang and A. D'Angelo, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p648-651.
Probabilistic Flood Forecast-Warning System, Roman Krzysztofowicz, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p231-232.

A Probabilistic Formulation of Damage Detection, Loukas Papadopoulos and Ephrahim Garcia, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p350-353.

A Probabilistic Framework for Brittle Fracture Assess-ments of Structures —Constraint and Ductile Tearing Effects, Claudio Ruggieri and Robert H. Dodds, Jr., Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p878-881

Probabilistic Framework to Detect and to Identify Anoma lies in Structures, Nabil Fares and Roula Maloof, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p910-913.

Probabilistic Seismic Analysis Including Soil-Structure In-teraction, Dan M. Ghiocel, Paul R. Wilson and Gary G. Thomas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p620-623.

1990), po. 20-62-3.
Probabilistic Simulation of Decomposition of Liquid Propellant, N. R. Moore, N. W. Ferraro, D. H. Ebbeler, L. E. Newlin, J. J. Blandino, R. A. Beaudet, C. M. Moran and S. H. Moore, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, 1008-1008.

ed., 1996), p640-643. Probabilistic Simulation of Geologic Waste Disposal Facili-The state of the Repository Integration Program (RIP), Ian Miller and Rick Kossik, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p944-964.

Probabilistic Slope Stability in Theory and Practice, Thomas F. Wolff, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p419-433.

Probabilistic Solutions to Geotechnical Problems, Nagaratnam Sivakugan and Ali Al-Harthy, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p938-941.

Reassessment and Requalification of Infrastructure: Application to Offshore Structures, R. G. Bea, IS June 96.

Reliability Applied to Levee Seepage Analysis, Douglas A. Crum, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p946-949

Reliability Applied to Slope Stability Analysis, John T. Christian, Charles C. Ladd and Gregory B. Baecher, GT

Dec. 94, p2180-2207.

Reliability Assessment of Dike and Levee Embankments, Thomas F. Wolff, Edward C. Demsky, Jeffrey Schauer and Edward Perry, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p636-650.

Reliability Based Design of Reinforced Earth Structures, Adnan A. Basma and Ali S. Al-Harthy, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p788-791.

Reliability Evaluation Using SFEM, Achintya Haldar and Liwei Gao, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p166-169.

Reliability of a Cast Duplex Stainless Steel Elbow by Using Probabilistic Fracture Mechanics, P. Hornet and P. Le Delliou, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p756-759.

Reliability-Based Optimization of Composite Structures, Xiaoping Liu and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p122-125.

ed. and Mircea D. Origoriu, ed., 1990), p122-123.
Response Cumulants of Nonlinear Systems Subject to External and Multiplicative Excitations, C. Papadimitriou, L. S. Katafygiotis and L. D. Lutes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p744-747.

Response to Arbitrarily Time-Varying Forces Using Convex Model, Chris P. Pantelides and Shyh-Rong Tzan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1252-1258.

A Review (and Comparison) of DSHA and PSHA, Russell A. Green and William J. Hall, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p125-126.

Risk Analysis in Dam Safety Practice, Steven G. Vick and R. A. Stewart, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p586-603.

Seismic Hazard Assessment in Southeastern U.S. Paul C. Rizzo and Vaidya E. Bazan, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p127-128.

Seismic Risk Assessment for Environmentally Sensitive Facilities in Northern Maine, Elizabeth A. Champeon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p1052-1067.

Sensitivity Study of Waste Rollover Using Probabilistic Fi-nite Element Analysis, Arshad Alfoqaha, William Cofer and M. A. Khaleel, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p914-917.

Some Recent Advances in Stochastic Structural Dynamics, Y. K. Lin, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p396-421.

A Stochastic Model for Elastic-Plastic Fracture of Cracked Pipes, Sharif Rahman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p764-767.

Stochastic Modelling of River Geometry, J. Dalsgaard Sørensen and K. Schaarup-Jensen, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p898-901.

Structural Load Modeling and Combination for Performance and Safety Evaluation by Y.-K. Wen, T. Igusa, EM

Feb. 96, p183-184.

Feb. 90, p183-164.
System Risk for Multi-Storey Reinforced Concrete Building Construction, Deepthi Epaarachchi, Mark G. Stewart and David V. Rosowsky. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p230-233.

Toward Risk-Consistent Wind Hazard Design/Mitigation Criteria Using Probabilistic Methods, Lawrence A. Twis-dale, Peter J. Vickery and Andrew C. Steckley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p256-257.

M. Chung, ed., 1997, p.20-237.
Use of Geologic Information in Site Characterization, Tien H. Wu, Mohamed A. Abdel-Latif, Michael A. Nuhfer and B. Brandon Curry, (Uncertainty in the Geologic Environment: From Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p76-90.

Use of Probabilistic Methods for Analysis of Cost and Duration Uncertainties in a Decision Analysis Frame Di-ration Uncertainties in a Decision Analysis Framework, D. M. Boak and L. Painton, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p.250-251.

Use of Risk Models to Mitigate Financial Impacts from Catastrophic Natural Events, Auguste Boissonnade, Peter Ulrich and Richard D. Wales, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p199-200.

A Verification System for Probabilistic Hydrograph Fore-casts, Edwin Welles and Momcilo Markus, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p223-224.

Probabilistic models

Analysis of Crack Propagation in Concrete Structures by Markov Chain Model and R-curve Method, Yunping Xi and Zdenek P. Bažant, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p358-361.

Application of the Limit-State Method for Probabilistic Unsaturated Flow Modeling, Yanyong Xiang and Srikanta Mishra, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p108-110.

Approach, Methods and Results of an Individual Elicitation for the Volcanism Expert Judgment Panel, Bruce M. Crowe, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p36-58.

An Assessment of Future Volcanic Hazard at Yucca Mountain, William R. Hackett, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p59-60.

Biosphere Modelling for Radioactive Waste Disposal, Richard A. Klos and Frits Van Dorp, (High Level Radio-active Waste Management, Technical Program Commit-tee, 1996), p237-239.

A Bridge Live Load Model Including Overloads, Gongkang Fu and Osman Hag-Elsafi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p34-37.

Compressive Behavior of Concrete: Physical Mechanisms and Modeling, Pierre Rossi, Franz-Josef Ulm and Fatiha

Hachi, EM Nov. 96, p1038-1043.

Hachi, EM Nov. 96, p1038-1043.
Damage Mechanics Model for Evaluation of Bridge Deterioration, Roberto Lopez-Anido, Hota V. S. GangaRao and Raimondo Luciano, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p458-461.
Development of Probabilistic Earthqake Damage Estimation Models, D. Mirfendereski and C. Scawthorn, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p243-244.

Effect of Load Models and Limited Data on Load and Resistance Factors for Fatigue Design, Clifford H. Lange and Steven R. Winterstein, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p58-61.
Groundwater Monitoring System Design Using a Probabilistic Observation Method for Site Characterization, Mauricio Angulo and Wilson H. Tang, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p797-812.
Mechanistic-Probabilistic Vehicle Operating Cost Model, Curtis F. Berthelot, Gordon A. Sparks, Terry Blomme, Lyle Kajner and Mark Nickeson, TE Sept./Oct. 96, p337-341.
Monte Carlo Simulation to Evaluate Slove Stability, Description Effect of Load Models and Limited Data on Load and Re-

Monte Carlo Simulation to Evaluate Slope Stability, Douglas Scott Chandler, (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth,

ed., 1996), p474-493.

A Multi-Loop Strategy for Performance-Based Optimiza-tion with Probabilistic Constraints, Robert H. Sues, David R. Oakley and Graham S. Rhodes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, metamuras of surcurus Retuotuty, John M. Frangopot, ed. and Mircea D. Grigoriu, ed., 1996), p126-129. Nonhomogeneous Markov Model for Daily Precipitation, Balaji Rajagopalan, Upmanu Lall and David G. Tarbo-ton, HE Jan. 96, p33-40.

ne-Dimensional Modelling of Individual Breaking Waves, K. M. Wijnberg and L. C. van Rijn. (Coastal Dy-namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p341-354. One-Dimensional

Possibilities of Fracture Mechanics Models Application to Optimisation of Operational Use of Large-Size Machine Components, Lech Bukowski and Piotr Artymiak, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p780-783.

p780-783.

probabilistic Aspects of Material Failure, David F. Bizup and Nozer D. Singpurwalla, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p474-477.

Probabilistic Fracture Mechanics of Nuclear Pressure Vessels, M. A. Khaleel and F. A. Simonen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p54-57.

Probabilistic Model for the Simulation of Traffic Flowsover, Histopacy Bridges, Cesar, Crespo, Minguillon, and

Probabilistic Model for the Simulation of Traffic Flows over Highway Bridges, Cesar Crespo-Minguillon and Juan R. Casas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p26-29.
Probabilistic Modeling of Metal Plate Connections, Robert N. Emerson and Kenneth J. Fridley, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Griegrin ed. 1996), 0330-333.

and Mircea D. Grigoriu, ed., 1996), p330-333. anu murcea D. Urigoriu, ed., 1996), p.330-333. Probabilistic Modeling of Radiation Damage in Charge-Coupled Devices, D. H. Ebbeler, L. E. Newlin and N. R. Moore, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p.776-779.

Probabilistic Modeling of Roof Sheathing Uplift Capacity, D. V. Rosowsky and S. D. Schiff, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p334-337.

Probabilistic Risk Assessment for Tailings Impoundment Founded on Paleokarst, Dirk Van Zyl, Ian Miller, Victor Milligan and W. James Tilson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p563-585. Probabilistic Seismic Hazard and Sensitivity Analysis: A

Case Study from Southern California, Mehrdad Mah-dyiar, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p299-300. Reliability of Post-Tensioned Concrete Slab Bridges, Sami

W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p712-715.

Reliability of Underground Pipelines Subject to Corrosion,
M. Ahammed and R. E. Melchers, TE Nov/Dec. 94,
p989-1002.

Results of the Probabilistic Volcanic Hazard Analysis Project, Robert R. Youngs, Kevin J. Coppersmith and Roseanne C. Perman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p61-63.

port-os.
Serviceability Reliability Analysis of Reinforced Concrete Structures, Mark G. Stewart, ST July 96, p794-803.
Sizing Dumped Rock Riprap, David C. Froehlich and Craig A. Benson, HY July 96, p389-396.

A. Berson, H.J. July 76, p.307–370.
Structural Fragility Analysis Using Finite Element Computational Models, Dan M. Ghiocel, Paul R. Wilson, Gary G. Thomas and John D. Stevenson, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p18-21.

Tornado and Hail Risk Modeling: An Event Based Approach, Khalid I. Bouzina, Mohan Sharma, Auguste Boissonnade and Surya Gunturi, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p19-20.

Towards a Probabilistic Model for Marine Corrosion of Steel, Robert E. Melchers, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Origoriu, ed., 1996), p660-663.

Cea D. Origoriu, ed., 1990, poor-care Traffic Action Effect Reduction Factors, Simon F. Bailey and Rolf Bez, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996, p.22-25.
Traffic Load Effects on Highway Bridges, Sang Hyo Kim and Sang Ho Lee, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p.38-41.

Using Probabilistic Balancing Rules in the Development of Multi-Purpose Multi-Reservoir Systems Operation Modmuti-rurpose muti-reservoir Systems Operation Mod-els, Emmanuel U. Nzewi and Wen Chen, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1948-1955. UV Disinfection of Wastewater: Probabilistic Approach to Design, Frank J. Loge, Jeannie L. Darby and George Tchobanoglous, EE Dec. 96, p1078-1084.

The Yucca Mountain Probabilistic Volcanic Hazard Analyne Yucca Mountain Probabilistic Volcanic Hazard Analysis Project, Kevin J. Coppersmith, Roseanne C. Perman, Robert R. Youngs, Todd A. Crampton, Laurel A. DiSilvestro, Richard P. Smith, C. Allin Cornell, Peter A. Morris, Timothy Sullivan, Stephen T. Nelson and J. Carl Stepp, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p53-55.

Application of Neural Networks for the Performance Eval-uation of Bridges, Augusto V. Molina and Karen C. Chou. (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p298-301.

Asymptotic Approximation of Reliability Integrals for Un-certain Systems, C. Papadimitriou, J. L. Beck and L. S. Katafygiotis, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p574-577.

Bayesian Liquefaction Resistance Analysis, Wilson H. Tang and Mauricio Angulo, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.

Roth, ed., 1996), pl 195-1209.
Calibration of XRF and Laboratory Analyses of Soil, Blair J. McDonald, Janice J. Trautner, Alan G. Seelos and Richard K. Glanzman, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p287-296.

Degradation of Reinforced Concrete Structures Under Aggressive Conditions, Michael P. Enright, Dan M. Frangopol and George Hearn, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p978-987.

um. Ken P. Chong, ed., 1996), p978-987.
Error Estimates for FORM and SORM Computations of Failure Probability, Jean-Claude Mitteau, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p562-565.
Fatigue Reliability Analysis Based on Time Dependent First Passage, C.-J. Kuo and P. H. Wirsching, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p466-469.

Fire Reliability at Earthquake Occasions, Mamoru Kohno, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p198-201.

p136-201.
First Passage Time of Nonlinear Ship Rolling in Nonstationary Random Seas, C. W. S. To and Z. Chen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p250-253.

FLODRO 2.0: A User Friendly Personal Computer Package for Flood and Drought Frequency Analyses, Jose A. Raynal-Villasenor, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p304-309.

Framework for PMS Using Mechanistic Distress Submodels, David K. H. Chua, TE Jan./Feb. 96, p29-40.

Frequency Analyses for Recent Regional Floods in the United States, Nick B. Melcher and Patsy G. Martinez, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), 959-61.

Fuzzy Rule-Based Estimation of Flood Probabilities under

Climatic Fluctuations, Istvan Bogardi, Roland Reiter and Climate Fluctuations, Istvan Bogardi, Roland Reiter and Peter Nachtnebel, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p61-79. Guist Creek Dam Spillway Upgrade: A Maze (Labyrinth) of Difficulties, David C. Froehlich, Michael A. Woolum and W. Keith Crim, (North American Water and Envi-

ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1918-1923.

Hazard Assessment of Extreme Earthquakes and Floods

Bantala, ed., 1990, p.1916-1923.

Hazard Assessment of Extreme Earthquakes and Floods Using the Theory of Outstanding Values, Reza Noubary, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p66-67.

Hysteretic Response and Structural Reliability, Ricardo O. Foschi and Hong Li, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p882-885.

Implementation of Structural Redundancy in Bridge Design — A Probabilistic Approach, Robert W. Kritzler and Jamshid Mohammadi, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p682-687.

Implementation of Variance Reduction Techniques Using Monte Carlo Stratified Sampling in the COMPROMIS Code Version 2, Emmanuel Ardillon, Patrice Pitner and Bernard Lapeyre, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p692-695.

Incorporation of Time-Intensity and Spatial Variability Into

Incorporation of Time-Intensity and Spatial Variability Into Probable Maximum Precipitation (PMP) Estimates, Ana Paula Barros, (Natural Disaster Reduction, George Housner, ed. and Riley M. Chung, ed., 1997), p64-65.

Integrated Planning Decision Support System (IPDS), Mario Mejía-Navarro and Luis A. García, (Natural Disstater Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p189-190. Lightning Safety: A Risk Management Approach, Richard Kithli, (Natural Disaster Reduction, George W. Housner,

ed and Riley M. Chung, ed., 1997), p17-18.

A Melnikov Theoretic Bound on Probability of Escape from a Potential Well, Michael R. Frey, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p510-513.

Method for Probabilistic Evaluation of Seismic Structural Damage, Ajay Singhal and Anne S. Kiremidjian, ST Dec. 96, p1459-1467.

Mode Search Algorithm for System Reliability under bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p978-981. Earthquake Load, Hideki Idota and Tetsuro Ono, (Proba

On the Development of a Selective Algorithm in Advanced On the Development of a Selective Algorithm in Advanced Monte Carlo Simulation, Helmut J. Pradlwarter, Napat Harnpornchai and Gerhart I. Schwëller, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p14-17. On Translation Processes and Upcrossing Probabilities, Michael Macke and Christian Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p608-611.

518

Outage Probability in Mobile Radio Communications in a Three-Dimensional Space, Silvano Pupolin, Luciano Tomba and Michele Zorzi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Performance-Based Seismic Design of Building Structures, Kevin R. Collins, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p792-795.

Probabilistic Analysis of Ocean Outfall Mixing Zones, Hening Huang, Robert E. Fergen, John R. Proni and John 1 Tsai, EE May 96, p359-367.

Probabilistic Analysis of Randomly Distributed Fiber-Reinforced Soil, Gopal Ranjan, R. M. Vasan and H. D. Charan, GT June 96, p419-426.

Probabilistic Approach for Cancer Risk Assessment, Paul S. Watkins, Timothy L. Jacobs, Rory B. Conolly and Warren T. Piver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2366-2371.

Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996, 0-7844-0184-5, 1025pp.

Probabilistic Stability Robustness of Structural Systems, R. V. Field, Jr., P. G. Voulgaris and L. A. Bergman, EM Oct. 96, p1012-1021.

Probability Based Design Requirements for Ship Structures, Alaa E. Mansour, Paul H. Wirsching, Bilal M. Ayyub and Gregory J. White, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p98-101.

Probability Based Design Requirements for Unstiffened Panels in Ship Structures, Bilal M. Ayyub, Gregory J. White, Alaa E. Mansour and Paul H. Wirsching, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p102-105.

Probability Based Estimation of Expected Annual Benefits, Eric D. Loucks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p298-303.

Probability-Based Design Requirements for Longitudinally Stiffened Panels in Ship Structures, G. J. White, B. M. Ayyub, A. E. Mansour and P. H. Wirsching, (Probabilis-tic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p110-113.

Probability-Based Design Requirements with Respect to Fatigue in Ship Structures, P. H. Wirsching, A. E. Man-sour, B. M. Ayyub and G. J. White, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p114-117

and whitea D. Cingotta, ed., 1990, p11-117.
The Reliability Analysis of a Major Dam Project, J. Barneich, D. Majors, Y. Moriwaki, R. Kulkarni and R. Davidson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1367-1382

Reliability Methods for Stability of Existing Slopes, John T. Christian, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p409-418.

Reliability of Jackets: Beyond-Static-Capacity, D. G. Schmucker and C. A. Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p578-581.

Reliability Tester for Water-Distribution Networks, D. Khomsi, G. A. Walters, A. R. D. Thorley and D. Ouazar, CP Jan. 96, p10-19.

Reliability/Cost of Adaptive Intraply Hybrid Fiber Composite Structures, Christos C. Chamis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p644-647.

Risk Communication: Guidelines and Commentary Clifford S. Russell and Duane D. Baumann, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p396-400.

SFE-Based Structural Reliability Analysis, Jun Zhang and Bruce Ellingwood, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p170-173.

Structural Safety for Fire Conditions, Fan Li and R. W. Fitzgerald, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p352-356.

Monammadi, ed., 1996), p322-330.
Subjective Probability Assessment in Water Resources
Planning, Charles Yoe, (Risk-Based Decision Making in
Water Resources VII, Yacov Y. Haimes, ed., David A.
Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p294-314.
Time-Dependent Reliability Analysis of Redundant Brittle

Systems, Animesh Dey and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p700-703

Uncertainty and Risk Analyses for FEMA Alluvial Fan Method, Bing Zhao and Larry Mays, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p180-190.

Uncertainty of Hydraulic Parameters, Peggy A. Johnson, HY Feb. 96, p112-114.

Using NOAA's New Climate Outlooks in Operational Hydrology, Thomas E. Croley, II, HE July 96, p93-102.

Vulnerability Curves for Buildings in Tropical-Cyclone Regions, John Holmes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p78-81.

Wave Induced Reaction Forces and Tension in TLP Tendons, John M. Niedzwecki, Dadi S. Soemantri and Oriol R. Rijken, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p586-587

Probability density functions

Application of the Concurrent Finite Element Method to Solution of the Fokker-Planck Equation, W. Yi, B. F. Spencer, Jr. and L. A. Bergman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p10-13.

Milicea D. Grigoriu, ed., 1996), p.10-13.
Approximate Solutions to Nonlinear Random Vibration
Problems and the Fokker-Planck-Kolmogorov Equation,
David C. Polidori and James L. Beck, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed.
and Mircea D. Grigoriu, ed., 1996), p94-97.

Assessment of Remaining Fatigue Life of Existing Railway Riveted Bridges, Luo Weiwen and Jamshid Mohammadi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p42-45.

Conditional Linearization in Nonlinear Random Vibration, R. N. Iyengar and D. Roy, EM Mar. 96, p197-200.

An Economy and Risk Analysis of Installed Capacity Expansion at the Three Gorges Power Plant, Liping Wang, Nianhua Xue and Changming Ji, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3874-3879.

Equivalence between Kriging and CPDF Methods for Con-ditional Simulation, Masanobu Shinozuka and Ruichong Zhang, EM June 96, p530-538

Method of Non-Linear Stochastic Dynamics - A Compara-tive Discussion, G. I. Schuëller and H. J. Pradlwarter, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Nonlinear Rocking Motions. II: Overturning under Random Excitations, H. Lin and S. C. S. Yim, EM Aug. 96, p728-735.

Path Integration Applied to Structural Systems with Uncertain Properties, Søren R. K. Nielsen and H. Ugur Köylüöğlu, (Probabilisti Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p6-9

Probabilistic Analysis of Complex Nonlinear Motions Under Combined Periodic and Random Excitations, Huan Lin and Solomon C. S. Yim, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p2-5.

Probability Analysis Method Using Fast Fourier Transform, Yasuhiro Mori, Jun Sakamoto and Takayoshi Sekioka, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p696-699

Probability Density Function of Linear Systems Subjected to a Random Stream of Poisson Pulses, G. Muscolino and G. Ricciardi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p388-391.

Wavelets in Random Processes Representation, Marina Vannucci, Antonio Moro and Pol D. Spanos, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p672-675.

Probability distribution

Bayesian Assessment and Selection of Models for Structural Reliability Analysis, Philippe Geyskens and Armen Der Kiureghian, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p566-569.

Crossing Rate Analysis of NonGaussian Response of Linear Systems, M. D. Pandey and S. T. Ariaratnam, EM

June 96, p507-511.

Estimation of Flood Forecasting Errors and Flow-Duration Joint Probabilities of Exceedance, Debdas Mukherjee and Nada Monsour, HY Mar. 96, p130-140.

First Interactive Drought Atlas Released, CE Oct. 96,

Flood Quantiles for Small Watersheds Using Peak Eleva-tion to Volume Method, Michael C. Morgan and Eric D. Loucks, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p146-151.

1990, p140-191.
Higher Moments of Weighted Integrals of Non-Gaussian Fields, Gunnar Mohr, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p254-257.

Investigation of Structural Properties of Used Formwork Stringers, Saeed Karshenas and Eyad Mizian, MT Feb. 96, p51-56.

Loading Spectra for Railway Bridges under Current Operating Conditions, Daniel H. Tobias, Douglas A. Foutch and John Choros, BE Nov. 96, p127-134.

On Communicating Hydrologic Risk, Rafael G. Quimpo, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene

Z. Stakhiv, ed., 1996), p265-271.

Probabilistic Assessment on Variability of Mechanical Properties of Rock Masses, Hang Gao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p934-937

Probabilistic Solutions to Geotechnical Problems, Nagaratnam Sivakugan and Ali Al-Harthy, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p938-941.

Probabilistic Stability Analysis of Shallow Arches, R. P. Nordgren and K. S. Hussain, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p124-127.

Probability Distribution of Annual Maximum, Mean, and Minimum Streamflows in the United States, Richard M. Vogel and Ian Wilson, HE Apr. 96, p69-76. Probability Distributions for Peak Stage on Rivers Affected by Ice Jams, Andrew M. Tuthill, James L. Wuebben, Steven F. Daly and Kathleen D. White, CR Mar. 96, 226-52.

Probability Distributions Used in 100-Year Return Period of Air-Freezing Index, Peter M. Steurer, CR Mar. 96,

Probability-Weighted Moments without Plotting Position Formula, Tefaruk Haktanir, HE Apr. 96, p89-91.

Railway Bridge Loads Under Current Operating Condi-tions, Daniel H. Tobias, Douglas A. Foutch and John Choros, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p215-222.

Regionalization of Annual Precipitation Maxima in Montana, Charles Parrett, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p57-58.

Reliability Analysis of Pipeline on Elastic Seafloor, H. Y. Yeh and Hengyun Li, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p752-755.

Reliability Based Design of Reinforced Earth Structures, Adnan A. Basma and Ali S. Al-Harthy, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p788-791.

Probability distribution functions

Simulation of Multi-Dimensional, Multi-Variate, Non-Gaussian, Homogeneous Stochastic Fields with Applications to Soil Liquefaction, Radu Popescu, George Deo-datis and Jean H. Prevost, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p808-811.

Probability theory

Probability theory
Calibration and Simulation of Non-Gaussian Translation
Processes, M. Grigoriu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p804-807.
A CDM-Based Approach to Stochastic Damage Growth, Baidurya Bhattacharya and Bruce Ellingwood, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol ed. and Mircea D. Grigoriu, ed. 1996), p727-275.

gopol, ed. and Mircea D. Grigoriu, ed., 1996), p772-775.

Dempster-Shafer Approach to Soil Properties, David Rees Gillette, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1254-1268

1208.
Fuzziness of the Modified Mercalli Intensity as a Measure of Damage, Nozar G. Kishi and Timothy H-J. Yao, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p247-248.
Incorporation of Fuzzy Damage States in Seismic Fragility Analysis, Jun-Rong Huo and Howard H. M. Hwang, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangoed ed. and Mirces D. Grigoriu, ed. 1996). M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p318-321.

Moment Equations for Linear Systems Subjected to Poly-nomials of Filtered Poisson Processes, M. Grigoriu and F. Waisman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p262-265.

Non-Gaussian Elliptically Contoured ARMA Models, Mir-cea Grigoriu, EM Apr. 96, p334-341.

Probabilistic Evaluation of Postclosure Criticality Events
Internal to the Waste Package, Peter Gottlieb and John R.
Massari, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p345-347

Reliability-Based Maintenance Strategy Using NDI, Achin-tya Haldar and Zhengwei Zhao, (*Probabilistic Mechan-*ics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p364-367

A Review (and Comparison) of DSHA and PSHA, Russell A. Green and William J. Hall, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p125-126.

Probes, instruments

Laboratory Evaluation of a Conductivity Probe for Scour Monitoring, David S. Mueller and Mark N. Landers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4154-4163.

ORP Measurement in Anaerobic Systems Using Flow-Through Cell, Munish Gupta, Ashutosh Gupta, Makram T. Suidan, Gregory D. Sayles and Joseph R. V. Flora, EE Nov./Dec. 94, p1639-1645.

Soil Thermal Properties for the Design of Underground Structures in Cold Regions, J. E. Steinmanis, D. Parmar, H. S. Radhakrishna and A. S. Judge, (Cold Regions Engi-neering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p471-482.

son, ed., 1990), p471-462.
The Use of Direct Push Technologies in Expedited Site Characterization, Greg A. Stenback, Bruce H. Kjartanson, Al Bevolo and David Wonder, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p180-194.

Problem solving

Cold-Related Electric Power System Considerations, John Aspnes and James Cote, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996).

Creativity Techniques for Teams, Mel Hensey, ME July/ Aug. 96, p5-6.

A Distributed Engineering Problem Generator, Martin C. Boyd and Nelson C. Baker, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p466-472.

Editorial, Mark R. Wiesner and Thomas L. Theis, EE Feb. 96, p89-90.

Editorial, Chris Hendrickson, TE Mar J Apr. 96, p95.

Editors' Letters, Vernon B. Watwood, P.E., SC Feb. 96. p1-2.

Enhancing Creativity when Solving Contradictory Techni-cal Problems, Sergey Drabkin, El Apr. 96, p78-82. Environmental Goal Needs Definition, David M. Herring,

P.E., CE Dec. 96, p27-28

Great Tips from Client Feedback Programs, Sylvia Wheeler, ME Nov./Dec. 96, p10.
Sustainability: Another New Paradigm, Larry Quinn, P.E., CE Oct. 96, p6.

Women Engineers Get Leadership Training, CE Dec. 96, p8.

Procedures

Practical Guide to Grouting of Underground Structures, Co-published in the UK by Thomas Telford Publications, Raymond W. Henn, 1996, 0-7844-0140-3, 198pp.

Process control

The Balanced Indigenous Population (BIP) and Statistical Process Control (SPC) in Marine Pollution Ecology, George Robertson, Mike Mengel, Don Maurer and Irwin Haydock, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1431-1436.

Managing Interdisciplinary Project Teams through the Web, Robin E. Goodman and Paul S. Chinowsky, (Com-puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p452-458.

Process variables

Alluvial Fan: Proposed New Process-Oriented Definition for Arid Southwest, Richard H. French, Jonathan E. Fuller and Steve Waters, WR Sept./Oct. 93, p588-598

Process Models in Enterprise Engineering - Tools for En-hancing Process Description, Lars Chr. Christensen, Tore R. Christiansen and Yan Jin, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p634-641.

Project Management Functions in Facility Owners' Envi-ronment: Organizational Diagnostics, Hossam El-Bibany, Douglas Ault, Ben Branch and John Bechtel, AE Dec. 96, p138-144.

Achieving Industrial Facility Quality: Integration is Key, Kelly Jean Fergusson and Paul M. Teicholz, ME Jan./ Feb. 96, p49-56.

Building Process Models for Design Management, David G. Platt, CP July 96, p194-203.

Design Considerations for the Use of Plastic Lumber in Structural Applications, Richard G. Lampo, Thomas J. Nosker and Richard W. Renfree, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1492-1500.

Development of a Solidification Method for Pulverized Concrete Waste by Hydrothermal Hot-Pressing and Fiber Reinforcement, Kazuhiko Sato, Toshiyuki Hashida, Hideaki Takahashi and Nakamichi Yamasaki, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p684-693.

to Extend the Service Life of Chloride Contaminated, Carbonated, or Alkali Silica Reactive Concrete Struc-tures, David W. Whitmore and Keith Stewart, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1504-1511.

High Performance Fiber-Cement Composites by Extrusion Processing, Yixin Shao and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

520

for the New Millennium, Ken P. Chong, ed., 1990), p251-260.
 HPFRCC - Extruded Pipes, Henrik Stang and Carsten Pedersen, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p261-270.
 Optical Waveguide Solar Energy System for Lunar Materials Processing, T. Nakamura, J. A. Case and C. L. Senior, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p783-790.
 Recent Advances in the Development of High Performance Cement-Based Materials, J. Francis Young, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1101-1110.

p1101-1110.

pl101-1110.
Rheology of Fresh Concrete, Leslie Struble and Richard Szecsy, (Materials for the New Millennium, Ken P. Chong, ed., 1996), pl121-1128.

A Simplified Process Audit to Design an Affordable Pollution Prevention and Waste Management Plan - Part 1, Ronald Zaloum and Pierre Sylvestre, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p87-92.

Technology for Mining of Building Materials at First Stage.

Chenchayya Bantana, ed., 1990b, p87-92.
Technology for Mining of Building Materials at First Stages of Moon Development, Oleg V. Nagovicin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p830-839.

Production planning
Digital Image Analysis of Two-Dimensional Fluidized
Beds at Lunar Gravity, D. J. Brueneman, L. L. Sorge, M.
A. Gibson, C. W. Knudsen and H. Kanamori, (Engineer-

ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p769-775.

Mars Sample Return Using In-Situ Propellant Production, David I. Kaplan, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p717-723

A Preliminary Design of a Pilot Plant for the Production of Lunar Oxygen, W. E. F. L. Moulford, A. R. Martin, P. W. Cains, P. D. Martin and G. Tan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p762-768.

ed., 1990), p. 702-708.

Pulling Propellants Out of Thin Air: Demonstration of an End-to-End Mars In-Situ Propellant Production Unit, John F. Connolly and Robert M. Zubrin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p. 706-716.

Standpipe Solids Transfer Behavior in a Lunar Gravity Flu-idized Bed, Les L. Sorge, David J. Brueneman, J. Dale Ortego, Jr., Michael A. Gibson, Christian W. Knudsen, Hiroshi Kanamori and B. Kent Joosten, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p776-782.

Study on Lunar Cement Production Using Hokkaido Anorthite and Hokkaido Space Development Activities, T. Horiguchi, N. Saeki, T. Yoneda, T. Hoshi and T. D. Lin,

Congineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p621-629. Using Ultra High Solar Flux in the Lunar Environment: Production of Cement and Other Applications, Joseph J. O'Gallagher, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p571-577

Productivity

Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996, 0-7844-0146-2, 730pp.

Approaches to Organization Development, Mel Hensey, ME Sept./Oct. 96, p11.

mts Sept.Act. 190, p.11.
Automated Generation of Productivity Functions, Alan D.
Russell and Simaan AbouRizk, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p.261-267.
Be Flexible in the Workplace, G. Michael Barton, ME Jan. 18-10, 96, p.6-7.

Benchmarking: Performance-Improvement Towards Com-petitive Advantage, N. M. Lema and A. D. F. Price, ME Jan/Feb. 95, p28-37. Bidding Competition Can Work, Stephen Auffinger, CE Jan. 96, p29.

Business Plans Live and Grow, Jack E. Reinhard, P.E., ME Nov./Dec. 96, p3-4.

CERF Unveils Interactive Extension Program, CE Jan. 96, p10,12

Construction Forum, SC Aug. 96, p69-70. Estimating Loss of Productivity Claims, Gasan G. Kallo,

ME Nov./Dec. 96, p13-15.

Estimating Trenching Productivity Using Neural Networks, Simaan AbouRizk, Brenda McCabe and Wissam Saadi, Gompuing in Civil Engineering, 10rge Vanegas, ed. and Paul Chinowsky, ed., 1996), p220-226.

Equation to Performance of Construction Equipment Operators in Egypt, Ashraf M. Elazouni and Ismail M. Basha, CO June 96, p109-114.

The Great Technology Transfer, Tim Cassidy, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl 265-1269. High-Octane Safety on a Low-Octane Budget, Paul J. Rich, ME Sept/Oct, 96, p9-10.

Partnering for Performance, Duke Nielsen, ME May/June 96, p17-19.

Searching for a Successful Strategy? Mel Hensey, ME

Sept./Oct. 96, p6-7.
Small Businesses Fuel Economic Growth, Innovation, and Job Creation, Garold D. Oberlender, SC Aug. 96, p76-

Professional activities

Communication Breakdowns, Philip C. Terry, SC Nov. 96, p108-112.

Marketing and Selling A/E and Other Engineering Services, Scott C. Gladden and Arnold Olitt, 1996, 0-7844-0100-4. 120pp.

Professional Liability — An Approach that Works, John G. Tawresey, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1288-1295.

Research Relevance: Communication is Key, John B. Scalzi, CE Aug. 96, p6.

Professional advancement ASCE Names Winners of Its Awards and Prizes for 1996, NE Dec. 96, p3-8. Counteroffers Don't Work in Consulting Firm, Survey

Says, ME Jan./Feb. 96, p13. Editorial, Earl F. Burkholder, SU Nov. 96, p143-144.

Eurorian, Earl F. Burkholder, 5U Nov. 96, p143-144.
Emerging Role of Management in Civil Engineering, Louis
Berger, ME July/Aug. 96, p37-39.
Engineering Sales: Process of Understanding, Larry G.

Crowley, ME Mar/Apr. 96, p40-43.

Honorary Members of ASCE Increase Ranks by 10 at Washington, D.C., Ceremony, NE Dec. 96, p2-3.

It Has a Ring to It, Stephen Auffinger, CE Nov. 96, p30,32. Part-Time Graduate Education: Obstacles, Conflicts, and Suggestions, Allen P. Davis and Richard H. McCuen, El Apr. 95, p108-113.

Women in Civil Engineering and Science: It's time for Recognition and Promotion, V. L. Khazanet, El Apr. 96, p65-68.

Professional development
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Business Development Basics, Mel Hensey, P.E., ME Nov./Dec. 96, p8-9.

CII offers "Framework" for Supervisory Education, ME Sept./Oct. 96, p6.

Does ASCE Have a Responsibility to Mandate Continuing Education? Tony Huff, P.E., CE Nov. 96, p72-73.

Engineering Education: Paragon or Paradox? Robert D. Kersten, El Oct. 96, p147-150. Everyday Success Pointers, Gary Bates, ME Sept./Oct. 96,

pil.

Guiding Principles, Narbey Khachaturian and John P. Gnaedinger, ME Nov/Dec. 96, p30-33.

Leadership Development, Jim Krug, ME Nov/Dec. 96,

p15-16. On the Shoulders of Giants-Part Three, Francis E. Griggs,

Jr., El Apr. 96, p55-64.

Professional Associations Offer Design Resources for Civil Engineers, Ben Northcutt, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3343-3348. Promote People Skills, Jim Krug, ME Sept./Oct. 96, p1. Quality People at Heart of the Corps, Donald M. Liddell, CE Apr. 96, p36. Rain Making: The Professional's Guide to Attracting New

Clients by Ford Harding, Judith Nitsch, P.E., ME Nov./

Dec. 96, p6-7.
Retaining Generation X Employees, Joan Lloyd, ME Nov./ Dec. 96, p5-6.

Women in Civil Engineering and Science: It's time for Recognition and Promotion, V. L. Khazanet, El Apr. 96, p65-68

Younger-Member Group Eyes Five ASCE Awards for 1997, CE Dec. 96, p68,70.

Professional engineering Cramming, CE Oct. 96, p11.

Editorial, Chris Hendrickson, TE Mar/Apr. 96, p95. Law Does Not Regulate All Use of the Word 'Engineer', CE July 96, p27.

Licensed to Practice, CE July 96, p27.

Services Rendered, Payment Due, CE Sept. 96, p29.

Professional personnel Counteroffers Don't Work in Consulting Firm, Survey Says, ME Jan./Feb. 96, p13

Management Bonuses Rise, CE Sept. 96, p11. Measuring Mutual Confidence in UK Construction Projects, A. K. Munns, ME Jan./Feb. 96, p26-33.

Professional practice

Are There Benefits to Continuing Professional Develop-ment? Russell J. Kehl, CE Oct. 96, p52-53.

Benchmarking Preproject-Planning Effort, M. R. Hamilton and G. E. Gibson, Jr., ME Mar/Apr, 96, p25-33.

Design—Cornerstone of Your Career: Advice for Young Engineers, Rodney Attwood, El July 94, p241-245.

Editor's Letter, Tom Williamson, SC Aug. 96, p59.

Editor's Letter, Joseph Kaplan, SC Nov. 96, p93-94. Editorial, Dennis Mertz, BE Feb. 96, pl.
Editorial, Bernard P. Monahan, SC May 96, p59.
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Editorial, Thomas L. Theis, EE June 96, p451. Editorial, Manohar P. Kamat, AS July 96, p63. Editorial, Kumares C. Sinha, TE July/Aug. 96, p263.

Editors' Letters, Joe Kaplan, P.E., SC Feb. 96, pl. Editors' Letters, Vernon B. Watwood, P.E., SC Feb. 96.

p1-2.
Emerging Role of Management in Civil Engineering, Louis Berger, ME July/Aug. 96, p37-39.
Engineering Ethics, Stanley H. Goldstein, P.E and Robert A. Rubin, CE Oct. 96, p40-44.
Ethics, Uncertainty and Postaudits, Charles G. Gunnerson, CE Dec. 96, p27.

Feedback Service for Reducing Losses Due to Building Problems, D. E. Allen, CF May 96, p67-72.

From, El Oct. 96, p139-146.
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The Importance of Being Historical: Civil Engineers and Their History, Jane Morley, El Oct. 94, p419-428. Is Moonlighting or Donating Professional Engineering Services Ethical? Thomas W. Lynch, El Jan. 96, p37-38. Join the EMPN, Gary D. Bates, ME July/Aug. 96, p4-5. Letters to the Editor, SC Aug. 96, p60-61. Malpractice Suit Against Engineer, CE May 96, p24. Moonlighting: Ethical Issues for Professional Engineers, Andrew M. Hui, El Jan. 96, p39-40. More Ethical Practice. Not Training. Dan Feger, P.E. CE.

More Ethical Practice, Not Training, Dan Feger, P.E., CE Nov. 96, p38,40.

Nov. 96, p38,40.
Need to Understand Foreign Education in Evaluating for P.E. Licensure, Joe O. Akinmusuru and Bosede O. Akinmusuru, El Jan. 96, p26-30.
Practitioners' Forum, Gary P. Ten Eyck, AE Mar. 96, p1-2.
Providing Engineering Services to Nonemployers: An Ethical Balance, David P. Brosnan, El Jan. 96, p35-36.
Readers Respond to Thomey Letter, Norm Hoffman, P.E., James S. Pol, Jim Coppock, P.E., J. Frank Brennan, P.E., John A. Mundell, P.E. and F. Weston Starratt, P.E., CE Aug. 96, p28-29.
Research Relevance: Communication is Kev. John B. Scal-Research Relevance: Communication is Key, John B. Scal-

zi, CE Aug. 96, p6.
A Review and Assessment of the *Journal of Computing in Civil Engineering*, Sivand Lakmazaheri and William Rasdorf, CP Apr. 96, p95-96.

Seismic Performance of Cladding: Responsibility Revisit-ed, Julie Mark Cohen, CF Nov. 95, p254-270.

Settlement of Shallow Foundations on Uncontrolled Mine Spoil Fill, J. Richard Checks, CF Nov. 96, p143-151. Seven ASCE Members Elected to NAE, CE Aug. 96, p67. Some Thoughts from the Editor, Robert B. Harris, CO Dec.

96, p297. Talk Needed for Research Application, Neil S. Grigg, CE

Oct. 96, p38.

Trends in Engineering: Education and Practice, Thomas T.

Theis, CE Nov. 96, p6.

Professional registration Editorial, Mark R. Wiesner and Thomas L. Theis, EE Feb. 96, p89-90.

Editorial, Anthony G. Collins and Rafael Bras, EE May 96,

Forum, El Oct. 96, p139-146.

Law Does Not Regulate All Use of the Word 'Engineer', CE July 96, p27.

Licensed to Practice, CE July 96, p27.

Need to Understand Foreign Education in Evaluating for P.E. Licensure, Joe O. Akinmusuru and Bosede O. Akinmusuru, El Jan. 96, p26-30.

Professional Registration of Engineering Technologists, Matthew A. Dettman, El Apr. 96, p51-52. Quality People at Heart of the Corps, Donald M. Liddell, CE Apr. 96, p36.

With Respect to Coasts, Darryl Hatheway, CE Dec. 96, p29-30.

Professional role
CERCLA Liability and the Environmental Professional—
An Overview of Judicial Developments, John J. Allen,
(Civil Engineers Influencing Public Policy, Maureen K.
Cotton, ed., 1996), p35-41.
The Changing Role of the Civil Engineer in the Past 25

The Changing Role of the Civil Engineer in the Past 25 Years, F. Thomas Young, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p55-62.

Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996, 0-7844-0204-3, 144pp.
Civil Engineers Need to Stay Together, C. Gary Kellogg, CE Feb. 96, pb.

Construction Engineers Driving into the 21st Century, Vir K. Handa, CO Mar. 96, p1-6. Education Can End Bidding Evils, James R. Woglom, CE

Jan. 96, p30-31.

The Engineering Profession as a Major Role Player in the New South African Political Order, Kevin Wall, El Apr. 96, p73-77. Engineers Get Ready for 1996 Engineers Week, NE Jan. 96,

p1. Ethical Responsibilities of Engineering Profession, Mark J. Holliday, El July 94, p270-272.

R. Proctor, Jr., SC Feb. 96, p12-14. Hard Cases Make Bad Law, Carol J. Patterson, ME May/

June 96, p25-28. The Importance of Civil Engineering Leadership in the Government Sector, Marvin H. Hilton, El Apr. 96, p53. Infrastructure Planning and Sustainable Development,

infrastructure Planning and Sustainable Development, David W. Wright, UP Dec. 96, p111-117. Market, Not Engineers, Makes Decisions, Gerald L. De-Mers, CE Feb. 96, p32.

Partnering: Building a Stronger Design Team, Richard G. Weingardt, AE June 96, p49-54. What's 'NEW' for 1996?, CE Jan. 96, p69.

Professional services
Bid Competition a Sign of the Times, James W. Johnson,
CE Jan. 96, p28. Comparing Contracts: Which Type is Best?, ME May/June

96, p10-11.

90, pt0-11.
Competition Should Be Based on Quality, Thomas W.
Blackburn, CE June 96, p28.
Consulting Engineering: A Guide for the Engagement of
Engineering Services, rev. ed. (M&R No. 45), Task
Committee on Revision of Manual No. 45 of the Committee on Standards of Practice of the American Society of Civil Engineers, (David F. Garber, chmn.), 1996, 0-7844-0152-7, 50pp.

Corps Moves Closer to Bid Shopping, Allen W. Hatheway, CE June 96, p35.

Education Can End Bidding Evils, James R. Woglom, CE Jan. 96, p30-31.

Engineering Sales: Process of Understanding, Larry G. Crowley, ME Mar./Apr. 96, p40-43.

Frequent "Failure Modes" an A/E/C Might Expect in Their Business, William M. Hayden, Jr., ME Sept/Oct. 96,

Grateful for Bid Process, N. Stanley Good, CE Jan. 96, p28-29

Guest Editorial, Robert W. Foster, SU Aug. 96, p95-96. Industry Leaders Meet the Press, CE Apr. 96, p8

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Marketing Engineering Services: Partnering Pales by Comparison, Oscar C. Boldt, ME Jan./Feb. 96, p3-5.

Maximizing Resources to Produce High Quality Results, Christopher J. Perry, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p958-964.

Procurement Issues, Delon Hampton, ME Nov./Dec. 94, p45-49.

Professional societies

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Editorial, Anthony G. Collins and Rafael Bras, EE May 96,

Engineers On the Line, J. A. Morgan, CE Dec. 96, p27.

Industry Standards for Erosion Control Products - Future Tools for Civil Engineers, David T. Williams, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3349-3354.

Japanese Rocket Society's Space Tourism Study Program, Patrick Collins, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p399-405

Partnering Manual for Design and Construction by William C. Ronco and Jean S. Ronco, Frederick S. Merritt, AE Sept. 96, p122.

Professional Associations Offer Design Resources for Civil Engineers, Ben Northcutt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3343-3348.

Who Do ASCE Members Work For? Jimmie Hinze, SC Aug. 96, p74-75.

Profile measurement

Technique for Precise Measurement of Large-Scale Silos and Tanks, Xiaoli Ding, Richard Coleman and J. Michael Rotter, SU Feb. 96, p14-25.

Profiles

Analysis and Simulation of Road Profiles, V. Rouillard, M. A. Sek and T. Perry, TE May/June 96, p241-245. Model of Beach Profile Change Under Random Waves,

Magnus Larson, WW July/Aug. 96, p172-181.

Surface Profiling System for Measurement of Engineering Structures, Xiaoli Ding, Richard Coleman and J. Michael Rotter, SU Feb. 96, p3-13.

Velocity and Concentration Profiles in Sheet-Flow Layer of Movable Bed, B. M. Sumer, A. Kozakiewicz, J. Fredsøe and R. Deigaard, HY Oct. 96, p549-558.

Profits

Government Actions to Enable Space Business Parks, Brent Sherwood, Charles J. Lauer and Joseph P. Hopkins, Jr., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p186-193.

Lower Overhead Responsible for Rise in Profits, ME Mar./ Apr. 96, p8.

Small Business in the Construction Industry, Howard H. Bashford, SC Aug. 96, p71-73.

Survey of Change Order Markups, Herbert Saunders, SC Feb. 96, p15-19.

Why Satisfied Customers Defect, Thomas O. Jones, ME Nov./Dec. 96, p11.

Working Longer for Profitability, CE Dec. 96, p8.

Program

Advanced Hydrologic Forecasting Products for Flood and Drought Mitigation, John J. Ingram, Edwin Welles and Dean T. Braatz, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p227-228.

Alternative Scenarios for Military Deployment of Unmanned Ground Vehicles, John G. Blitch and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p36-42.

Buffalo Section Works with Cub Scouts to "Build a Better

Future", CE Nov. 96, p74.

A California Handbook for Developing an Industrial/
Commercial Storm Water Inspection Program, Jill C. Bicknell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2625-2630.

CERF Unveils Interactive Extension Program, CE Jan. 96,

p10,12.

Continuing Education Program Involving A Partnership Among Building Designers, Constructors, and Code Enforcers, Michael A. Cassaro, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p92-96.

Developing the Infrastructure for Lead Assessment and Abatement, Joseph S. Carra, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p70-76.

The Educational Ozone Researcher: A University Satellite, Linden H. McClure and Ellen L. Riddle, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1327-1333.

Effects of an Extended Set-Control Admixture on the Properties of Fresh and Hardened Concrete, Steven A. Raga (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1617-1626.

An Empirical Assessment of Continuing-Education Needs, S. Dowlatshahi, ME Sept./Oct. 96, p37-44.

Engineering Education for Appropriate Technology, Richard L. Rosen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2743-2747.

EPA Proposes Rural Wastewater Grants, CE Dec. 96, p8. Flight Crew Equipment Development and Integration with the International Partners, Rod Jones, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p467-472.
Flood Control Studies for Arizona Communities, Philip O.

Lowe and Sam Arrowood, (North American Water and Environment Congress & Destructive Water, Chen-

Environment Congress a Destruction Chaya Bathala, ed., 1996), p1870-1874.
Fluid Management in Space-Based Systems, Jack A. Salzman, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p521-526.

The Great Technology Transfer, Tim Cassidy, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1265-1269.

Jonnson, ed., 1990, p.1203-1209.
The Highway Safety Expert System: A New Approach to Safety Programs, Tarek Sayed and Frank Navin, (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p.346-362.
A. Integrated Approach to Maintaining a Program Baselina

An Integrated Approach to Maintaining a Program Baseline on the International Space Station, Roy Patrick Norris and Larry D. Toups, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p450-457

International Space Station Traffic Model Development, Clare T. Kingsford and Neil W. Lemmons, (Engineering,

Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p443-449.

Long Term Scenarios for Europe in Space, Klaus Pseiner, Angelo Atzei and David Raitt, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p145-154.

Lunar Sample Return: A Near-Term Marketing Opportunity? Brad R. Blair, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p194-

The Maryland Bridge Scour Program, Stanley R. Davis and David D. Dee, Jr., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p469-478.

ia, cu., 1990, pa93-476.
Monitoring Scour at Bridge Piers in Snohomish Co., WA, Anthony P. Nahajski, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1156-1161.

The Moon Within Our Grasp: A Strategy for Renewing Human Exploration of the Moon, Andrew Petro, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p133-139.

The NASA Reusable Launch Vehicle Technology Program Delma C. Freeman, Theodore A. Talay and Robert E. Austin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p385-391.

Non-Federal Flood Control Works Inspection Program, Jim Crum, Ruh-Ming Li and Henry M. Fehlman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1796-1800. On TRAC with Tate Jackson, William E. Kelly, NE Feb.

96, p14.

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Process Research in Support of the Human Exploration and Development of Space: Issues in Program Development, Bradley M. Carpenter, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

poup-315.
A Program for the Reduction of Seismic Hazards Posed by Welded Steel Moment Frame Structures, Stephen A. Mahin, Ronald O. Hamburger and James O. Malley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p157-158.

and Riley M. Chung, ed., 1991), p151-158.
Research Program for Reducing Frost Heave with Geosynthetic Capillary Barriers, Karen S. Henry and Earl Ellis, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p266-277.
San Francisco International Airport Light Rail System, William Land Care. Bordengery (Mexing the Challenger)

liam Leder and Gene Bordegaray, (Meeting the Challenge: Rebuilding Inner Cit Seneviratne, ed., 1996), p106-114. Airports, Prianka City

The Scour at Bridges Management Program in Rhode Island, Edward J. Kent, Jeffrey S. Glenn and Joseph T. Boardman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p489-498.

South Florida Water Management District: Reconstructing the Everglades Ecosystem, James Phillip Lee, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1190-1196.

The Space Exploration Initiative: Its Failure and Lessons for the Future, Matthew Fisk Marshall, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p116-125.

Space Shuttle Program-Defining a Needed Paradigm for Efficient Access to Space, Lyle M. Jenkins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), 9426-434.

State of Delaware - Scour Evaluation Program, Thomas M. Heil, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p459-468.

Student Guide for Space Conference Research Papers, Malva A. Knoll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1319-1326.

Toward A.D. 2000 in the IDNDR, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p285-286.

Fig. 1971, p.285-286.
Training Dropouts to Build Houses, CE Feb. 96, p.20,22.
USAID Efforts in Mitigating Natural Disasters, Tej Mathur and Nathalie Valette-Silver, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p.82-83.

Water Quality Improvement Program in Ventura County at Port Hueneme, Lynn M. Takaichi, Sachiko Itagaki and Dennis D. Wolfe, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p412-417.

Women Engineers Get Leadership Training, CE Dec. 96,

Progressive failure

After Oklahoma City, Structural Redundancy Should Be Required, A. Longirow, CE Feb. 96, p28,31. Building Codes Exist for Progressive Collapse, J. Jeff

Davies, P.E., CE July 96, p31-32.

Large Deformation Analysis of Inelastic Space Truss Struc-tures, George E. Blandford, ST Apr. 96, p407-415.

Object-Oriented Model for Integrating Construction Product and Process Information, Annette L. Stumpf, Ra-jaram Ganeshan, Sangyoon Chin and Liang Y. Liu, CP July 96, p204-212.

Project Management Functions in Facility Owners' Envi-ronment: Organizational Diagnostics, Hossam El-Bibany, Douglas Ault, Ben Branch and John Bechtel, AE Dec. 96, p138-144.

Project evaluation

Blueprint for Measuring Project Quality, James D. Stevens, ME Mar/Apr. 96, p34-39.

Company and Project Evaluation Model for Privately Promoted Infrastructure Projects, Antonio Dias, Jr. and Photios G. Ioannou, CO Mar. 96, p71-82.

Equity Measures for Selecting Sustainable Projects, Sam Matheson and Barbara Lence, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4371-4376.

Holistic Appraisal of Value Engineering in Construction in United States, Angela Palmer, John Kelly and Steven Male, CO Dec. 96, p324-328.

Modeling Project Performance for Decision Making, Luis F. Alarcón and David B. Ashley, CO Sept. 96, p265-273. Multijurisdictional Project Evaluation in Chattanooga Urban Area, Catherine L. Ross and W. Jeffrey Davis, UP June 96, p71-81.

Statewide Programming: Implementing Transportation-Policy Objectives, Debbie A. Niemeier, Tracy L. Reed, G. Scott Rutherford and Pat Morin, IS Mar. 96, p30-39.

Success or Failure: A Tale of Two Projects, Dov Kam-inetzky and Benjamin Lavon, CE June 96, p62-63.

Systematizing Construction Project Evaluations, Mohan M. Kumaraswamy and Antony Thorpe, ME Jan./Feb. 96, p34-39.

Project management

3D & 4D CAD Modeling on Commercial Design-Build Projects, Frank Vaugn, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Achieving Industrial Facility Quality: Integration is Key, Kelly Jean Fergusson and Paul M. Teicholz, ME Jan./

Feb. 96, p49-56.

ACPSS-Animated Construction Process Simulation System, Liang Y. Liu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p397-403

Adaptation of Barcode Technology for Construction Project Control, Diego Echeverry, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1034-1040.

Advanced Site Design Software for Landfill Closure and Remedial Design, Douglas Cervenak, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p818-824.

An Agent-Supported Framework for Collaborative Design, Yan Jin and Hiroshi Ohira, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p529-535.

Animation of Complex Construction Simulation Models, Photios G. Ioannou and Julio Martinez, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p620-626.

Application of Expert Systems to Workflow in Construc-tion Management, Raja R. A. Issa and Charles S. Duvel, (Computing in Civil Engineering, 10 roge Vanegas, ed. and Paul Chinowsky, ed., 1996), p781-785.

Applications of Case-Based Reasoning in Construction Engineering and Management, Jyh-Bin Yang and Nie-Jia Yau, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p663-669. Approaches to Simulating Organizational Behavior of Con-current Design Teams, Yan Jin and Raymond E. Levitt, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p281-287.

An Automated Design and Review Assistant: SEDAR, Michael C. Fu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p118-125.

Automated Generation of Productivity Functions, Alan D. Russell and Simaan AbouRizk, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p261-267.

Bar Codes in the Design Office, Richard L. Bland, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p951-957.

Blueprint for Measuring Project Quality, James D. Stevens, ME Mar./Apr. 96, p34-39.

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Collecting, Abstracting, and Compiling Review Comments: the Reviewer's Assistant and the Lessons-Learned Generator, Michael C. Fu and E. William East, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p104-111.

Company and Project Evaluation Model for Privately Promoted Infrastructure Projects, Antonio Dias, Jr. and Photios G. Ioannou, CO Mar. 96, p71-82.

COMPASS—New Paradigm for Project Cost Control Strategy and Planning, Makarand Hastak, Daniel W. Halpin and Jorge Vanegas, CO Sept. 96, p254-264.

Computational Support for Distributed and Concurrent Design Team, John L. Wilson and Chenggang Shi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p544-550.

Concept Ecology Integrated Project Engineering and Envi-ronment; Relating a Project to the Surroundings, David S. Reutter, Roger J. Menendez, Peter J. Bottone and Robert L. Whitman, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p753-758.

A Conceptual Model for Construction Clients' Requirements Processing, Chimay J. Anumba and Nosa F. O. Evbuomwan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p431-437.

Construction Planning through Multi-Agent Constraint Sat-isfaction, Milorad Sucur and Francois Grobler, (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p240-246.

Construction Project Control through Risk Management, E. N. Wirba, J. H. M. Tah and R. Howes, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p28-34.

Construction Regulated by Performance Information, Dean T. Kashiwagi and Chad T. Halmrast, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p551-558.

Construction Representative: Scheduling and Cost Management, Allan F. Samuels and Michael J. Bruder, CO Sept. 96, p281-290.

Construction Resource Scheduling with Genetic Alog-rithms, Weng-Tat Chan, David K. H. Chua and Govindan Kannan, CO June 96, p125-132.

Construction Safety: A Vision for the Future, Stewart Young, ME July/Aug. 96, p33-36.

Contractor Prequalification in Saudi Arabia, Abdulaziz A. Bubshait and Kamal H. Al-Gobali, ME Mar/Apr. 96,

Data Exchange: File Transfer, Transaction Processing and Application Interoperability, James Andrew Arnold and Paul Teicholz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p438-444.

A Decision Support Tool for the Steel Building Industry, Gregory P. Pasley and W. M. Kim Roddis, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p725-731.

Delivering the Project in Technical Consulting, James L Hawley and John Frauenhoffer, AE June 96, p55-62.

Design Case Adaptation Using Genetic Algorithms, Mary Lou Maher and Andrés Gómez de Silva Garza, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p294-300. Design Information Evolution in a Collaborative Engineering Software Environment, Beth A. Brucker and Annette L. Stumpf, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p732-738.

Development of a Knowledge-Driven Interactive Contractual Agreement Preparation Program using Multimedia, Thomas F. Harrington, Cheryl L. Ruf and Guillermo F. Salazar, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p649-655.

Developmental Approach for the Use of Expert Systems in Preparing Bidding Documents, Michael Bowen and Guillermo F. Salazar, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p656-662.

Dynamic Programming Approach to Scheduling of Non-serial Linear Project, Ahmed B. Senouci and Neil N. El-

serial Linear Project, Annieu B. Senouer and Neil N. En-din, CP Apr. 96, p106-114.

Emerging Role of Management in Civil Engineering, Louis Berger, ME July/Aug. 96, p37-39.

Estimating and Project Management for Building Contrac-tors, Michael Kitchens, 1996, 0-7844-0148-9, 242pp.

Estimating Trenching Productivity Using Neural Networks, Simaan AbouRizk, Brenda McCabe and Wissam Saadi, Simaan Adoustick, Brenda McCape and wissam saadi, (Computing in Civil Engineering, 10rge Vanegas, ed. and Paul Chinowsky, ed., 1996), p220-226. Examples and Characteristics of Shared Project Models, Martin Fischer and Thomas Froese, CP July 96, p174-

Facilitating Workgroup Activities through the Internet, Randall Guensler, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p459-465.

Florida Department of Transportation's MastArm Pro-gram—Placing the Engineer in Control, Andre V. Pavlov, (Computing in Civil Engineering, Jorge Vane-

gas, ed. and Paul Chinowsky, ed., 1996), p473-479. Global Project Documentation and Communications Using HTML on the World Wide Web, L. Y. Liu, A. L. Stumpf and S. Y. Chin, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p15-20.

Henry's Problem and Its Representation --- Representing an Architect's Reasoning Structure, Quinsan Cao, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1058-1064.

Chinowsky, ed., 1996), p1058-1064.
A Hybrid Approach to Integration in Construction, E. T. Thompson, J. H. M. Tah and R. Howes, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p417-423.
ICeD: An Interdisciplinary Conceptual Design Environment, Paul S. Chinowsky, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p133-139.

p133-139.

Implementing the Knowledge Worker System (KWS) in an Engineering Environment, Bruce C. Goettel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p288-293.

Information Technology for Better Management of Change, Cost and Schedule in Construction Projects, Feniosky Peña-Mora and Hong Chen, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p613-619.

Integrated Infrastructure Maintenance Management, Carol Subick and Ilker Adiguzel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed.,

1996), p207-213.

Integration of Generic Knowledge and Cases in DOM, Wolfgang Oertel and Shirin Bakhtari, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-

sky, ed., 1996), p301-307.
Interactive 4D-CAD, Kathleen McKinney, Jennifer Kim, Martin Fischer and Craig Howard, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p383-389.

Issues in Pursuing Quality in Facility Program Develop-ment, Ernest W. Parti, AE Mar. 96, p32-40. It's Project Management, Stupid! Stuart G. Walesh, ME

Jan./Feb. 96, p14-17.

A Knowledge Based Construction Contractor Proposal Evaluation System, John A. Kuprenas and Farzin Madjidi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p247-253. A Knowledge Based Information Model for Components in the Process Industry, James Andrew Arnold and Paul Teicholz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p586-592.

LAN Based Tools for a Project Environment, Edward Haninger, Ludi Billings and Kate Oertel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p944-950.

Lessons Learned from Multiphase Reconstruction Project, Raymond J. Krizek, Wei Lo and Ahmad Hadavi, CO Mar. 96, p44-54.

Managing Interdisciplinary Project Teams through the Web, Robin E. Goodman and Paul S. Chinowsky, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p452-458.

Maximizing Resources to Produce High Quality Results, Christopher J. Perry, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

p958-964

Measuring Mutual Confidence in UK Construction Projects, A. K. Munns, ME Jan./Feb. 96, p26-33.

Mobile Field Data Acquisition for Construction Quality Control and ISO 9000 Certification, Robert F. Cox and Raja R. A. Issa, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1041-1046

A Multi-Agent Architecture for Foundation Design Environments, M. R. Halfawy, N. A. B. Yehia, A. S. Bazaraa, A. Dessouki, F. C. Hadipriono and J. W. Duane, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p200-206.

Chinowsky, ed., 1990; p.200-200.
A Multi-Media Information System for Construction Delay Management, Osama Abudayyeh, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p593-599.

A Multimedia Expert System for Slurry Wall Construction, Nie-Jia Yau and Chien-Hong Lu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p600-606.

Neural Networks for the Identification and Control of Quantity Variance in Construction Projects, Hashern Al-Tabtabai, Nabil Kartam and Alex P. Alex, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p227-232.

New Approach for Optimization of Overall Construction Schedule, Shirong Li, CO Mar. 96, p7-13.

A New Model of Risk Allocation for Construction Contracts based on Fair Liabilities between Parties, Harkunti P. Rahayu and David G. Carmichael, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p35-41.

Object-Oriented Construction Information Framework for Construction Management, Sangyoon Chin, Annette L. Stumpf and Liang Y. Liu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Optimization of Graphical Models, Jeanine Graf, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p97-103.

Owner-Contractor Relationships on Contaminated Site Re-mediation Projects, Cynthia M. Ruff, David A. Dzombak and Chris T. Hendrickson, CO Dec. 96, p348-353.

Parametric Estimating: An Object-Oriented Approach, Irtishad U. Ahmad and Praveen K. Ommi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p254-260.

The Pre-Planning Phase and the Use of Multipurpose Con-struction Equipment in Pipeline Crossings, V. L. Kha-zanet, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p494-501.

Process Modeling for Design-Build Project Management, Yan Jin, Tore Christiansen, Raymond E. Levitt and Paul Teicholz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p642-648.

Process Models in Enterprise Engineering - Tools for Enhancing Process Description, Lars Chr. Christensen, Tore R. Christiansen and Yan Jin, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p634-641. Project Modeling in Construction Applications, Thomas Froese, Kevin Yu and Syed Shahid, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p572-578.

Quicktime VR and Interactive CD-ROM Applications for Communicating Project Alternatives, Douglas D. Eberhard, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p806-811.

Real Time Planning & Total Risk Management, Ali Jaafari, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p193-199.

Reasoning about Cases with Diagrams, Ellen Yi-Luen Do and Mark D. Gross, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p314-320.

Relationship Between Project Interaction and Performance Indicators, James B. Pocock, Chang T. Hyun, Liang Y. Liu and Michael K. Kim, CO June 96, p165-176.

Requirements for Industry Applicability of Knowledge-Based Schedulers, Florian Aalami and Martin A. Fischer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p774-780.

Risk Management for Response Planning, Roozbeh Kan-gari and Jacob Kovel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

p42-48.

So Mrs. Roebling—What's Your Side of the Story—About the Brooklyn Bridge? Patricia D. Galloway, (Civil Engi-Roberts, History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p23-24.

A Software Architecture for Concurrent Lifecycle Design and Construction, Nosa F. O. Evbuomwan and Chimay J. Anumba, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p424-430.

Strategies for the Use of IT in the Construction Industry of Singapore, Krishan Mathur, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1065-1071.

Structuring Cases in a Case-Based Design Aid, Craig Zimring, Sonit Bafna and Ellen Do, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed.,

1996), p308-313.

Theoretical Foundations for Computer-Supported Negotiation, Feniosky Peña-Mora and James Kennedy, (Con ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p186-192.

Towards Lessons-Learned Systems in the US Army, Corps of Engineers, Donald K. Hicks, Jeffrey G. Kirby and E. William East, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p112-117.

Using CPM-Chart Animation to Illustrate the Evolution of Schedules, Julio C. Martinez and John R. Knoke, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p627-633.

The Virtual Design Team (VDT): Concurrent Design of Fa-cility Products, Processes and Organizations, Raymond E. Levitt, Tore R. Christiansen, Geoff Cohen, Yan Jin and John C. Kunz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p268-274.

Virtual Reality Modeling for Bridge Construction, Tsung-chieh Tsay, Fabian C. Hadipriono and Richard E. Larew, (Computing in Civil Engineering, Jorge Vanegas, ed. and

Paul Chinowsky, ed., 1996), p63-69.

Visualization of Spatial and Geometric Databases for Con-struction Projects, M. R. Halfawy, F. C. Hadipriono, J. W. Duane and R. E. Larew, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p920-926.

What Project Partnering Is and Is Not, Gary D. Bates, ME Jan./Feb. 96, p10.

Where the Interstate Meets the Information Highway, John Lynch, CP Apr. 96, p91-92.

Project managers

Financial Management Primer for New Project Managers, Gregory L. Magee, ME Sept./Oct. 96, p62-67.

Great Tips from Client Feedback Programs, Sylvia Wheeler, ME Nov./Dec. 96, p10.

The Importance of Invoicing, Sri Krishnamachari, CE Jan. 96, p28.

Preparing for Project Management, David J. Williams, 1996, 0-7844-0175-6, 94pp.

R, for Risk Communication, Steven D. Perry, CE Aug. 96,

Strategies for Remediation Managers, Gary Dunbar and Scot Foster, CE June 96, p53-55.

Project planning

19 Tough Acts to Follow, Eric Rasmussen, CE July 96, p44-49.

Benchmarking Preproject-Planning Effort, M. R. Hamilton and G. E. Gibson, Jr., ME Mar/Apr. 96, p25-33.

Border Environment Cooperation Commission: 1995 Year End Status Report, Peter Silva, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1819-1821.

Capital Facelift Takes Flight, Richard Cullerton and Albert J. Gravallese, CE Apr. 96, p40-43.

Computerized Tool for Hierarchical Simulation Modeling, Anil Sawhney and Simaan M. AbouRizk, CP Apr. 96, p115-124.

Constructability in Public Sector, G. E. Gibson, Jr., C. I. McGinnis, W. S. Flanigan and J. E. Wood, CO Sept. 96, p274-280.

The Construction Manager as Project Integrator, Charles H. Kluenker, ME Mar/Apr. 96, p17-20.

Construction Project Control through Risk Management, E. N. Wirba, J. H. M. Tah and R. Howes, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p28-34.

CSFs in Competitive Tendering and Negotiation Model for BOT Projects, Robert L. K. Tiong, CO Sept. 96, p205-

Design Rationale for Computer-Supported Conflict Mitiga-tion, Feniosky Peña-Mora, Duvvuru Sriram and Robert Logcher, CP Jan. 95, p57-72.

Ecological and Biological Considerations in River Restoration, Dudley W. Reiser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2601-2606.

Graphical Simulation for Project Planning: 4D-Planner™, Mike Williams, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p404-409.

An Integrated Intelligent Planning Approach for Modular Construction, Nashwan Dawood, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p410-416.

Issues in Pursuing Quality in Facility Program Develop-ment, Ernest W. Parti, AE Mar. 96, p32-40.

Making Effective Use of Construction Lessons Learned in Project Life Cycle, Nabil A. Kartam, CO Mar. 96, p14-

Modeling Project Performance for Decision Making, Luis F. Alarcón and David B. Ashley, CO Sept. 96, p265-273.

Project Management Functions in Facility Owners' Envi-ronment: Organizational Diagnostics, Hossam El-Bibany, Douglas Ault, Ben Branch and John Bechtel, AE Dec. 96, p138-144.

Recently Emphasized Objectives and Risk Analysis for Project Planning in Developing Countries, Alvin S. Goodman and Lampros E. Bourodimos, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p154-168.

Risk as a Sustainable Development Criteria, Heidelore I. Kroeger and Slobodan P. Simonovic, (North American Water and Environment Congress & Destructive Water,

Risk Management for Response Planning, Roozbeh Kangari and Jacob Kovel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p42-48.

San Diego County Water Authority's Emergency Storage Project: A Major Planning Achievement, Ken Steele, Lee Judd, Richard Pyle and Uli Kappus, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2815-2819.

White River Fish Screen Project Planning and Design, Morton D. McMillen and Wayne Porter, (North Ameri can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1123-1128

Worth the Risk? Charles W. Lockhart and William J. Roberds, CE Apr. 96, p62-64.

Project selection

Reversibility Measures for Sustainable Decisions, Nick Fanai and Donald H. Burn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1525-1530.

Selecting Design-Build: Public and Private Sector Owner Attitudes, Anthony D. Songer and Keith R. Molenaar, ME Nov./Dec. 96, p47-53.

Project specifications

Project specifications
Construction Forum, SC Feb. 96, p9-11.
Hydroelectric Pumped Storage Technology: International
Experience, Task Committee on Pumped Storage of the
Committee on Hydropower of the Energy Division of the
American Society of Civil Engineers, (A. Hassan
Makarechian, chmn.), 1996, 0-7844-0144-6, 390pp.

Projectile impact

Concrete Penetration by Eroding Projectiles: Experiments and Analysis, Vladimir M. Gold, George C. Vradis and James C. Pearson, EM Feb. 96, p145-152.

Damage Caused by Projectile Impact to High Strength Con-crete Elements, A. N. Dancygier, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p484-495.

Projectiles

Constitutive Models for Concrete Penetration Analysis, Vladimir M. Gold, George C. Vradis and James C. Pearson, EM Mar. 96, p230-238.

On-Board Neural Network Control of Kinetic Energy Projectiles for NEO Exploration, R. E. Vance, M. V. Spangler, Z. Qian, C. Cho and K. A. Prisbrey, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1183-1189.

Theory and Practice of Projectile's Penetration in Soils, Yu. Boguslavskii, S. Drabkin, I. Juran and A. Salman, GT

Oct. 96, p806-812.

Advanced Seawater Desalination Plant, David W. Dean and Earl B. Lindquist, Jr., (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p685-690.

Advanced Technologies Applied to Public Transport Fleets Maintenance: Diamante Project, Antonio Marqués, Vicente Sebastián, Vicente Macián and Ma. José Lerma, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p19-23.

Air Force Cadets Learn while Doing, NE Feb. 96, p9.

Aluminum Has History, Kurt P. Thompson, CE Sept. 96, p36,38

Analytic Approach Helps Firm Expand Business, CE Dec. 96, p22 Architect Gives Precast Care to Nursing Center, CE Sept.

Artificial Recharge of a Buried Glacial Aquifer in South Dakota, Vernon R. Schaefer and Delvin E. DeBoer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p742-747.

ASR Case Study - City of Salem, Oregon, Joe Glicker and Paul Eckley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2679-2684.

Benefits of the Santa Ana River Mainstem Project, William L. Zaun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2176.

Bentley's Brave New World, CE Oct. 96, p22,24.

Building Seismic Safety Council Project '97, James E. Beavers and R. Joe Hunt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p335-336.

Cannot Indemnify for Own Negligence, CE Oct. 96, p30.

The Caribbean Disaster Mitigation Project: Introducing Disaster Mitigation in Highly Vulnerable Small Islands, Keith B. Ford and Jan C. Vermeiren, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p29-30.

Central Artery/Tunnel (CA/T) Project Environmental Permitting, Jeffrey M. Paul, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2236-2241.

CERF Receives Award, CE Nov. 96, p8.

Changing Times for Engineers Is Focus of Triennial Con-clave between U.S., Britain, Virginia Fairweather, NE Dec. 96, p1,10.

COFPAES Supports House Bill on Design-Build Fee Re-

imbursement, CE June 96, p73

Cold Regions' Icy Reach, Eric G. Johnson, CE Sept. 96, p6. Coil Regions Tey Reach, Eric G. Johnson, CE Sept. 96, po. Combined Flood Hazard Mitigation Techniques for Com-prehensive Planning - the Saugus River Coastal Flood Risk Reduction Plan, Barbara D. Hayes, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2312-2317. Comparing Contracts: Which Type is Best?, ME May/June

96, p10-11.

Computers Aid Federal Contract Awards, CE July 96, p8.

Computing Flood Damage Reduction Accomplishment, Jo Ann Duman and Donna Lydon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2318-2323.

Considering Constructor Prequalification, Gary D. Bates, P.E., ME Nov./Dec. 96, p10. Construction for Tomorrow and the Day After, William R.

Nash, SC May 96, p67. A Constructive Act, CE Dec. 96, p13.

A Continuing Education Program Involving A Partnership Among Building Designers, Constructors, and Code En-forcers, Michael A. Cassaro, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p92-96.

Contractor Markets Management Software, CE Dec. 96, p20.

Cooperative Approaches in Achieving Additional Water Conservation at Prado Dam, James A. Van Haun, (North American Water and Environment Congress & Destruc-

American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2352-2353.
Cooperative Efforts for Earthquake Risk Management in Developing Countries, Geoffrey Hoefer, Brian Tucker, Jeannette Fernández, Hugo Yepes, Jean-Luc Chatelain, Fumio Kaneko and Stephanie A. King, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p283-284.
Corps Begins Work on California Dam, CE Feb. 96, p17 19

p17,19.

Corps Public Works In Jeopardy, Hugh Converse, CE June 96, p35.

Creep Test Results Confirmed, Toby D. Leamon, P.E., CE Sept. 96, p30.

Dam Requires Record-Setting Slurry Walls, CE Jan. 96, p12,15.

Danish Suspension Bridge is World's Largest, CE June 96,

Data Acquisition and Handling for the Minnesota Road Re-search Project, David E. Newcomb and Joseph A. Cor-nell, (Applications of Advanced Technologies in Trans-

nell. (Applications of Advanced Technologies in Transportation Engineering, Vorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p510-514.
Design and Implementation of On-Farm Surface Drainage Projects in the Humid Tropics of Mexico, John C. Tiedeman and Rodolfo Namuche Vargas, (North American Conserved Control of Control of Destructive Water. Mater and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2480-2485. Design-Build Continues to Grow in U.S., CE Dec. 96,

Design-Build Joint Venture Liability, Michael C. Loulakis and William L. Cregger, CE May 96, p32. Editor's Letter, Tom Williamson, SC Aug. 96, p59. Editor's Letters, Joe Kaplan, P.E., SC Feb. 96, p1.

Elvis, Marilyn Monroe, John Roebling, Clarence A. P. Ha-

merson, CE June 96, p28.

The Enforceability of "Pay When Paid" Clauses, Michael C. Loulakis and William L. Cregger, CE Sept. 96, p40.

Engineers Cut a "Greenway" Through Atlanta, CE Oct. 96,

Engineers Establish Bridge Safety Site, CE Nov. 96, p8.

Environmental Improvement in Southern Africa, Daniel P. Miller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1069-1074.

Ethics, Uncertainty and Postaudits, Charles G. Gunnerson,

CE Dec. 96, p27. Evaluating Risk to the Environment from Mining Using Failure Modes and Effects Analysis, Kelvin Dushnisky and Steven G. Vick, (Uncertainty in the Geologic Emi-ronment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p848-865.

Evaluation of Modelling Needs for Central Valley Project Operations, John Burke and Donald Frevert, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p806-811.

Excavation Cautious for Memorial at Arlington Cemetery,

CE Sept. 96, p14.

Fast-Track Concrete Paving—Overview of Key Components, Lawrence W. Cole and Gerald F. Voigt, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p446-455.

Federal Legislation Will Increase Design-Build Opportuni-ties, Michael C. Loulakis and William L. Cregger, CE

July 96, p35.

Flexible Water Deliveries: One District's Experience, Eric Swenson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p679-684.

Getting to Know ArcView by Environmental Systems Re-search Institute, Wayne Sarasua, TE Sept./Oct. 96, p409. Golden Gate Bridge Gets Its Color Back, CE Sept. 96, p12.

Grants Aid South American Development, CE Dec. 96, p13.

Grateful for Bid Process, N. Stanley Good, CE Jan. 96, p28-29.

Groundwater Monitoring For a Tunneling Project, James C. Burton and John e. Shamma, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p691-696.

High-Speed Rail Meets Historic Station, CE Dec. 96, p8. In Defense of Design Engineers, Burton A. Lewis, CE Sept. 96, p32.

Innovative Drilling Brings Potable Water to Islanders, CE

June 96, p87.

Just One More Boring, and We'll Know for Sure! Sam S C. Liao, David L. Druss, Thom L. Neff and Brian R. Brenner, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p119-133

Korean Gas Company Digitizes Maps, Records, CE Dec.

96, p20.

Latin American Infrastructure Database Formed, CE Dec. 96, p22.

Making Effective Use of Construction Lessons Learned in Project Life Cycle, Nabil A. Kartam, CO Mar. 96, p14-21

The Management and Policies of the BECC, April Lander, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1813-1818.

Metacomputing on the Horizon, CE Dec. 96, p20.

Minnesota DOT Pursues Privatization Projects, CE Feb. 96,

Multimode Before Green Line, Robert J. Camillone, CE Sept. 96, p38.

NA River Project Environmental Compliance with the Na-tional Environmental Policy Act (NEPA), Ruth B. Vil-lalobos, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2347-2349.

Nation's Largest Grouting Contract Under Way, CE Aug. 96, p22

New City Breaks Ground, CE Sept. 96, p20,22.

OCEA Entries for 1997 Are Due Soon, CE Dec. 96, p68.

On the Process and Products of Project Space Vision, Pär Edin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p155-161.

Organizing and Evaluating Uncertainty in Geotechnical En-gineering, Robert V. Whitman, (Uncertainty in the Geo-logic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1-28.

Partnering for Quality Projects, ME July/Aug. 96, p11-12. Pay When Paid, CE Mar. 96, p24.

Problem and Technical Solutions: The Seven Oaks Dam, Physical Elements of the Seven Oaks Dam Feature, Robert E. Koplin, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2177-2184.

Providential Resurrection, CE May 96, p16.

Reader Thanks All, John T. Fowler, CE Oct. 96, p32.

Reasonable Care Must Be Taken, CE Dec. 96, p24. Record 22 Entrants in Running for 1996 Outstanding C.E. Achievement, CE Apr. 96, p78-79.

Record 22 Projects Vie for Outstanding Civil Engineering Achievement This Year, NE Mar. 96, p1,2,15

REGIT Project: An Advanced Transportation Management System for the City of Terni, C. Galli, A. Mattucci and G. Righetti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p676-679

Representing the City, CE Dec. 96, p24.

Retaining Wall Enhances Flowering Residential Site, CE Jan. 96, p77.

Retrofitting a Nuclear Lab, CE Dec. 96, p12,13.

Risky Business, ME Nov./Dec. 96, p12

Role of Vegetation in Hydraulics of Channel Restoration, Marcelo H. García, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2607-2612.

Santa Ana River Mainstern Project, Brian M. Moore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2169-2175.

The Secondary Inlet of the Eastside Pipeline Project, Antonio J. Perez and Aida G. Garabetian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p702-707.

Section Lauds Utah Governor, CE Oct. 96, p74,76 Selection of Sediment Transport Relations: Part I, Review of Sediment Transport Comparisons, Martin J. Teal and

David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2831-2836.

Services Rendered, Payment Due, CE Sept. 96, p29.

Siting Low Profile Grade Control Structures for the Muddy Creek Demonstration Stream Restoration Research Project, R. J. Wittler, D. R. Eby, S. D. Keeney, C. C. Watson and S. R. Abt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p105-110.

The Standley Lake Protection Project, Joseph Green-Heffern and David J. Kaunisto, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2820-2825.

Structural Design Forum, SC Feb. 96, p3-8. TDA Profiles Opportunities in European Market, CE July 96, p8.

Technologies for a Multimedia Based Highway Information System in the Gigabit Networking Environment, Kelvin C. P. Wang, Robert P. Elliott and James P. Turner, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p490-499.

Traffic Congestion Leads to Innovative Funding, CE Sept. 96, p14.

U.S. Looks to Mexico for New Infrastructure Projects, CE Oct. 96, p28

Uncertainty Model is a Redundancy, William Hayden, CE Aug. 96, p31.

Update on Scour Prediction, Robert B. Nairn, P.E., CE Sept. 96, p36.

Urban Control Services Integration the Innovative Components of THERMIE-JUPITER Architecture in Florence, G. Ambrosino, M. Boero, L. Niccolai, M. Romanazzo and M. Turrini, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p515-519.

The Use of Monitoring of Russian Water Objects for the Decrease of Disaster Consequences, G. M. Barenboim and G. M. Ostrovski, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1341.

Value Engineering Changes to the Eastside Pipeline, Antonio J. Perez, Francisco Becerra and John Vrsalovich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p697-701.

Washington Buildup, John Casey, CE Oct. 96, p64-67.

Wastewater Treatment Facility Aeration Project, Gary L. Eddy, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p506-517.

Water Resources Legislation, Martin Hight, CE Sept. 96,

p116.

Westlake Farms Demonstration Wetlands A Cooperative Effort, John M. Shelton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p388-393.

White River Fish Screen Project - Hydraulic Modeling, Dennis Dorratcague, Wayne Porter and Larry Swenson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p310-315.

Wind Engineering Co-operation: A Perspective of Europe and of China, Brian E. Lee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1069-1074.

Younger-Member Group Eyes Five ASCE Awards for 1997, CE Dec. 96, p68,70.

Propage

Life Cycle Cost Analysis of a Storburn Propane Combustion Toilet, Paul Ritz and Herbert P. Schroeder, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p816-827.

A Comparison of Alternative Methods for the Mars Sample Return Mission, Robert Zwienous for the Mars Sample Return Mission, Robert Zwienin, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p724-733.

Development Testing of the Mars Pathfinder Inflatable Landing System, Tommaso P. Rivellini, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1059-1068.

Mars Sample Return Using In-Situ Propellant Production,

David I. Kaplan, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p717-

On-Board Neural Network Control of Kinetic Energy Projectiles for NEO Exploration, R. E. Vance, M. V. Spangler, Z. Qian, C. Cho and K. A. Prisbrey, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1183-1189.

Probabilistic Simulation of Decomposition of Liquid Propellant, N. R. Moore, N. W. Ferraro, D. H. Ebbeler, L. E. Newlin, J. J. Blandino, R. A. Beaudet, C. M. Moran and S. H. Moore, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p640-643.

Pulling Propellants Out of Thin Air: Demonstration of an End-to-End Mars In-Situ Propellant Production Unit, John F. Connolly and Robert M. Zubrin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p706-716.

Recover Inorganic Solids from Obsolete Propellants, Frank J. Y. Shiu, Iris C. Y. Yang and T. F. Yen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1373-1378. Propellers

Entrainment of Eggs and Larval Fish Into Propeller Jets, Stephen T. Maynord, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3147-3152.

Propeller Wash Induced Erosion at Quay Walls, H. N. Hashmi, G. A. Hamill, H. T. Johnston and A. R. Ghumman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Properties Firms Form Brownfield Alliance, CE Dec. 96, p22.

Engineering Automation Expands, CE Sept. 96, p22.

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White House Proposes Design-Build Regulation, Michael Charles, CE Oct. 96, p116.

Protective coatings

Protective coatings
Corrosion and Hydrogen Permeation Inhibition by Thin
Layer Zn-Ni Alloy Electrodeposition, D. H. Coleman, B.
N. Popov and R. E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1281-1287.
Development of Bridge Corrosion Cost Model for Coating
Maintenance, C. K. Tam and S. F. Stiemer, CF May 96,

p47-36. Influence of Coatings on Bar-Concrete Bond, Protasio F. Castro, MT Nov. 96, p212-214. Protective Film Helps Landfills Make Energy, CE Nov. 96,

p95.

Protective structures

Protective structures of the projectile Impact to High Strength Concrete Elements, A. N. Dancygier, (Worldwide Advances in Structural Concrete and Massonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p484-495.

Design of Guide Banks for Bridge Abutment Protection, P. F. Lagasse, E. V. Richardson and L. W. Zevenbergen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Innovative Radiation Shields for Lunar Surface Operations, Milton Schwartz and Raymond S. Leonard, (Engineer ing, Construction, and Operations in Space, Stewart W.

Johnson, ed., 1996), p349-354.

Lunar Textile Method for the Shield Wall on the Lunar Surface, Mikiya Okumura, Takao Ueno and Yasuhiro Ohashi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p889-895.

Protecting Buildings against Vehicle Bomb Attacks, Anatol Longinow and Kim R. Mniszewski, SC Feb. 96, p51-54. Protection of and from the Lunar Environment, Anthony M. Wachinski, Tony Rachwal and Colin Waters, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p668-672.

Prototype tests

Addressing Current Issues in Structural Design Software, Julia D. Biedermann, CP Oct. 96, p286-294.

Local Scour Downstream of Hydraulic Structures, Gijs J. C. M. Hoffmans and Krystian W. Pilarczyk, HY Apr. 95, p326-340.

Prototypes

Acquisition of Subsurface Comet Samples, Richard Welch, Donald Sevilla, Don Noon and Albert Delgadillo, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p129-135.

Pseudodynamic method Damage Evaluation in Steel Box Columns by Pseudodynamic Tests, Tsutomu Usami and Satish Kumar, ST June 96, p635-642

PsD Test on Four-Story R/C Building Designed According to Eurocodes, P. Negro, A. V. Pinto, G. Verzeletti and G. E. Magonette, ST Dec. 96, p1409-1417.

Public buildings

'New" Method for Seismic Analysis is the Norm, Brian Grant, P.E., CE Sept. 96, p35-36.

At AWWA Conference, Public Utilities Put Up a Fight, CE Sept. 96, p24-25.

Boiler Emissions Drop, CE Nov. 96, p21.

The Caspian Sea Transgression (Environmental Medical Aspect), L. I. Elpiner, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3498.

scussion of Environmental Engineering Forum: Backflow Prevention and Water Quality in Residential Sprinkler Systems (September/October 1993, Vol. 119, No. 5, by Thomas M. Walski (Environmental Engineering Forum)), Frederick L. Hart, EE Jan. 96, p78-79.

ose Rates from Repository Performance Assessment, Robin K. McGuire and John A. Vlasity, (High Level Radioactive Waste Management, Technical Program Com-

mittee, 1996), p325-326.

From Cholera to Cancer to Cryptosporidiosis, Daniel A.

Okun, EE June 96, p453-458.

Initial EPRI Reaction to the NAS Yucca Mountain Standards Recommendations, John H. Kessler, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p282-284.

Making Waves by Edward Wenk, Jr. Dan H. Pletta, El July

96, p136. The National Academy of Sciences Report and Environmental Radiation Standards for Yucca Mountain, Law-rence Weinstock and Raymond L. Clark, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p267-268.

National Research Council Report:"Technical Bases for Yucca Mountain Standards"—A State of Nevada View, Carl A. Johnson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p285-

Preparation of Notification Models Using Continuous Mod-

Preparation of Notification Models Using Continuous Mod-eling Techniques, Mark TenBroek, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2474-2479. Regulatory Perspective on NAS Recommendations for Yucca Mountain Standards, Stephan J. Brocoum, Miguel A. Lugo, Steven P. Nesbit, Paul M. Krishna and James A. Dunyil (High Land Rediscretive Water, Water Manne) A. Duguid, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p272-273

Water and Sanitation Intervention in Flood Mitigation Programs, Bilquis A. Hoque, Bradley R. Sack, Nahid A. Ali and J. T. A. Chowdhury, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3916. The Yucca Mountain Standard: How Lenient Should It Be? Thomas H. Pigford, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

p263-266.

"Do Nothing" Title Misleading, Bruce E. Rittmann, Mi-chael C. Kavanaugh and Jacqueline A. MacDonald, CE Nov. 96, p36,38.

Public information programs
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96, p8.

Dates Set for Engineers Week '97, CE Dec. 96, p70.

Ed Groff: A "Muddy Boots" President, Virginia Fairweath-

Fostering Reclamation through Cooperation, Cheryl K. Davis, Olujimi O. Yoloye and Mary Grace Pawson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3696-3700.

p309-3700.

Grassroots Grants to Aid Sections, Branches Make an Impact at Local Level, NE Nov. 96, pl. Impacts of Improved Water Supply and Sanitation on the Rural Population of India, Padmavathy Bogabathini, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p781.

The Importance of Dissemination and Instruction in Hurri-cane Warnings, Earl J. Baker, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p391-392.

Innovative Methods for Informing the Public—A Case Study, Stan Reid, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), p507-

Intelligent Transportation Education, Steven P. Scalici, CE Apr. 96, p52-54.

Iowa Touts Transportation, CE Nov. 96, p24.

It Has a Ring to It, Stephen Auffinger, CE Nov. 96, p30,32. Johnson Sparkplugs Chicago's Engineers Week Events, CE

May 96, p70.

EW '96 Gets Message from President; Home Page on Computer Net, CE Feb. 96, p68. NEW

Utilizing Communications Strategies to Educate the Public on a Major Program, David L. Pratt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Reduction, George W. H. Chung, ed., 1997), p99-100.

Public opinion

An Approach to International High Level Radioactive Waste Management, Pieter J. Bredell and Helmut D. Fuchs, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p486-488.

ASCE's New Logo: A Case of Corporate Identity, NE June 96, p15.

Comments on the Movie "Apollo 13", Brian Brenner, EI Apr. 96, p53-54.

Cooperation Can End Bid Evils, David R. Chapman, P.E., CE July 96, p32.

Drinking Water Quality in Small Northern Communities, Daniel W. Smith, Stephen J. Stanley and Dennis S. Prince, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p570-581.

Elvis, Marilyn Monroe, John Roebling, Clarence A. P. Hamerson, CE June 96, p28. Empowerment at ASCE's Grass Roots Starts to Take Hold,

NE Apr. 96, p1,6.

Engineering and History: Manifestations in Monuments, Henry Petroski, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p155-161.

Environmental Worldviews and Water Resources, Robert E. O'Connor, Richard J. Bord and Ann Fisher, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p10-18.

Getting No Respect? Whose Fault Is It Anyway? Phil Estes, NE May 96, p14.

In Pursuit of a Stamp, Ronald E. Boenau, P.E., CE Oct. 96,

p31-32 Issues in Risk Perception and Communciation of Impor-Sponsored by HMIP, Daniel A. Galson, Roger D. Wil-mot and Ray V. Kemp, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p502-504. tance to a Regulator: Results of an International Seminar

It Has a Ring to It, Stephen Auffinger, CE Nov. 96, p30,32. Key Risk Attributes in the Perception of Engineering De-sign Options, P. Grindrod, D. J. Waters, H. Takase and F. Yousaf, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p499-501.

Letters to the Editor, SC Aug. 96, p60-61.

Not on Our Salary, Kimball L. Ohsiek, P.E., CE Dec. 96,

p31.

Oil Spills: Prevention, Prediction, and Preparation, Richard E. Burke, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p770-775.

Public Attitudes, Behavior, and the Willingness to Sacrifice to Mitigate Uncertain Adversity: Water Management Implications for Climate Change, Robert E. O'Connor, Richard J. Bord and Ann Fisher, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1828-1833.

Reader Praise for CE, Obi Iwuagu, CE Aug. 96, p30.

Reader Urges Peers to Accept Challenge, John Dunnicliff and Robert Hickman, CE Feb. 96, p26,28. Survey of University Students' Knowledge and Views on

Nuclear Waste Disposal and the Alternative Dispute Resolution Process, Grant Sheng, Lenore Deffner and Sonja Fiorini, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p510-512.

Writing the Great American (Civil Engineering) Novel, Eric Rasmussen, NE Jan. 96, p1,5.

Public participation

Classroom Simulation of Public Involvement in H.L.W. Issues Featuring STS Concepts, Z. T. Bieniawski, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p505-506.

Community Involvement in Hazard Mitigation, Subodh A. Kumar, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p282.

Construction Engineers Driving into the 21st Century, Vir K. Handa, CO Mar. 96, p1-6.

Developing Comprehensive State Ground-Water-Protection Programs, R. Gregory Bourne, Sonja Massey, Elizabeth Rolle and Bruce Meighen, WR July/Aug. 95, p294-301.

Ecosystem Management in the State of Florida, Ernest L. Barnett and Jim Lewis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3586-3591.

Intelligent Transportation Education, Steven P. Scalici, CE Apr. 96, p52-54.

Minnesota Featured State at Bridge Conference, CE Aug.

96, p16. MPO's Conform to ISTEA Requirements, CE Oct. 96,

p12,14.

Sims Bayou: The Public Speaks - The Corps Listens, Don R. Allen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3314-3319.

Understanding Why Stakeholders Matter, Richard C. Eschenbach and Ted G. Eschenbach, ME Nov./Dec. 96, p59-64.

"Elevating the Importance & Visibility of Mitigation— Promoting Public Awareness", Kenneth A. Deutsch, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p165-166.

Public policy

1996 Elections: Get Involved, Casey Dinges, CE Apr. 96, p116.

ASCE Convention Set for Nation's Capital This Fall, CE May 96, p72.

ASCE Joins Ranks of Congressional Fellows, Martin ASCE Opposes California Amendment on A/E Services, CE July 96, p70. Hight, CE Dec. 96, p114.

The Case Against Markets, Joseph W. Dellapenna, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2933-2938. Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996, 0-7844-0204-3, 144pp.

Conceptual Design of Enertopia in Korea, Kiryun Choi, EY Dec. 96, p102-113.

Construction Engineers Driving into the 21st Century, Vir K. Handa, CO Mar. 96, p1-6.

Dam Safety Policy for Spillway Design Floods, James R. Dubler and Neil S. Grigg, El Oct. 96, p163-169.

Damaging Earthquakes: A Scientific Laboratory, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p151-152.

Ed Groff: A "Muddy Boots" President, Virginia Fairweather, CE Dec. 96, p66-68. Editorial, Boris Berkovski, EY Dec. 96, pvi-x.

Haute Cuisine and Highways? John C. Laughland, CE July 96, p29.

James Ogilvie, Prominent Water-Resources Engineer, Dies at 84, NE Feb. 96, p14.

a. A. Multi-Objective Analysis for Cyclone Shelter Planning in Bangladesh, Jahir U. Chowdhury, Rezaur Rahman, Fazlul Karim and David W. Watkins, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p213-214.

Pay-When-Paid Risks are Limited, CE Aug. 96, p24.

Public Policy and Building Safety, Marjorie Greene and Chris D. Poland, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p155-156

Reflections on the Regulatory Reform Debate, Leonard Shabman, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p1-9. Subcontractor's Pass-Through Claim Forfeited Due to Fraudulent Conduct of Prime Contractor, Michael C. Loulakis and William L. Cregger, CE Nov. 96, p29.

Toward A.D. 2000 in the IDNDR, Walter W. Hays, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p285-286.

Tunnelers Probe Policy Ponder Baseline Reports, CE June 96, p16-18.

Water Resources Legislation, Martin Hight, CE Sept. 96, p116.

Public safety

Assurance of Structural Safety—Priority Issue for Structur-al Engineers, Frank J. Heger, SC Nov. 96, p113-118.

Author Clarifies His Convictions, Oscar De Pineres, P.E., CE July 96, p31

Biosphere FEP List Development Specific to Yucca Moun-tain, Graham M. Smith, Barbara M. Watkins and Richard Little, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p244-246.

Biosphere Model for Assessing Doses from Nuclear Waste Disposal, Marsha I. Sheppard, R. Zach, S. C. Sheppard, B. D. Amiro, G. A. Bird, J. A. K. Reid and J. G. Szekely, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p240-243.

Biosphere Modelling for Radioactive Waste Disposal, Richard A. Klos and Frits Van Dorp, (High Level Radio-active Waste Management, Technical Program Commit-tee, 1996), p237-239.

Closure to Discussion of Environmental Engineering Forum: Backflow Prevention and Water Quality in Residential Sprinkler Systems, Thomas M. Walski, EE Jan. 96, p82.

Comments Regarding the NAS Report on Yucca Mountain Standards, Chris Whipple, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p261-262.

of Environmental Engineering Discussion Backflow Prevention and Water Quality in Residential Sprinkler Systems (September/October 1993, Vol. 119, No. 5, by Thomas M. Walski (Environmental Engineering Forum)), Harry Shaw, EE Jan. 96, p79-80.

Editorial, Earl F. Burkholder, SU May 96, p45-46.

Evacuation Strategies for Public Officials, T. Michael Carter, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p109-110.

Fuel and Cladding Oxidation under Expected Repository Conditions, J. Kevin McCoy, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p396-398.

The Importance of Dissemination and Instruction in Hurri-cane Warnings, Earl J. Baker, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p391-392.

Initial EPRI Reaction to the NAS Yucca Mountain Standards Recommendations, John H. Kessler, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p282-284.

Intrusion Detection by Linear Active Cameras, J.-P. DeParis, L. Duvieubourg and J.-G. Postaire, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p114-118.

Making Waves by Edward Wenk, Jr. Dan H. Pletta, El July 96, p136.

The National Academy of Sciences Report and Environ-mental Radiation Standards for Yucca Mountain, Law-rence Weinstock and Raymond L. Clark, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p267-268.

New Modeling Method Aims to Better Scout Scour, ET Mar./Apr. 96, p6.

Regulatory Perspective on NAS Recommendations for Yucca Mountain Standards, Stephan J. Brocoum, Miguel A. Lugo, Steven P. Nesbit, Paul M. Krishna and James A. Duguid, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p272-273.

Risk Factors for Physical Injury During Earthquakes: Lessons from Previous Studies, Robin M. Wagner, Nicholas P. Jones, Gordon S. Smith and Kirsten O. Waller, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p78-79.

Scary Bridge Rehabbed for Economic Boon, CE Mar. 96, p12,14.

WIPP TRU Waste Transportation— A Circle of Safety, J.

J. Winkel and O. R. Spooner, (High Level Radioactive
Waste Management, Technical Program Committee, 1996), p360-362.

The Yucca Mountain Standard: How Lenient Should It Be? Thomas H. Pigford, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

"New" Method for Seismic Analysis is the Norm, Brian Grant, P.E., CE Sept. 96, p35-36.

Public transportation

Advanced Technologies Applied to Public Transport Fleets Maintenance: Diamante Project, Antonio Marqués, Vicente Sebastián, Vicente Macián and Ma. José Lerma, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p19-23.

BALANCE - A Method for Traffic Adaptive Signal Control Field Trial and Simulation Studies, Bernhard Friedrich and Hartmut Keller, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Design Tools for Public Cars Transportation Systems, Chafik Allal, François Dumontet and Michel Parent, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p6-18.

Enhancing AVM Systems by Operator Support DRS Func-tionalities, G. Ambrosino, M. Boero and P. Sassoli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p413-417.

Estimating Effects of TLC Into Urban Public Road Transport, Luigi Biggiero, Massimo Di Gangi and Bruno Mon-tella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p66-70.

An Evaluation of TLC Systems Benefits and Potential Market in Italy, Ennio Cascetta and Bruno Montella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p59-65.

Fingh, ed., 1996, 1976.
Flexible Dynamic Scheduling: A Major Improvement for Public Transport, Antonio Marqués, Manuel Torregrosa, Arturo Camarena, K. Darby-Dowman, Shirley Moody and James Little, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996).

Local Urban Transit Bus Impact on Pavements, Reed Gibby, Rebecca Dawson and Peter Sebaaly, TE May/June 96, p215-217.

Los Angeles' Gateway Opens, CE Jan. 96, p20,22.

Methodologies for the Analytic Definition of Uniform Travelling Time-Shifts of an Urban Public Transportation Service, Severo Pace and Graziana Ghio, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p139-143.

New on the Web, CE May 96, p8.

Nonurbanized Public Transportation Needs Assessment, M. Moussavi, M. Al-Turk and J. Albeck, TE Nov./Dec. 96, p447-453.

Passenger Information Terminals: Towards Standardisa-tion, P. Papaioannou, S. Basbas and D. Panayotako-poulos, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p24-29.

Public Transport Priority in Real-Time Traffic Control Systems, N. B. Hounsell and J. P. Wu, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p71-75

Trip Characteristics of Travelers without Vehicles, V. Thamizh Arasan, V. R. Rengaraju and K. V. Krishna Rao, TE Jan/Feb. 96, p76-81. Urban Control Services Integration the Innovative Components of THERMIE-JUPITER Architecture in Florence, G. Ambrosino, M. Boero, L. Niccolai, M. Romanazzo and M. Turrini, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p515-519. Vision Technique for Platoon Driving, Michel Parent, Pas-

cal Daviet and Sofiane Abdou, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p666-675.

ublic welfare

Engineering in Context: Engineering in Developing Countries, Laura Brigitte Parsons, El Oct. 96, p170-176 Making Waves by Edward Wenk, Jr. Dan H. Pletta, El July 96, p136

Public works

Anton, Public-Works Engineer, Dies at 59, CE Apr. 96,

proposes California Amendment on A/E Services, CE July 96, p70. Claim Review Process, CE May 96, p24.

COFPAES Supports House Bill on Design-Build Fee Reimbursement, CE June 96, p73. Corps Public Works In Jeopardy, Hugh Converse, CE June

96, p35.

County Responsible for Bond, CE June 96, p24.

Critical Issues in the Monitoring and Control of Toxic Air Contaminants at POTWs, Federico G. A. Vagliasindi and Vincenzo Belgiorno, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p81-86.

Evaluating Efficiency of Rock Blasting Using Data-Envelopment Analysis, James Odeck, TE Jan./Feb. 96, p41-49

Piscal '97 Budget Likes Infrastructure, Martin Hight, CE Nov. 96, p116. For Public Works, Metrication is a Luxury, Ronald F. Kil-

martin, CE Jan. 96, p31-32. Innovative Drilling Brings Potable Water to Islanders, CE

June 96, p87.

Late License Acceptable, CE Sept. 96, p28-29.
Minority Set-Aside Unconstitutional, CE Oct. 96, p30.

Partnering for Quality Projects, ME July/Aug. 96, p11-12. Positive Outlook in Construction Industry. CE May 96, p8. Robust H., Control Considering Actuator Saturation. I: The-ory. J. Geoffrey Chase and H. Allison Smith, EM Oct.

96, p976-983 State Agency Not Responsible for Performance Bond, CE Nov. 96, p28.

Two Federal Legislators Named ASCE Honorary Fellows during Society's National Policy Week, NE Apr. 96, p2. Water Resources Legislation, Martin Hight, CE Sept. 96, p116.

Watershed Management for a Limited Coastal Aquifer System, James P. Rhodes, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1087-1092.

Women Engineers Take High Road in California's Transportation Scene, NE July 96, p11.

'Since When is 5% Slight?', Merlyn Isaak, CE Feb. 96,

p31-32.

Publications

The Art of the Structural Engineer by Bill Addis, Wolfgang Schueller, AE Dec. 96, p145-146.

ASCE Members Figure Prominently in ENR's List of 1995

Achievers, NE Apr. 96, p10.

The Best Partnering Books for Your Design Firm, Ned Godfrey, ME Sept./Oct. 96, p7-9.

Building Code Requirements for Structural Concrete (ACI 318-95) and Commentary (ACI 318R-95) by ACI Committee 318, AE Search (6, p. 120). mittee 318, AE Sept. 96, p120.

Building Evaluation Techniques by George Baird et al. Frederick S. Merritt, AE Sept. 96, p122-123. CII offers "Framework" for Supervisory Education, ME

Sept./Oct. 96, p6.

Development of the San Joaquin County Hydrology Manual, T. V. Hromadka, J. J. DeVries, M. Callahan and J. Pulver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2078-2083.

Editor's Note, Kenneth L. Carper, CF May 96, p45. Editorial, Harry H. Yeh, WW May/June 96, p109.

Energy Dissipators edited by D.L. Vischer and Willi Hager, Henry T. Falvey, HY Aug. 96, p478. Engineers of Dreams Is Well Worth the Read as Petroski

Zeroes in on Bridges, Augustine J. Fredrich, NE Nov. 96,

Feedback Letter, Dameron H. Williams, ME Nov./Dec. 96, p5.

Fluid Vortices edited by S.I. Green, J. S. Marshall, HY July

96, p423

70, pp 23.
70, pp 23.
Fracture Mechanics of Concrete: Applications of Fracture Mechanics to Concrete, Rock and Other Quasi-Brittle Materials by Surendra P. Shah, Stuart E. Swartz, and Chengsheng Ouyang, Walter H. Gerstle, ST Nov. 96, p1390-1391

A Heyday for Engineers' Salaries, CE Oct. 96, p28.

Hydraulic Structures by P. Novak, A. I. B. Moffat, C. Nal-luri, and R. Narayanan, Steven Abt, HY Nov. 96, p674. Industry Leaders Meet the Press, CE Apr. 96, p8.
The Management of Engineering, Mel Hensey, ME July/

Aug. 96, p10.

Mixed Views Voiced on Book about the Northwest Pas-sage, Augustine J. Fredrich, NE Feb. 96, p6,7.

New Metric Guide Stresses "Preferred Numbers" to Aid in Building Construction, NE June 96, p10.

Notes on ACI 318-95 with Design Applications edited by S.J. Ghosh, David A. Fanella, and Basile G. Rabbat, AE Sept. 96, p120.

Partnering Manual for Design and Construction by William C. Ronco and Jean S. Ronco, Frederick S. Merritt, AE

Sept. 96, p122.

Professional Associations Offer Design Resources for Civil Engineers, Ben Northeutt, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathah, ed., 1996), p3343-3348. A Review and Assessment of the Journal of Computing in Civil Engineering, Sivand Lakmazaheri and William Rasdorf, CP Apr. 96, p95-96. Engineers, Ben Northcutt, (North American Water and

Slow Starter, Strong Finisher, Mel Hensey, ME July/Aug. 96, p10.

Small, Smaller Smallest, Howard F. Greenspan, CE June

96, p28.

90, p.z.b.
Standard Specifications for Structural Concrete (ACI 301-96) by ACI Committee 301, AE Sept. 96, p120.
Structural Design Guide to the AISC (LRFD) Specification for Buildings, 2nd Ed. by Edward S. Hoffman, Albert S. Gouwens, David P. Gustafson, and Paul F. Rice, AE Sept. 96, apr. 106, apr. Sept. 96, p121. Trademark Mention, Dana H. Toups, CE Feb. 96, p32

Writing the Great American (Civil Engineering) Novel, Eric Rasmussen, NE Jan. 96, p1.5.

Any New Address Stress? James Donald Strong, CE Nov. 96, p36.

Correction, CE Sept. 96, p38.

Corrections, CE Nov. 96, p41

Corrections, C.E. 700, 90, p41.

Editorial, A. Jacob Odgaard, HY Aug. 96, p426.

Editorial, Thomas L. Theis, EE Oct. 96, p887.

Editorial, Harry Yeh, WW Nov./Dec. 96, pviii.

Guest Editorial, John McNown, HY Aug. 96, p427.

Reader Remembers Cost, Not Fish, Charles C. McCloskey,
PE. CE Nov. 96, 232 (2018).

P.E., CE Nov. 96, p32,36. Some Thoughts from the Editor, Robert B. Harris, CO Dec.

96, p297. Start the Presses! Ramon Gilsanz, CE Apr. 96, p65-67.

Student Guide for Space Conference Research Papers, Mal-va A. Knoll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1319-1326. "Ethics" Credit, CE Nov. 96, p30.

Puerto Rico

Cost-Performance Criteria for Seismic Retrofitting, Alberto L. Guzmán, Ali Saffar and Leandro Rodríguez Agrait, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p902-905.

Hydrodynamic Model and Sensitivity Analysis for San Juan Bay, P. R. Lisa J. Wolf and Gavin Gong, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p505-517.

The Role of Circulation Patterns on the Simulation of Constituent Transport in San Juan Bay, Puerto Rico, Gavin Gong and James D. Bowen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p518-529.

Sediment Impacts on Yield from a Two-Reservoir System in Puerto Rico, Gregory L. Morris, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2103-2108.

Pull-out resistance

Analysis of Bond Stress Distributions in Pullout Specimens, Homayoun H. Abrishami and Denis Mitchell, ST Mar. 96, p255-261.

Bond and Slip of Plain Rebars in Concrete, Y. L. Mo and J. Chan, MT Nov. 96, p208-211.

Dimensional Analysis of Bond Modulus in Fiber Pullout, Jyrki Kullaa, ST July 96, p783-787. Improvement of Soft Clays by High-Voltage Electrokinetics, Julie Q. Shang and Wayne A. Dunlap, GT Apr. 96,

p274-280 Pullout Simulation of Postinstalled Chemically Bonded An-

chors, Michael McVay, Ronald A. Cook and Kailash Krishnamurthy, ST Sept. 96, p1016-1024.

Acoustic Emission Monitoring of Pultruded Bridge Members, Arup K. Maji, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p963-966.

Compression Strength of Pultruded Flat Sheet Material, J. T. Mottram, MT May 94, p185-200.

Mottani, MT May 94, p.165-200.
 Evaluation of FRP Composites Bolted and Adhesive Joints, Sotiris Sotiropoulos, Hota V. S. GangaRao and Roberto Lopez-Anido, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p.233-242.

Local Buckling Experiments on Pultruded Composite Beams, Roberto Lopez-Anido, Rachid Bendidi, Hota V. S. GangaRao and Mohammed Al-Megdad, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p914-923

p914-923.
Ultrasonic Characterization of FRP Composites for Bridge Applications, Jerrol W. Littles, Jr., Laurence J. Jacobs and Abdul-Hamid Zureick, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p959-962.

Pumped storage
Hydroelectric Pumped Storage Technology: International
Experience, Task Committee on Pumped Storage of the Committee on Hydropwer of the Energy Division of the American Society of Civil Engineers, (A. Hassan Makarechian, chm.), 1996, 0-7844-0144-6, 390pp. Modeling Pumping of Saline Water from Two-Layer Aqui-

fer, Andrzej Sawicki, HY June 96, p341-347.

Sound Way to Save Fish, John Nestler and Gene Ploskey, CE Sept. 96, p58-61.

Adaptive Search Optimization in Reducing Pump Operating Costs, S. Pezeshk and O. J. Helweg, WR Jan./Feb. 96, p57-63.

Biological Clogging and Rehabilitation of Drains and Well Systems and the Implications on Groundwater Quality, George Alford and D. Roy Cullimore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p34-39.

A Comparison of Geological and Stochastic Approaches to Characterization of Heterogeneity and their Effects on Simulations of Pump-and-Treat Systems, Peter E. Riemersma, Jean M. Bahr and Mary P. Anderson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1003-1018.

Comparison of Stochastic Programming and Robust Optimization Models for Groundwater Plume Containment, David W. Watkins, Jr. and Daene C. McKinney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p612-617.

Computation of Velocity Fields of Intravenous Balloon Pumping, Huaqiang Li, Tin-Kan Hung, Chiuping Chang and Pat Sawzik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p326-329.

Design of Multistage Pumping Main, Prabhata K. Swamee, TE Jan./Feb. 96, p1-4.

Design of Sediment-Transporting Pipeline, Prabhata K. Swarnee, HY Jan. 95, p72-76.

Eastern San Joaquin County Groundwater Management, Monique B. Magolske and Miguel A. Marino. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2781-2786.

Effect of Gravel on Pumping Behavior of Compacted Soil, Robert W. Day, GT Oct. 96, p863-866.

The Effect of Measurement Scale on the Worth of Hydraulic Conductivity Data: Slug Tests and Pumping Tests, Willy Zawadzki and Roger Beckie, Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1034–1051.

Effect of Surface Water and Ground Water Interaction on Atrazine Transport to Pumping Wells, Chittaranjan Ray, David Soong, Deva K. Borah and George R. Roadcap, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1575-1580.

Geosynthetic Tubes for Confining Pressurized Slurry: Some Design Aspects, Dov Leshchinsky, Ora Leshchinsky, Hoe I. Ling and Paul A. Gilbert, GT Aug. 96, p682-690.

Impact of Sedimentation Caused by Runoff, Dilip Khatri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p708-713.

Modeling Damage to Rigid Pavements Caused by Subgrade Pumping, M. Asghar Bhatti, Jeffery A. Barlow and James W. Stoner, TE Jan./Feb. 96, p12-21.

Modeling of Surface Water Pumps in TVA Reservoirs, Boualem Hadjerioua, Mark H. Mobley, Gary E. Hauser and W. Gary Brock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3188-3193.

A Multiperiod Approach for the Solution of Groundwater Management Problems using the Outer Approximation Method, George P. Karatzas, Alexander A. Spiliotopoulos and George F. Pinder, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p129-134.

Nonsteady-State Drawdowns in Two Coupled Aquifers, Louis H. Motz, IR Jan./Feb. 96, p19-23.

Optimal Well Locations for Groundwater Mound Control, Maili Wang and Kevin Lansey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p940-945.

Optimization of a Ground-Water Injection/Extraction System, Anand Prakash, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1167-1172.

Optimization of Water Supply System Operation, Vilas Nitivattananon, Elaine C. Sadowski and Rafael G. Quimpo, WR Sept./Oct. 96, p374-384.

Pump and Treat and Wait (Available only in the Geo/ Environmental Special Issue), Richard A. Sullivan, P.E., CE Nov. 96, p8A-12A.

Pump-and-Treat Ground-Water Remediation System Optimization, Daene C. McKinney and Min-Der Lin, WR Mar/Apr. 96, p128-136.

Use of Artificial Neural Networks for Agricultural Chemical Assessment of Rural Private Wells, Chittaranjan Ray and Kristopher K. Klindworth, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1687-1692. Use of SALQR Optimization in Large Aquifer Cleanup, Christopher M. Mansfield and Christine A. Shoemaker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p135-139.

Pumping plants

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Engineering Features of the Red Bluff Research Pumping Plant, K. Warren Frizell, Charles R. Liston and Stephen Atkinson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p316-321.

Sediment Transport Modeling for the Glen-Colusa Irrigation District Fish Screen Modifications, Cassie Klumpp, Mark Sailer, Arthur Glickman and Brent Mefford, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1027-1032.

Pumping stations

Alternative Wastewater Pumping Station Design Considerations, Thomas R. Dion, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p328-334.

Berkeley Fights Fire with Salt Water, CE Dec. 96, p18.

Direct Sizing of Small Stormwater Pump Stations, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2072-2077.

Effects of Approach Flow Conditions on Pump Sump Design, Gustavo Arboleda and Mutasem El-Fadel, HY Sept. 96, p489-494.

Hydraulic Structures by P. Novak, A. I. B. Moffat, C. Nalluri, and R. Narayanan, Steven Abt, HY Nov. 96, p674.

A New Strategic Management of Pumping Station in Sewer Systems, David Tsoi and Tsun-Hou Kuan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2486-2491.

Optimum Simulation and Control of Fixed-Speed Pumping Stations, Mark T. Yin, John F. Andrews and Michael K. Stenstrom, EE Mar. 96, p205-211.

Pumping tests, wells

Comparisons of Site Characterization Methods Using Mixed Data, Donna M. Rizzo, Theodore P. Lillys and David E. Dougherty, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p167-179.

Implications of Using Approximate Expressions for Well Function, Rajesh Srivastava, IR Nov/Dec. 95, p459-462. Mammoth Well Gurgles to Life, CE July 96, p11-12.

Object-Oriented Pumping-Test Expert System, Driss Ouazar, Alexander H-D. Cheng and Abdu Diore Kizamou, CP Jan. 96, p4-9.

Pumps

Eddy Pump Dredging Demonstration at Cresta Reservoir, Larry L. Harrison and Harry P. Weinrib, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2091-2096.

Efficient Pump Representation for Fixed-Grid MOC in Pipeline Systems, David H. Axworthy and Bryan W. Karney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p370-375.

Engineering Features of the Red Bluff Research Pumping Plant, K. Warren Frizell, Charles R. Liston and Stephen Atkinson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p316-321.

Performance of Electric Irrigation Pumping Plants Using Variable Frequency Drives, B. Hanson, C. Weigand and S. Orloff, IR May/June 96, p179-182.

Punching

Punching Strength of Deck Slabs in Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE May 96, p59-66.

Purlins

Load Capacity of Nested, Laterally Braced, Cold-Formed Steel Z-Section Beams, Ahmad A. Ghosn and Ralph R. Sinno, ST Aug. 96, p968-971.

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Alluring Approach, James D. Lockwood, P.E. and John R. Hillman, P.E., CE Nov. 96, p68-71.

Cable-Stayed Bridge Concept for Longer Spans, Uwe Starossek, BE Aug. 96, p99-103. Singapore Showcase, T. Y. Lin and Tan See Chee, P.E., CE

Nov. 96, p61-63.

Pyramids

Pyramid Power, Vladimir Novokshchenov, CE Nov. 96, p50-53.

Editor's Note, Thomas L. Theis, EE Apr. 96, p247.

A Preliminary Design of a Pilot Plant for the Production of Lunar Oxygen, W. E. F. L. Moulford, A. R. Martin, P. W. Cains, P. D. Martin and G. Tan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p762-768.

Pyrolysis Kinetics of Uncoated Printing and Writing Paper of MSW, Ching-Yuan Chang, Chao-Hsiung Wu, Jiann-Yuan Hwang, Jyh-Ping Lin, Wan-Fa Yang, Shin-Min Shih, Leo-Wang Chen and Feng-Wen Chang, EE Apr.

96, p299-305.

Reductive Pyrolysis for the Destruction of Chloromethane: A Reaction Pathway Model Based on Thermodynamic and Thermokinetic Considerations, Varadarajan Ravin-dran, Massoud Pirbazari, Badri N. Badriyha and Sidney W. Benson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1367-1372.

Qualifications

ASCE Opposes California Amendment on A/E Services, CE July 96, p70. Competition Should Be Based on Quality, Thomas W.

Considering Constructor Prequalification, Gary D. Bates, P.E., ME Nov./Dec. 96, p10.

Contractor Prequalification in Saudi Arabia, Abdulaziz A. Bubshait and Kamal H. Al-Gobali, ME Mar/Apr. 96, p50-54.

Copperation Can End Bid Evils, David R. Chapman, P.E., CE July 96, p32. Corps Moves Closer to Bid Shopping, Allen W. Hatheway,

CE June 96, p35.

Design-Build Origins in Question, Dean E. Stephan, Jeffrey
L. Beard and Michael Charles, CE Aug. 96, p26,28.
Regarding Bid Competition, James F. Adams, CE May 96,

Quality assurance

Assurance of Structural Safety—Priority Issue for Structural Engineers, Frank J. Heger, SC Nov. 96, p113-118.

A Concept in Networking, Kevin A. Taylor, ME Nov./Dec.

96, p9-10.

Data Qualification for the Waste Isolation Pilot Plant, R. Dennis Brown and Victor J. Harper-Slaboszewicz, (High Level Radioactive Waste Management, Technical Pro-gram Committee, 1996), p211-213.

Determination of Importance Process during Yucca Moun-tain Site Characterization, Peter S. Hastings, Dealis W. Gwyn and Robert F. Wemheuer, (High Level Radioac-tive Waste Management, Technical Program Committee, 1996), p327-329.

Engineers, Not QBS, Insure Quality, Mark W. Fantozzi, CE Apr. 96, p30,32.

Guiding Principles, Narbey Khachaturian and John P. Gnaedinger, ME Nov./Dec. 96, p30-33.

Maximizing Resources to Produce High Quality Results, Christopher J. Perry, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p958-964.

Physical Sampling for Site and Waste Characterization, nough, (High Level Radioactive Waste Man-Ted L. Bon agement, Technical Program Committee, 1996), p217-

Quality Assurance Plays a Key Role in Getting the Waste Isolation Pilot Plant to Operational Status, R. Dennis Brown, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p214-216.

TQM and ISO 9000 for Architects and Designers by Charles Nelson, Frederick S. Merritt, AE June 96, p81.

Using Process Modeling to Gain ISO 9000 Certification in Construction, Raja R. A. Issa and Robert F. Cox, (Com-Construction, Raja R. A. Issa and Robert F. Cox, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1013-1019.

"Design Control" and Scientific Investigations—Is There

Any Linkage? Robert R. Richards, (High Level Radioac tive Waste Management, Technical Program Committee.

1996), p208-210.

Quality control

Quality control
Achieving Industrial Facility Quality: Integration is Key,
Kelly Jean Fergusson and Paul M. Teicholz, ME Jan/
Feb. 96, p49-56.
Blueprint for Measuring Project Quality, James D. Stevens,
ME Mar/Apr. 96, p34-39.
A Concept in Networking, Kevin A. Taylor, ME Nov/Dec.

96, p9-10. Construction Representative: Scheduling and Cost Management, Allan F. Samuels and Michael J. Bruder, CO Sept. 96, p281-290.

Development of a Robotic Bridge Painting System, Yong Bai and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p185-191.

Environments, Laura A. Demsetz, ed., 1996), p185-191.
Guiding Principles. Narbey Khachaturian and John P.
Gnaedinger, ME Nov./Dec. 96, p30-33.
Issues in Pursuing Quality in Facility Program Development, Ernest W. Parti, AE Mar. 96, p32-40.
Mobile Field Data Acquisition for Construction Quality Control and ISO 9000 Certification, Robert F. Cox and Raja R. A. Issa, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1041-

Partnering for Quality Projects, ME July/Aug. 96, p11-12. Pavement Management Pays Off, Rita Robison, CE Apr.

96, p44-47

Preliminary Overview of Radiological Data Validation: Problems Found in Laboratory Data, LeRoy F. Wenrick, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p312-314.

Project Management Functions in Facility Owners' Envi-ronment: Organizational Diagnostics, Hossam Elronment: Organizational Diagnostics, Hossam El-Bibany, Douglas Ault, Ben Branch and John Bechtel, AE

Dec. 96, p138-144.

Proof Loads, Construction Error and the Reliability of Service Proven Structures, Mark G. Stewart, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p226-229.

Quality Control in Seismic Design and Construction, G. G.

Schierle, CF Aug. 96, p90-95.

Statistical Sample Size for Construction of Soil Liners, Craig H. Benson, Huaming Zhai and Salwa M. Rashad, GT Oct. 94, p1704-1724.

Supervise, Inspect, or Observe? The Structural Engineer's Role in Construction, Otto Avvakumovits, SC Aug. 96,

A User's Experience in Design and Field Quality Control With the Superpave System, Gerald Huber, Xishun Zhang and Robin Fontaine, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p711-720.

Quality control - management

Analysis of Client-Satisfaction Factors in Construction Industry, Syed M. Ahmed and Roozbeh Kangari, ME Mar./Apr. 95, p36-44.

Benchmarking Preproject-Planning Effort, M. R. Hamilton and G. E. Gibson, Jr., ME Mar./Apr. 96, p25-33.

Benchmarking: Performance-Improvement Towards Com petitive Advantage, N. M. Lema and A. D. F. Price, ME Jan./Feb. 95, p28-37. Comments on Quality Management and Civil Engineering

Education, Charles H. Samson, El Apr. 96, p52.
Connecting Random Acts of Quality: Global System Standard, William M. Hayden, Jr., ME May/June 96, p34-44. Design Quality Management Activities, Abdulaziz A. Bubshait and Ahmad Al-Abdulrazzak, El July 96, p104-

Direct Outcome-Based Assessment Measures, J. D. Bakos,

Jr., El Jan. 96, p31-34. Examination of Emerging Consciousness in Engineering Management, Amarjit Singh, ME July/Aug. 96, p50-57. The Future of Engineered Quality, Michael T. Kubal, ME

Sept./Oct. 96, p45-52.

536

It's Project Management, Stupid! Stuart G. Walesh, ME Jan./Feb. 96, p14-17.

Preparing for Project Management, David J. Williams, 1996, 0-7844-0175-6, 94pp.

Quality Is Dead; Long Live Quality, ME Jan./Feb. 96, p9-10.

Small Business in the Construction Industry, Howard H. Bashford, SC Aug. 96, p71-73.

Total Quality Management Implementations and Results, John A. Kuprenas, Carlos J. Soriano and Sanscho Ramhorst, SC May 96, p74-78.

TQM and ISO 9000 for Architects and Designers by Charles Nelson, Frederick S. Merritt, AE June 96, p81. Twenty-First Century Partnering and the Role of ADR, Robert S. Miles, ME May/June 96, p45-55.

Quantitative analysis

A Norm-Based Approach to the Quantification of Model Uncertainty, E. Zio and G. E. Apostolakis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p252-254.

Quay

Propeller Wash Induced Erosion at Quay Walls, H. N. Hashmi, G. A. Hamill, H. T. Johnston and A. R. Ghumman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3812-3817.

Questionnaires

Characteristics of the Craft Workforce, James E. Rowings, Mark O. Federle and Sara A. Birkland, CO Mar. 96, p83-90.

Summary of Responses to Participant Questionnaire, Yacov Y. Haimes, David A. Moser and Eugene Z. Stakhiv, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p422-434.

What Is the Standard of Care? Eugene A. Miller, ME Nov./Dec. 96, p40-46.

Queueing

Bus Gate, Pre-Signal and Queue Relocation: The Park View Road Bus Priority Scheme, Daniel D. G. T. Metzger, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p81-86.

Francesco Fingh, ed., 1990, pol-36. Equilibrium Network Traffic Signal Setting under Conditions of Queuing and Congestion, Hai Yang, (Applications of Advanced Technologies in Transportation Engineering, Vorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p578-582.

Rada

Application of Ground-Penetrating Radar to a Site Investigation Involving Shallow Faults, Christopher L. Liner and Jeffrey L. Liner, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p101-111.

Applications of Space Technology to Aid in Identification of Seismic Hazards, Ronald Blom, Robert Crippen, Andrea Donnellan, Gilles Peltzer and Paul Rosen, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p305-306.

Coastal Evolution Downdrift of St. Joseph Harbor on Lake Michigan, R. B. Nairn and L. E. Parson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p903-914.

Condition Assessment of Transportation Infrastructure Using Ground-Penetrating Radar, Kenneth R. Maser, IS June 96, p94-101.

Connections of Large Steerable Antennas, Joseph Antebi and Mehdi S. Zarghamee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p505-509.

Developing Parameters for a Quasi-Distributed Runoff Model Using GIS, Thomas A. Evans and John C. Peters, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2707-2712. Distributetd Parameter Hydrologic Modeling and NEX-RAD for River Forecasting: Scale Issues Facing the National Weather Service, Michael Smith, Dong Jun Seo, Bryce Finnerty and Victor Koren, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p140-145.

Enhanced Movements Estimation Methods for High Resolution Airport Surface Radar Images, P. F. Pellegrini, A. Boccellari, E. Piazza and R. Valenti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p92-98.

Evaluation of Bridge Decks and Pavements at Highway Speed using Ground Penetrating Radar, Kenneth R. Maser, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p820-828.

Flood Forecasting Based on Radar Rainfall Measurements, M. A. Mimikou and E. A. Baltas, WR May/June 96, p151-156.

Ground Penetrating Radar for Infrastructure Condition Assessment and Geophysical Applications: A Review, Udaya B. Halabe, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p812-819.

Indianapolis Uses New Radar Technology to Refine Hyetographs for CSO Model and SSES Studies, Patrick L. Stevens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1236-1241.

hillimetre Radar System for the On-Board Lateral Distance Acquisition: Performances Evaluation and Infrastructure Constraints, Corrado Cugiani and Luigi Giubbolini, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p656-660.

Sand Variability from Ground Penetrating Radar Data, Charles T. Young and Jon P. Doucette, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p368-382.

Three-Dimensional Finite-Element Simulation of FWD Loading on Pavement Systems, W. Uddin, R. M. Hackett, P. Noppakunwijai and Z. Pan, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p284-294.

Using Spaceborne Imaging Radar to Identify Lake Water Resources on the Alaskan North Slope, M. O. Jeffries, K. Morris and G. E. Liston, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), 985-865.

Dadiel flo

Approximate Theory for Radial Filtration/Consolidation, Frank M. Tiller, J. M. Kirby and H. L. Nguyen, GT Oct. 96, p797-805.

Developing a Rating Table for the Central Diversion Dam Radial Gates, Michael A. Drain, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3598-3603.

Increasing Computational Accuracy of Radial Gate Flows, Brian Henning and Timothy F. Kacerek, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3592-3597.

Numerical Modeling of Biologically Reactive Transport Near Nutrient Injection Well, T. Prabhakar Clement, Brian S. Hooker and Rodney S. Skeen, EE Sept. 96, p833-839.

Release Rates of Radionuclides through a Porous Material-Filled Borehole in a Radioactive Waste Repository, Kun Jai Lee and Heui-Joo Choi, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p279-281.

Radiatio

Analyzing Drought with a Simplified Climate Model, Michael L. Anderson and M. Levent Kavvas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1075-1080. Architecture on the Moon: The Importance of Human Factors Considerations in the Design of a Lunar Base, John Bergquist, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1038-1044.

Comparison of Methods for Estimating REF-ET, D. M. Amatya, R. W. Skaggs and J. D. Gregory, IR Nov./Dec. 95, p427-435.

Continuing Data Needs for Lunar Radiation Protection, Richard R. Roll, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p646-652

The Distinction between an Interplanetary Vehicle and a Mars Surface Habitat, Marc M. Cohen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), 9984-996.

Hazards to Personnel from Tower EMFs, James B. Hatfield, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p499-504.

HPS: A Space Fission Power System Suitable for Near-Term, Low-Cost Lunar and Planetary Bases, Michael G. Houts, David I. Poston and William A. Ranken, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p973-983.

Innovative Radiation Shields for Lunar Surface Operations, Milton Schwartz and Raymond S. Leonard, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p349-354.

Probabilistic Modeling of Radiation Damage in Charge-Coupled Devices, D. H. Ebbeler, L. E. Newlin and N. R. Moore, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p776-779

Radiation Hardening of Robotic Control Components Against Terrestrial Radiation, G. U. Youk, J. S. Tulenko, H. Liu and H. Zhou, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p248-254.

Radiation Hydrodynamics of a Slightly-Submerged Body, P. Ananthakrishnan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p832-835.

Radioactive materials

Management of the Hanford Engineer Works in World War II, Harry Thayer, 1996, 0-7844-0160-8, 225pp.

Safety Assessment of a Robotic System Handling Nuclear Material, Christopher B. Atcitty and David G. Robinson, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p255-261.

Radioactive tracers

Factors Limiting Microbial Activity in Volcanic Tuff at Yucca Mountain, Thomas L. Kieft, William P. Kovacik and Jennifer Taylor, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p36-38.

Radioactive waste disposal

An Approach to International High Level Radioactive Waste Management, Pieter J. Bredell and Helmut D. Fuchs, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p486-488.

Benchmarking of a Total-System Performance Assessment Model for WIPP, Joseph E. Hachey and Dawn A. Shut-tle, (High Level Radioactive Waste Management, Techni-cal Program Committee, 1996), p322-324.

Benefits/Impacts of Utilizing Depleted Uranium Silicate
Glass as Backfill for Spent Fuel Waste Packages, R. B.
Pope, C. W. Forsberg, R. C. Ashline, M. D. DeHart, K.
W. Childs and J. S. Tang, (High Level Radioactive Waste
Management, Technical Program Committee, 1996),
2303 321 p369-371.

Biosphere FEP List Development Specific to Yucca Mountain, Graham M. Smith, Barbara M. Watkins and Richard Little, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p244-246.

Biosphere Model for Assessing Doses from Nuclear Waste Disposal, Marsha I. Sheppard, R. Zach, S. C. Sheppard, B. D. Amiro, G. A. Bird, J. A. K. Reid and J. G. Szekely, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p240-243.

Biosphere Modelling for Radioactive Waste Disposal, Richard A. Klos and Frits Van Dorp, (High Level Radioactive Waste Management, Technical Program Commit-

active waste management, technical rogani Commi-tee, 1996), p237-239.

Changes in Water Table Elevation at Yucca Mountain in Response to Seismic Events, Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program

Committee, 1996), p102-104

Classroom Simulation of Public Involvement in H.L.W. Is-Classroom Simulation of ruloic involvement in H.L.w., issues Featuring STS Concepts, Z. T. Bieniawski, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p505-506.

Comments Regarding the NAS Report on Yucca Mountain Standards, Chris Whipple, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p261-262.

537

Compass: A Source Term Code for Investigating Capillary Barrier Performance, Wei Zhou and M. J. Apted, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p276-278.

gram Committee, 1996), p. 10-2-10.
Control of Stacking Loads in Final Waste Disposal According to the Borehole Technique, Walter Feuser, Eike Barnert and Hendrik Vijgen, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Controlled Drill & Blast Excavation at AECL's Underground Research Laboratory, G. W. Kuzyk, D. P. Onagi and P. M. Thompson, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Coupled Modelling of Groundwater Flow and Hydrochemistry in the Sellafield Area, A. K. Littleboy, R. Metcalfe and D. J. Noy, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p135-140

Critical Groups for Geological Disposal Performance As-sessments, Graham M. Smith and John Kessler, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p234-236.

Deep Geological Disposal Programs in Preparation an Under Development, D. P. Khrushchov, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p19-21.

mittee, 1996), p19-21.

Depleted-Uranium-Silicate Backfill of Spent-Fuel Waste Packages for Repository Containment and Criticality Control, Charles W. Forsberg, Ron B. Pope, Ron C. Ashline, Mark D. DeHart, Kenneth W. Childs and Jabo S. Tang, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p366-368.

Determination of Importance Process during Yucca Mour tain Site Characterization, Peter S. Hastings, Dealis W. Gwyn and Robert F. Wernheuer, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p327-329.

Dose Rales from Repository Performance Assessment, Robin K. McGuire and John A. Vlasity, (High Level Ra-dioactive Waste Management, Technical Program Com-

mittee, 1996), p325-326.

Effect of Repository Underground Ventilation on Emplacement Drift Temperature Control, Hang Yang, Yiming Sun, Daniel G. McKenzie and Kalyan K. Bhattacharyya, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p417-419.

Effects of Transport Model Alternatives Incorporating Precipitation on the Performance of Engineered Barriers, Takao Ohi, Kaname Miyahara, Morimasa Naito and Hiroyuki Umeki, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p274-

Evaluation of Geological Formations of West Ukraine from the Standpoint of Raw Disposal, Olga V. Shestopalova (High Level Radioactive Waste Management, Technical

Program Committee, 1996), p79-80. Final WIPP Compliance Criteria (40 CFR Part 194), Mary Kruger and Elizabeth Forinash, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p224-225.

1990), p.24-223.
Geoenvironmental Evaluation of Geological Formations of Lithuania for Radioactive Waste Disposal, Valentinas Kadūnas and Jurgis Valūnas, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p83-85.

Geological and Geophysical Studies of Sites in the Ukrainian Shield Rock Series Suitable for Construction of Underground Laboratories, L. S. Galetsky, D. P. Khrushtov and A. P. Volik, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

p81-82.

High Level Radioactive Waste Management, Sponsored by ASCE and the American Nuclear Society, Technical Program Committee, (Holly A. Dockery, chmn.), 1996, 0-7844-0169-1, 520pp.

How Can Coupled Systems Evolve? A Scenario Simulation Methodology, H. Takase, P. Grindrod and S. P. Crompton, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p258-260.

Important Parameters in the Performance of a Potential Repository at Yucca Mountain (TSPA-1995), Joel E. Atkins, S. David Sevougian, Joon H. Lee, Robert W. Andrews and Jerry A. McNeish, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p291-292.

Indian Programme on Deep Geological Disposal of Radioactive Waste, A. N. Prasad, K. Balu, R. K. Mathur and P. K. Narayan, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p22-24.

Initial EPRI Reaction to the NAS Yucca Mountain Standards Recommendations, John H. Kessler, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p.282-284.

International High-Level Radioactive Waste Repositories, Wunan Lin, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p492-493.

Intracrystalline Diffusion in Clinoptilolite: Implications for Radionuclide Isolation, Sarah K. Roberts, Brian E. Viani and Douglas Phinney, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p48-49.

Issues in Risk Perception and Communciation of Importance to a Regulator: Results of an International Seminar Sponsored by HMIP, Daniel A. Galson, Roger D. Wilmot and Ray V. Kemp, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p502-504.

Key Risk Attributes in the Perception of Engineering Design Options, P. Grindrod, D. J. Waters, H. Takase and F. A. Yousaf, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p499-501.

Keys to Opening the Nation's First Deep Geological Repository in 1998, Michael H. McFadden and Leif G. Eriksson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p220-223.

Mechanical Properties Characterization of Asphalt Concrete Barrier for Radioactive Nuclear Waste Vaults, Bernard A. Vallerga, Akhtarhusein A. Tayebali, Shmuel L. Weissman and Carl L. Monismith, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1288-1297.

Modeling of Possible Outflow of Radionuclides from Deep Burials into Biosphere, V. M. Shestopalov, B. D. Stetsenko and A. S. Bogusławski, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p176-177.

Modelling of El Berrocal Field Tracer Tests, J. P. Humm, J. Guimera, P. Grindrod and S. P. Crompton, (High Level Radioactive Waste Management, Technical Program

Committee, 1996), p114-116.

NAS Recommendations and Current Legislative Proposals: Implications for U.S. NRC's Regulatory Program, J. P. Kotra, M. V. Federline, T. J. McCartin, N. A. Eisenberg and J. H. Austin, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p269-271.

The National Academy of Sciences Report and Environmental Radiation Standards for Yucca Mountain, Lawrence Weinstock and Raymond L. Clark, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p.267-268.

National Research Council Report: Technical Bases for Yucca Mountain Standards" — A State of Nevada View, Carl A. Johnson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p285-287. Natural Ventilation of an Exothermic Waste Repository, George Danko and Steven Saterlie, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p426-428.

538

Naturally-Occurring Chemical Analogues for Repository-Derived Radionuclides, Bill Miller, (High Level Radioactive Waste Management, Technical Program Committee. 1996), p50-52.

The NEA International FEP Database: Outcome of the Working Group, Trevor J. Sumerling. (High Level Radioactive Waste Management, Technical Program Committee, 1996), p317-319.

Near-Drift Thermal Analysis Including Combined Modes of Conduction, Convection, and Radiation, Clifford K. Ho and Nicholas D. Francis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), 9448-450.

NRC's Refocused Prelicensing High-Level Waste Regulatory Program, M. V. Federline, R. L. Johnson and J. T. Greeves, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p196-198.

Performance Assessment Modeling of the Proposed Genting Island Repository Facility, Yudi U. Imardjoko, Daniel B. Bullen and Sofyan Yatim, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p172-175.

Potential Changes to Technical Issues in HLW Performance Assessment, N. A. Eisenberg and R. G. Wescott, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p288-290.

Practical Experiences with Sealing Technology in the Czech Republic, Michal Vanecek, (High Level Radioactive Waste Management, Technical Program Committee, 1996), 9415-416.

Preliminary Overview of Radiological Data Validation: Problems Found in Laboratory Data, LeRoy F. Wenrick, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p312-314.

Probabilistic Evaluation of Postclosure Criticality Events Internal to the Waste Package, Peter Gottlieb and John R. Massari, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p345-347.

A Progress Report on the Large Block Test, W. Lin, D. Wilder, J. Blink, P. Berge, S. Blair, V. Brugman, K. Lee, M. Owens, C. Radewan, Ramirez, A., N. Rector, J. Roberts, D. Ruddle and J. Wagoner, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p122-124.

A Radiological Disadvantage for Siting a Repository at Yucca Mountain, Peter Spiegler, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p178-180.

Radwaste Disposal in Clay—E. C. Everest Project, IPSN Contribution, Catherine Certes, Patrick Goblet and André Levassor, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p170-171.

Radwaste Disposal in Granite—E.C. Everest Project, IPSN Contribution, P. Baudoin and C. Serres, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p168-169.

Radwaste Management in Reracking of Korean Nuclear Power Plants, Seung Ick Yoo, Young Ho Shin, Chan Do Kim and Do Soon Jun, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p379-381.

Recommendations from EPA's Review Committee on WIPP, Chris G. Whipple, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p226-227.

Regulatory Assessment of Evapotranspiration at Yucca Mountain, Neil M. Coleman and Michael P. Miklas, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p199-200.

Regulatory Perspective on Future Climates at Yucca Mountain, Neil M. Coleman, Norman A. Eisenberg and David J. Brooks, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p255-257.

Release Rates of Radionuclides through a Porous Material-Filled Borehole in a Radioactive Waste Repository, Kun Jai Lee and Heui-Joo Choi, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p279-281.

Review of the Performance Assessment in the WIPP Draft Compliance Application, William W.-L. Lee, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p228-230.

Risk Model Applied Backwards, Monica Maldonado, ET Oct./Nov. 96, p1,7.

Screening, Combining and Tracking Features, Events and Processes in WIPP Performance Assessments, D. A. Galson, D. G. Bennett, R. D. Wilmot, D. R. Anderson and Peter N. Swift, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p231-233.

Site Selection and Evaluation of Geological Disposal of Radioactive Waste: Regulatory Aspects, G. Guentchev and L. Katzarska, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p86-88.

Solid Waste and Materials Systems Alternatives Study Summary, John R. Kasper and Stephen T. Smith, (High Level Radioactive Waste Management, Technical Program Committee, 1996), 9374-378.

Status of Thermal Loading Evaluations for a Potential Repository, Steven F. Saterlie, (High Level Radioactive Waste Management, Technical Program Committee, 1996), 942-444.

Isolation at the Yucca Mountain Site, Larry D. Rickertsen, Edward C. Taylor, Janet A. Docka and Jean L. Younker, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p303-304.

Testing of Abstractions for Total System Performance Assessment, Vinod Vallikat, Srikanta Mishra, Yanyong Xiang and David Sevougian, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p293-294.

Total System Performance Predictions (TSPA-1995) for the Potential High-Level Waste Repository at Yucca Mountain, S. David Sevougian, Robert W. Andrews and Jerry A. McNeish. (High Level Radioactive Waste Management, Technical Program Committee, 1996), p295-297.

Transferring Knowledge about High-Level Waste Repositories: An Ethical Consideration, Stefan Berndes and Klaus Kornwachs, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p494-498.

Tunneling Progress on the Yucca Mountain Project, William H. Hansmire and Richard J. Munzer, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p385-387.

Ukrainian Program of Radioactive Waste Disposal in Geological Formations, Dmitri P. Khrushchov, Michail A. Pavlovsky and Valeri M. Starodoumov, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p25-26.

Uncertainty as a Parameter for Decision Making, Jiff Faltejsek, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p320-321.

Use of Expert Judgment in the HLW Regulatory Program:
U.S. NRC Staff Draft Guidance, Janet P. Kotra, Michael
P. Lee, Norman A. Eisenberg and Aaron R.
DeWispelare, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p247-249.

Use of Limited Information in a License Application to Construct a Repository, J. Michael McGarry, III and F. Stanley Echols, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p201-204.

Use of Probabilistic Methods for Analysis of Cost and Duration Uncertainties in a Decision Analysis Framework, D. M. Boak and L. Painton, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p250-251. The Yucca Mountain Probabilistic Volcanic Hazard Analysis Project, Kevin J. Coppersmith, Roseanne C. Perman, Robert R. Youngs, Todd A. Crampton, Laurel A. DiSilvestro, Richard P. Smith, C. Allin Cornell, Peter A. Morris, Timothy Sullivan, Stephen T. Nelson and J. Carl Stepp, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p53-55.

The Yucca Mountain Standard: How Lenient Should It Be? Thomas H. Pigford, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p263-266.

Radioactive waste processing

Analysis of Proliferation Risk for Taiwan's Spent Fuels, K. K. Li, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p489-491.

A Follow-Up Study to: Job Performance Aids to Criticality Safety, Michael A. Rodriguez, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p348-350.

Making a Case for "Cost-Effective" Compliance, Dale T. Bignell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p305-307.

National High-Level Waste Systems Analysis, Thomas P. O'Holleran and Keith Kristofferson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p315-316.

Radwaste Management in Reracking of Korean Nuclear Power Plants, Seung Ick Yoo, Young Ho Shin, Chan Do Kim and Do Soon Jun, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p379-381.

Spent Nuclear Fuel Dry Transfer System, Leroy Stewart and Stephen Agace, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p471-473.

Surface Reactivity of High Level Waste Matrices Characterized by Radiometric Emanation Method, Vladimír Balek, Zdeněk Málek and A. Clearfield, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p474-476.

Uncertainty as a Parameter for Decision Making, Jiff Faltejsek, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p320-321.

Understanding How to Maintain Compliance in the Current Regulatory Climate, Dale T. Bignell, Jeffry L. Newman and Ronald D. Burns, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p298-299.

Radioactive wastes

Bounding Axial Profile Analysis for the Topical Report Database, Chien-Hsiang Chen and Theodore A. Parish, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p336-339.

Corrosion Test on Candidate Waste Package Basket Materials for the Yucca Mountain Project, Richard A. Van Konynenburg and Paul G. Curtis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p464-467.

Data Qualification for the Waste Isolation Pilot Plant, R. Dennis Brown and Victor J. Harper-Slaboszewicz, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p211-213.

Drift Apex Temperature Distributions due to Cylindrical Heat Sources, W. G. Culbreth and J. J. Ventresca, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p435–437.

Examination of Exploration Options of the Yucca Mountain CHn Unit, Kurt E. Suchsland, Jerry L. King and Richard D. Memory, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p300-302.

Fuel and Cladding Oxidation under Expected Repository Conditions, J. Kevin McCoy, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p396-398.

High Level Radioactive Waste Management, Sponsored by ASCE and the American Nuclear Society, Technical Program Committee, (Holly A. Dockery, chmn.), 1996, 0-7844-0169-1, 520pp. Impacts of Cathodic Protection on Waste Package Performance, Joel E. Atkins, Joon H. Lee and Robert W. Andrews, (High Level Radioactive Waste Munagement, Technical Program Committee, 1996), p459–461.

In-Situ Corrosion Testing of Selected HLW Container Materials, E. Smallos, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p462-

Legal Weight Truck Cask Response to Regulatory Format Thermal Events, Part 1: Fuel Cladding, M. Greiner, R. J. Faulkner and Y. Jin, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p351-353

Legal Weight Truck Cask Response to Regulatory Format Thermal Events, Part 2: Containment Seal, M. Greiner, Y. Jin and R. J. Faulkner, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p354-356.

Long-Term Corrosion Behavior of Environmental Assess-ment Glass, W. L. Ebert and J. K. Bates, (High Level Radioactive Waste Management, Technical Program Com-

mittee, 1996), p399-401.

Measurement of the DWPF Canistered Wasteform Weight and Free Volume, D. T. Herman, J. R. Harbour, M. K. Andrews and C. A. Cicero, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p402-403.

Methodology to Group DOE Fuels for the Purpose of Re-pository Technical Acceptance, Robert Einziger, Ray Stout, Henry Loo and Scott Gladson, (High Level Radio-active Waste Management, Technical Program Commit-

tee, 1996), p432-434.

Microbiological Sorption and Transport: Field and Labora-tory Experiments, Larry E. Hersman, (High Level Radioactive Waste Management, Technical Program Commit-

tee, 1996), p27-29.

Mixed Convection Heat Transfer Coefficients for Horizon tally Emplaced Waste Packages, J. J. Ventresca, W. G. Culbreth and C. Lawson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p451-453.

Mixing Influences on Cement-Based Waste Forms, James B. Stong, James R. Weber and Kevin J. Hull, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1597-1601.

Modelling of a Heater Experiment in a Saturated Granite with Thermoporoelastic Source Singularities, Emmanuel

with Intermoporelastic Source Singularities, Emmanuel Detournay and Ilya Berchenko, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p44-47.

Modelling of Thermal-Hydrological-Mechanical Processes in a Discrete Joint, T. S. Nguyen, A. P. S. Selvadurai and P. Flavelle, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p60-63.

Nonequilibrium Thermodynamical Model for Spent Fuel Dissolution Rate, Ray B. Stout, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p393-395.

Physical Sampling for Site and Waste Characterization, Ted L. Bonnough, (High Level Radioactive Waste Mar agement, Technical Program Committee, 1996), p217-

Quality Assurance Plays a Key Role in Getting the Waste Isolation Pilot Plant to Operational Status, R. Dennis Brown, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p214-216.

Radionuclide Release for Unsaturated Spent Fuel Tests— First 1.6 Years, P. A. Finn, S. F. Wolf and J. K. Bates, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p390-392.

A Robotic Inspector for Low-Level Radioactive Waste, Joseph S. Byrd and Robert O. Pettus, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996),

Route Assessment Using Comparative Risk Factors Inte-grated through a GIS, Douglas M. Toth and William J. O'Connell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p363-365.

Savannah River Recycles Metals, Saves Money, CE Oct. 96, p14,

Whither Nuclear Waste Disposal-A 50th Anniversary View, William W.-L. Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1592-1596.

WIPP TRU Waste Transportation— A Circle of Safety, J.
J. Winkel and O. R. Spooner, (High Level Radioactive
Waste Management, Technical Program Committee,

1996), p360-362.

Radioactivity

Whither Nuclear Waste Disposal—A 50th Anniversary View, William W.-L. Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1592-1596.

Radiography

X-ray Radiography of Fracture Flow and Matrix Imbibi-tion, Jeffery J. Roberts and Wunan Lin, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p89-91.

Surface Reactivity of High Level Waste Matrices Charac-terized by Radiometric Emanation Method, Vladimír Balek, Zdeněk Málek and A. Clearfield, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p474-476.

Rail transportation

Experimentation of the ERTMS System on the Italian, Ger-man and French Railways, Daniel Lancien, Florian Kollmannsberger and Paolo Ripamonti, (Applications of Advanced Technologies in Transportation Engineering. Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p30-38 Green Light for Whom? Hermann Zutraun, P.E., CE Sept. 96, p38.

Impact of Commuter-Rail Services in Toronto Region, Sarah Stewart Wells and Bruce G. Hutchinson, TE July/ Aug. 96, p270-275.

Lessons for Rail Access to Airports, Hanan A. Kivett, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p96-105.

Modeling Reliability of Train Arrival Times, L. Ferreira and A. Higgins, TE Nov./Dec. 96, p414-420.

Multimode Before Green Line, Robert J. Camillone, CE Sept. 96, p38.

Timber Trestle Stars at Costner-Owned Resort, CE Mar. 96, p16.

Transportation Shortcuts Exist, J. F. Koenen, P.E., CE Oct. 96, p37-38.

"Dry Canal" to Link Atlantic and Pacific, CE Dec. 96, p18.

Railroad cars

DOT Crew Excavates Historic Train Cars, CE Nov. 96,

Loading Spectra for Railway Bridges under Current Oper-ating Conditions, Daniel H. Tobias, Douglas A. Foutch and John Choros, BE Nov. 96, p127-134.

Transportation Shortcuts Exist, J. F. Koenen, P.E., CE Oct. 96, p37-38.

Railroad stations

An Elevated Train Rises Again, CE Nov. 96, p10.

High-Speed Rail Meets Historic Station, CE Dec. 96, p8.

DNAPI. Recovery System at a Railroad Tie Treating Facil-ity, Richard Broad, III, David F. Atwater and Riaz Ah-med, (Non-Aqueous Phase Liquids (NAPLs) in Subsur-face Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p743-750.

Banding* Timber Crossties Using Composite Fabrics for Improving Their Performance, S. S. Sonti and H. V. S. GangaRao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1449-1457.

Railroad tracks

Dynamic Analysis of Resilient Crosstie Track for Transit System, M. J. Fatemi, M. F. Green, T. I. Campbell and A. Moucessian, TE Mar./Apr. 96, p173-180.

Modeling Rail Fatigue Behavior with Multiple Hazards, Feng-Yeu Shyr and Moshe Ben-Akiva, IS June 96, p73-82

Railroad trains

Modeling Reliability of Train Arrival Times, L. Ferreira and A. Higgins, TE Nov./Dec. 96, p414-420.

Train/Vehicles Wind-Induced Hazard and Its Mitigation. Masaru Matsumoto and Tatsuo Maeda, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p131-132.

Coal Pipelines Crossing Railroads: Legal Issues, Peter N. Davis and Henry Liu, (Pipeline Crossings 1996, Law-rence F. Catalano, ed., 1996), p254-264.

Intersection of Spiral Curve with Circle, Olcay Öztan and Orhan Baykal, SU Feb. 95, p3-12.

The Kobe Earthquake: Ground Shaking, Damage and Loss, Charles A. Kircher, (Building an International Commu nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p908-916.

Low Temperature Performance Rating Criteria for Lubricaion Greases, Jan Lundberg and Terry McFadden, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p153-172.

Service Life of Timber Trestles, William G. Byers, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p720-723.

Permafrost Soils, V. G. Kondratjev, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p688-699.

Wind-Induced Accidents of Train/Vehicles and their Countermeasures, Tatsuo Maeda, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p70-73.

Earthquake Response of Structure-Elevator System, F. Segal, A. Rutenberg and R. Levy, ST June 96, p607-616.

Effect of Sidewalks and Railings on Wheel Load Distribu-tion in Steel Girder Bridges, K. M. Tarhini, M. Mabsout and M. Kobrosly, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p881-886.

Rain gages

Flood Forecasting Based on Radar Rainfall Measurements, M. A. Mimikou and E. A. Baltas, WR May/June 96, p151-156.

Indianapolis Uses New Radar Technology to Refine Hyeto-graphs for CSO Model and SSES Studies, Patrick L. Stevens, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1236-1241.

Preliminary Studies of a Karst Warm Spring in Mt. Kräuterin, Austria, Dachang Zhang, Rudolf Pavuza, Hans Fischer and Karl Mais, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1279-1284.

Storm-Driven Trajectories of Rain near Balconies on Tall Building, Fillmer W. Ruegg, AE Sept. 96, p100-106. Waterproofing An Expanded Convention Center, CE Dec.

Rainfull

Analysis of Exceptional Meteorological Conditions on July and August in Conakry, Mamadou Tounkara, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1144.

Analysis of Rainfall-Induced Debris Flows, Scott A. Anderson and Nicholas Sitar, GT July 95, p544-552.

Beneficial Aspects of Flood and Rain in Countries Where the Drinking Water is Naturally Contaminated with Fluoride Where Fluorosis is a Major Public Health Problem, Susheela Andezhath Kumaran, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2191.

Debris Flow Events at Mountainous Creeks near Santiago, Chile- Hydrologic Analysis, X. Vargas and P. Lara, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996). p1550-1551.

Design and Implementation of On-Farm Surface Drainage Projects in the Humid Tropics of Mexico, John C. Tiede-man and Rodolfo Namuche Vargas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2480-2485.

Distributed Parameter Hydrologic Modeling and NEX-RAD for River Forecasting: Scale Issues Facing the Na-tional Weather Service, Michael Smith, Dong Jun Seo, Bryce Finnerty and Victor Koren, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p140-145.

Estimation of Flash Flood Potential for Large Areas, K. P. Georgakakos, A. K. Guetter and J. A. Sperfslage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1147

Estimation of the Probable Maximum Rainfall and Snow melt Floods Via Physically Based Model of River Runoff Generation, L. S. Kuchment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1337.

First Interactive Drought Atlas Released, CE Oct. 96,

Flooding from Rain-on-Snow Events in the Sierra Nevada, Richard Kattelmann, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1145-1146.

Flooding in Southeastern United States From Tropical Storm Alberto, July 1994, T. C. Stamey, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p245-246.

Frequency Analyses for Recent Regional Floods in the United States, Nick B. Melcher and Patsy G. Martinez, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p59-61.

Hydrological Analysis of High Flows and Floods in the Sava River Near Zagreb (Croatia), Dusan Trninic, Lidija Tadic and Zdenko Tadic, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p918.

Identification of a General Linear Model for Reservoir Inflows Forecasting, J. Ribeiro, J. Rousselle, J. D. Salas and H. Ta Trung, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2354-2359.

Indianapolis Uses New Radar Technology to Refine Hyeto-graphs for CSO Model and SSES Studies, Patrick L. Stevens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1236-1241.

The Integrated Flood Control System of the Great Miami Valley, M. Zoghi and K. A. Rinehart, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p384-385.

Inundation Scenarios and Inundation Risk, M. P. C. Frijters and B. P. van den Bunt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p62-63.

Investigation of Some Heavy Flood Hazards in Small Alpine Catchments in Austria, A. Watzinger, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p715.

Preparation of Notification Models Using Continuous Modeling Techniques, Mark TenBroek, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2474-2479.

Probabilistic Flood Forecast-Warning System, Roman Krzysztofowicz, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p231-232

The Rhine Flood Events in December 1993/January 1994 and in January 1995, H. Engel, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p243-244.

542

Spatial Statistics for Rainfall Forecasts Assessment, Lynn E. Johnson and Billy Olson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2897-2902.

cnayya natmata, ed., 1990), p.2897-2902. Status Report - Task Committee on GIS Models and Dis-tributed Models of the Watershed, Rafael G. Quimpo, Paul A. DeBarry and E. James Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2915-2920.

The Timberlake Dam Failure: A Hydrometeorological Assessment, J. Warner, G. V. Loganathan, R. J. Kane, M. Gillen, D. F. Kibler and K. Kostura, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2522-2527.

Uncertainty in Comparative Analysis with Continuous Nonpoint Source Pollution Models, Dipmani Kumar and Conrad D. Heatwole, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1705-1710.

Looking Back At The Great Flood of 1993, Gary R. Dy-

Looking Back At The Great Flood of 1993, Gary R. Dy-house, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p375-376.
Nonhomogeneous Markov Model for Daily Precipitation, Balaji Rajagopalan, Upmanu Lall and David G. Tarboton, HE Jan. 96, p33-40.
Rainfall Depth—Duration Relationship for South Italy, Vito Ferro and Vincenzo Bagarello, HE Oct. 96, p178-180.

Flood Destruction and Abatement in China, Zhixin Liang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3017.

Stormwater Management Plan Updated for Climate System Changes, Yuan Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1846-1851.

Rainfall intensity

96 Extraordinary Flood in the Middle Reach of the Yang-tze River, Xuewu Ji, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p377-378.

The Analysis of the Failure of the Minte Stream Culvert, I Ayala and E. Brown, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3018.

Flood Destruction and Abatement in China, Zhixin Lian (North American Water and Environment Congress Destructive Water, Chenchayya Bathala, ed., 1996), p3017.

Incorporation of Time-Intensity and Spatial Variability Into Probable Maximum Precipitation (PMP) Estimates, Ana Paula Barros, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p64-65.

Rainfall-runoff relationships

Automated Tools for Spatially Distributed Rainfall/Runoff Modeling, E. James Nelson and Norman L. Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2903-2908.

Comparison of Multi-Layer Perceptron and Radial Basis Function Network as Tools for Flood Forecasting, A. W. Jayawardena and D. A. K. Fernando, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p457-458.

Developing Parameters for a Quasi-Distributed Runoff Model Using GIS, Thomas A. Evans and John C. Peters, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2707-2712.

Distributed Hydrologic Modeling of Humid Regions, Fred L. Ogden, Brent A. Watts and B. Saghafian, (North American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996), p2909-2914. Field Verification of Dem-Derived Watershed Response, Randal F. Bodnar, Mark Michelini and Rafael G. Quimpo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3206-3211.

Flood Forecasting Based on Radar Rainfall Measurements, M. A. Mimikou and E. A. Baltas, WR May/June 96, p151-156.

Flood Forecasting Model for an Alpine Drainage Basin -River Drau in Austria, D. Gutknecht, W. Kugi and F. Nobilis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Hydrologic Modeling System, John Peters and Arlen Feldman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3776-3781.

Identifying Trends from Streamflow Records--A Case Study, Joseph A. Van Mullem, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1675-1680.

Performance of a Virtual Runoff Hydrograph System, Pa-trick Carriere, Shahab Mohaghegh and Razi Gaskari, WR Nov./Dec. 96, p421-427.

Rainfall-Runoff Modeling for Watershed Stormwater Management, Yuan Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2066-2071.

Runoff Computation Using Spatially Distributed Terrain Parameters, Francisco Olivera and David R. Maidment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3212-3217.

Simulation of Catchment Response Using RC Network, M. J. Abedini, W. T. Dickinson and R. P. Rudra, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3381-3386.

Streamflow Forecasting for Han River Basin, Korea, Haitham M. Awwad, Juan B. Valdés and Pedro J. Restrepo, WR Sept./Oct. 94, p651-673.

Streamflows Prediction Models for the Colombian Generation System Considering El Niño Effect, Oscar J. Mesa, Ricardo A. Smith, Pedro J. Restrepo, José E. Salazar, Luis F. Carvajal and Juan D. Velásquez, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1477-1482

Urbanization and Hydrologic Consequences in Simi Valley, California, M. Ali Tabidian, James M. Evensen, Jr., Don D. Adelman and Steve Elliott, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3332-3337.

Water Balance of the Niger Basin, D. R. Maidment, F. Olivera, Z. Ye, S. M. Reed and D. C. McKinney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3411-3416.

Bike Trail Gets Lift, CE Nov. 96, p23-24.

Features of a Chevron Weir Rock Ramp, R. J. Wittler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p111-116.

Impact of Freeway Geometric and Incident Characteristics on Incident Detection, H. M. Al-Deek, S. S. Ishak and A. A. Khan, TE Nov./Dec. 96, p440-446.

Major Brooklyn Interchange Being Upgraded, CE July 96,

A New Kind of Rubber Drive, CE Nov. 96, p94-95. Students Build Ramp for Disabled Boy, NE Feb. 96, p9.

Random processes

Active Vibration Control of Double Wall Composite Shells to Random Inputs, Chen-Ying Wang and Rimas Vaicai-tis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p842-845.

Annealing Strategy for Optimal Structural Design, Shyh-Rong Tzan and Chris P. Pantelides, ST July 96, p815-

Application of the Concurrent Finite Element Method to Solution of the Fokker-Planck Equation, W. Yi, B. F. Spencer, Jr. and L. A. Bergman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p10-13.

Approach to Failure Mode Analysis of Large Structures, Shaowen Shao and Yoshisada Murotsu, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p704-707.

A Combined Fuzzy and Random-Set Approach to the Multiobjective Optimization of Uncertain Systems, Alberto Bernardini and Fulvio Tonon, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p314-317.

Generalized Random Decrement Method for System Identification, P. D. Spanos and B. A. Zeldin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p850-853.

Higher Moments of Weighted Integrals of Non-Gaussian Fields, Gunnar Mohr, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p254-257.

Identification of Nonlinear Systems under Random Excita-tion, B. A. Zeldin and P. D. Spanos, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p168-171.

Identification of Wind Spectral Characteristics from Struc-ture Response, K. Pan, N. P. Jones and J. H. Ellis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p482-485

Mean Stress Effects in Fatigue of Welded Steel Joints, Shahram Sarkani and David P. Kihl, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p50-53.

Measures of Exceedance by Random Fields for Ocean Stress and Environmental Application, M. R. Leadbetter and Holger Rootzén, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p258-261.

Micromechanics of Damage in Random Composites, M. Ostoja-Starzewski, A. Al-Ostaz, I. Jasiuk and K. Alzeb-deh, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p362-363

Moment Lyapunov Exponent and Stability Index for Linear Stochastic Systems with Small Diffusion, Nikolai Mosh-chuk and Rafail Khasminskii, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p538-541.

Probabilistic Analysis of Foundation Settlement, Gordon A. Fenton, G. M. Paice and D. V. Griffiths, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p651-665.

Random Elastic Response Characteristics of Bar Structures by Monte Carlo Simulation, Michael Koutsoukis and Ed-mund S. Melerski, (*Probabilistic Mechanics & Structur-*al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p812-815.

Random Fields and Airplane Loads, Ludomir M. Laudan-ski, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p684-687

Random Network Modeling for Determination of Repre-sentative Specimen Size of Compacted Clays, Suri Thangavadivelu, Lakshmi N. Reddi and Sunil Menon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1303-1317.

Random Response of Nonlinear System to PERPM Model, Y. Wang, Z. Hou, M. Dimentberg, M. Noori and Y. Zhou, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p954-957.

Random Responses of Discretized Structures with Energy Dissipation Devices, C. W. S. To, M. L. Liu and J. M. Kelly, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p824-827.

Reliability Analysis of Nonlinear Structures Using Stochas-tic Finite Elements, C. E. Brenner and C. Bucher, (Prob-abilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p596-599.

Reliability of Ocean Structure Using Spectrum-Consistent Excitation, Yunshen Zhou, Zhikun Hou, Mikhail F. Dimentberg and Mohammad Noori, (*Probabilistic Me*chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p982-985.

Representation of Compacted Clay Minifabric Using Random Networks, Lakshmi N. Reddi and S. Thangava-divelu, GT Nov. 96, p906-913.

Response of an Oscillator with One-Sided Barrier under Non-White Random Excitation, G. Q. Cai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p112-115.

SFEM for Reliability of Structures with Material Nonlinearities, Jun Zhang and Bruce Ellingwood, ST June 96,

Stability Analysis of a Geometrically Imperfect Structure Using a Random Field Model, York Schorling and Christian Bucher, (*Probabilistic Mechanics & Structural Reli*ability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p604-607.

Stable Forced Vibrations Near Unstable Positions, Michael Zakrzhevsky, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p384-387.

Cal. 1720), port of Toughness in Brittle Fracture, A. Chudnovsky and M. Gorelic, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p346-349.

Statistical Dynamics of Pipe-Line with One-Side Contact Supports Under Turbulence of Cross-Wind Loads, Anatoly I. Menyailov and Christian G. Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p986-989.

Stochastic Modeling of Imperfections in Beams, B. W. Yeigh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p676-679

Synthesis of Correlated and Vector-Valued Time Series Based on Random Vibration for Nuclear Piping, Yong Zhao and D. A. Gasparini, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p748-751.

Vibration Absorber for Offshore Structures: Frequency-Domain Analysis, Mikhail F. Dimentberg, Shiyu Chen, Zhikun Hou and Mohammad Noori, (*Probabilistic Me*chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p588-591.

Wavelets in Random Processes Representation, Marina Vannucci, Antonio Moro and Pol D. Spanos, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p672-675.

Random variables

Analysis of Crack Propagation in Concrete Structures by Markov Chain Model and R-curve Method, Yunping Xi Markov Chain Model and Recurve Method, Tunping Al and Zdeněk P. Bažant, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p358-361.

Analysis of Eigenvalue Variability for 2D Stochastic Structural Systems Using Variability Response Functions, George Deodatis and Lori Graham, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p600-603.

Choice of Input Fields in Stochastic Finite Elements, Ove Ditlevsen and Niels Jacob Tarp-Johansen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p820-837

Dynamic Stability of Viscoelastic Structures under Stochastic Loading, S. T. Ariaratnam and G. Amaniampong, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p542-545

Effect of Uncertainty on an Active Mass Damper System, H. S. Deoskar, R. V. Tappeta and B. F. Spencer, Jr., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p426-429

Faligue Lifetime Prediction of Steel Bridge Details, Peter J. Massarelli and Thomas T. Baber, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p450-453.

Finite Element Modeling of Settlements on Spatially Ran-dom Soil, G. M. Paice, D. V. Griffiths and G. A. Fenton, GT Sept. 96, p777-779. Modelling of Randomly Meandering Fatigue Crack Growth, Kazimierz Sobczyk and Jerzy Trebicki, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Monotonic Loading of Brittle Materials: A Stochastic Damage Model, David J. Kirkner, B. F. Spencer, Jr. and Satish Kandarpa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p354-357.

A Multi-Loop Strategy for Performance-Based Optimiza-tion with Probabilistic Constraints, Robert H. Sues, David R. Oakley and Graham S. Rhodes, (*Probabilistic* Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p126-129.

Nonlinear SDOF System Subject to Poisson-Distributed Pulse Process, Sau-Lon James Hu, George Tsiatas and Shuang Jin, (Probabilistic Mechanics & Structural Reli-ability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p680-683.

Path Integration Applied to Structural Systems with Uncer-tain Properties, Søren R. K. Nielsen and H. Ugur Köylüoğlu, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p6-9.

ed., 1990), po-9.

Probabilistic Cervical Spine Injury Analysis Methods, Ben H. Thacker, Y.-T. (Justin) Wu, Daniel P. Nicolella and Ronald C. Anderson, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangop, ed. and Mircea D. Grigoriu, ed., 1996), p.270-273.

Origoni, ed., 1990, p.2.0-273.
Probabilistic Finite Element Analysis of Aerospace Structures, M. R. Khalessi, H.-Z. Lin, T. Y. Torng, Y. Zhang and A. D'Angelo, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p648-651.

Probabilistic Solutions to Geotechnical Problems, Nagaratnam Sivakugan and Ali Al-Harthy, (*Probabilistic Me-chanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p938-941.

Probabilistic Stability Analysis of Shallow Arches, R. P. Nordgren and K. S. Hussain, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p124-127.

Probability Analysis Method Using Fast Fourier Transform, Yasuhiro Mori, Jun Sakamoto and Takayoshi Sekioka, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p696-699

Probability Density Function of Linear Systems Subjected to a Random Stream of Poisson Pulses, G. Muscolino and G. Ricciardi, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p388-391.

Random Field of Cumulative Damage by Space Debris Impact, A. Der Kiureghian, P. V. Geyskens and M. R. Khalessi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p668-671

Reliability Analysis of Bolted Wood Connections, William M. Bulleit and Dennis B. Decator, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p326-329.

Reliability Analysis of Masonry Walls, A. S. Al-Harthy and D. M. Frangopol, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p338-341

Resonances in Nonlinear Stochastic Systems, Agnessa Kovaleva, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p736-739.

Seismic Motion Incoherency Effects on Dynamic Response, Dan M. Ghiocel, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p624-627

SFE-Based Structural Reliability Analysis, Jun Zhang and Bruce Ellingwood, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p170-173.

Statistical Analysis of S-N Fatigue Data; Design Curve Based on Tolerance, C. L. Shen, P. H. Wirsching and G. T. Cashman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p470-473.

Statistical Characteristics of Strength and Load Random Variables of Ship Structures, Khaled Atua, Ibrahim Asvariables of sing Sutcuties, Riaded Atda, Israilli As-sakkaf and Bilal M. Ayyub, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p106-109.

Stochastic BEM-Random Excitations and Time-Domain Analysis, Sunil Saigal and Igor Kaljević, EM Apr. 96,

Stochastic Snow Load Process Model from Daily Climato-logical Data, Kenneth J. Fridley, (Probabilistic Mechan-ics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p2.10-213.

Strongly Nonlinear Stochastic Response of a System with Random Initial Imperfections, Jiff Náprstek, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p740-743

Variability Response Functions for Random Eigenvalue Problems, George Deodatis and Lori Graham, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p681-684.

Approximate Solutions to Nonlinear Random Vibration roblems and the Fokker-Planck-Kolmogorov Equation, David C. Polidori and James L. Beck, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p94-97.

An Approximation Method for Estimating Extremes of Narrow-Band Non-Gaussian Random Vibration, Arvid Naess and Tor Espen Hagen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-

cea D. Grigoriu, ed., 1996), p90-93.

Conditional Linearization in Nonlinear Random Vibration, R. N. Iyengar and D. Roy, EM Mar. 96, p197-200.

Moment Equations for Linear Systems Subjected to Poly-nomials of Filtered Poisson Processes, M. Grigoriu and F. Waisman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p262-265.

Non-Gaussian Elliptically Contoured ARMA Models, Mir-cea Grigoriu, EM Apr. 96, p334-341.

Performance of Multiple Mass Dampers Under Random Loading, Ahsan Kareem and Samuel Kline, ST Feb. 95, p348-361.

Random Response to Periodic Excitation with Correlated Disturbances, Zhikun Hou, Yunshen Zhou, Mikhail F. Dimentberg and Mohammad Noori, EM Nov. 96, p1101-1108.

Random Vibration of a Hysteretic Oscillator, Arvid Naess and Vibeke Moe, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p514-517.

Random Vibration of Mechanical and Structural Systems by T. T. Soong and Mircea Grigoriu, Dan M. Frangopol, EM Feb. 96, p184.

Random Vibrations of an Isochronous SDOF Bilinear Sys-tem with Secondary Structure, Mikhail Dimentherg and Philip Muller, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p958-961. Spectral Relative Motion of Two Structures due to Seismic Travel Waves, Van Jeng and Kazuhiko Kasai, ST Oct.

96, p1128-1135. Statistical Moments of Principal Stress-Related Quantities in Random Vibration Analysis, Ronald S. Harichandran and Mu-Tsang Chen, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p962-965.

Statistical System Identification of Structures Using ARMA Models, Joel P. Conte and Satyendra Kumar, (Probabilistic Mechanics & Structural Reliability, Dan M. Fran-

gopol, ed. and Mircea D. Grigoriu, ed., 1996), p142-145. Statistics of Fractional Occupation Time for Nonlinear Stochastic Response, Armen Der Kiureghian and Chun-Ching Li, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p116-119.

Synthesis of Correlated and Vector-Valued Time Series Based on Random Vibration for Nuclear Piping, Yong Zhao and D. A. Gasparini, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p748-751.

System and Input Identification with Partially Correlated Load Processes, K. Pan, N. P. Jones and J. H. Ellis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p138-141.

Torsion in Symmetric Structures due to Ground-Motion Spatial Variation, Ernesto Heredia-Zavoni and Federico

Barranco, EM Sept. 96, p834-843.

Random waves

Contributions to the Momentum Balance in the Surf Zone, Marien Boers and Jan van de Graaff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p257-268.

1990), p237-208.
Evaluation of the UK Coastal Research Facility, Richard R. Simons, Richard J. S. Whitehouse, Ruairi D. MacIver, Jonathan Pearson, Paul B. Sayers, Yingdao Zhao and Adrian R. Channell, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p161-172.

Experimental Study of the Flow Around a Breakwater, Mathieu Mory and Luc Hamm, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p501-512.

Fatigue Analysis with Random Loads, Igor Rychlik and Georg Lindgren, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p46-49.

goriu, et., 1990), p46-49. First Passage Time of Nonlinear Ship Rolling in Nonsta-tionary Random Seas, C. W. S. To and Z. Chen, (*Proba-bilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p250-253.

Model of Beach Profile Change Under Random Waves, Magnus Larson, WW July/Aug. 96, p172-181.

Parameterisation of Triad Interactions in Wave Energy Models, Y. Eldeberky and J. A. Battjes, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p140-148.

Zeidler, ed., 1996), p140-148.
Probabilistic Analysis of Complex Nonlinear Motions Under Combined Periodic and Random Excitations, Huan Lin and Solomon C. S. Yim, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p2-5.
Reproducibility of Beach Profiles and Sand Ripples Generated by Huge Waves, Masahiro Ito, Hiroshi Murakami and Takeshi Ito, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p698-708.
Response Statistics of Mogored Elozting Structures, Subject.

Response Statistics of Moored Floating Structures Subjected to General Nonlinear Random Wave Forces, Shunji Kato and Takashi Okasaki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p158-161.

Simulating Nature Wind Waves in a Wave Flume, John Z. Yim, C.-R. Chou and M.-Y. Lai, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p45-56.

Spatial and Temporal Fluctuations of Nearshore Currents Induced by Directional Random Waves, Yoshimi Goda and Tetsuya Mizusawa, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p269-280

Stochastic Response of Offshore Structures Excited by Drag Forces, Arvid Naess and Solomon C. S. Yim, EM May 96, p442-448.

Wave Propagation in Shallow Waters: Modelling and Real Data, José C. Santás and José M. de la Peña, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p128-139.

Wave Run-Up: Recent IBW PAN Investigations, Jerzy Ko-lodko, Jaroslaw Kapiński, Marek Szmytkiewicz and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p197-208.

Waves on a 1:100 Slope: Experiments and Numerical Models, G. Liberatore, M. Petti, M. Drago and M. Sclavo, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p355-365.

Adapting Water Resources of the Canadian Prairies under the impact of Climatic Warming, Thian Yew Gan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2163-2168.

Simulating Evapotranspiration on Semi-Arid Rangelands, G. N. Flerchinger, C. L. Hanson, W. P. Kustas and M. A. Weltz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p424-429.

Rapid transit railways

Amtrak Breaks Ground on High-Speed Rail, CE Aug. 96.

Comparison of High-Speed Rail and Maglev Systems, Fazil T. Najafi and Fadi Emil Nassar, TE July/Aug. 96, p276-

Computer Modelling and Simulation for High Speed Rail-way Applications, C. Ianniello, S. Savio and G. Sciutto, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p54-58.

Customer Oriented Train Scheduling in Underground Railway Systems, Riccardo Minciardi, Massimo Paolucci and Raffaele Pesenti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

p149-153.

EMC Issues in Electric Railway Traction Systems, M. Mazzucchelli, P. Pozzobon and G. Sciutto, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p44-48.

Experimentation of the ERTMS System on the Italian, German and French Railways, Daniel Lancien, Florian Kollmannsberger and Paolo Ripamonti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p30-38.

High-Speed Rail Meets Historic Station, CE Dec. 96, p8 High-Speed Rail Moves Ahead, CE Jan. 96, p8.

Impact of Commuter-Rail Services in Toronto Region, Sarah Stewart Wells and Bruce G. Hutchinson, TE July/ Aug. 96, p270-275.

A Model for the Design and Control of Urban Electric Traction Systems, O. Bottauscio and G. Farina, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p39-43.

The Tram Simulation in Helsinki - A New Research Meth-od, Jarkko Niittymäki and Kari J. Sane, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p76-80.

Rapid transit systems
Earle T. Andrews, ASCE's 98th President, Dies at 94, NE Sept. 96, p15.

On Concept of Lateral Change of Acceleration, Orhan Bay-kal, SU Aug. 96, p132-141.

South Korea Stabilizes Commuter Bridge, CE Apr. 96, p16,18.

Storm-Water Utility User Fee Credits, Andrew J. Reese, WR Jan./Feb. 96, p49-56.

Application of Neural Networks for the Performance Eval-uation of Bridges, Augusto V. Molina and Karen C. Chou, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p298-301.

Application of the Newton Method in Valve Discharge Coefficient Relationships, Jorge A. Garcia and Antonia M. Romero, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p946-953.

Contraction Scour at Bridges Founded on Clay Soils, W. R. Ivarson, F. Qadir and M. Phelps, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1358-1366.

The Maryland Bridge Scour Program, Stanley R. Davis and David D. Dec, Jr., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p469-478.

Maryland SHA's Procedure for Assessing Existing Bridges

for Scour Vulnerability and for Rating Unknown Foun-dations, Leonard N. Podell, Stanley R. Davis and Dan Sajedi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2766-2774.

Reactions, mechanics

Mechanical Behavior of Confined Reactive Powder Concretes, Éric Dallaire, Olivier Bonneau, Mohamed Lachemi and Pierre-Claude Aïtcin, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p555-563.

Ready mixed concrete

Effects of an Extended Set-Control Admixture on the Properties of Fresh and Hardened Concrete, Steven A. Ragan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1617-1626.

Reagration

Determination of Reaeration Coefficients: Whole-Lake Approach, Rakesh K. Gelda, Martin T. Auer, Steven W. Effler, Steven C. Chapra and Michelle L. Storey, EE Apr. 96, p269-275.

Lake/Reservoir Restoration Activities in Taiwan, Shaw L. Yu, Jan-Tai Kuo, Ching-Gung Wen, Shang-Lien Lo and Jen-Yang Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4208-4213.

Real-time programming

Applications of Predictive Numerical Simulations Using Calibrated Macroscopic Traffic Flow Models, Ronald Kates, Marcus Hoops and Hartmut Keller, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p394-397.

Dynamic Vehicle Allocation Under Real Time Information: Operational Considerations and Potential Efficiencies, Amelia C. Regan, Hani S. Mahmassani and Patrick Jaillet. (Applications of Advanced Technologies in Transpor-tation Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p690-694.

Hurricane Disaster Mitigation Through Real-time Wind Analysis, Mark D. Powell, Samuel H. Houston and Ignacio Ares, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p289-290.

Intranet Technology to Aid Engineers, CE Dec. 96, p20.

Neural Network Control for Accurate Rebar Bending, Phillip S. Dunston, S. (Ranji) Ranjithan and Leonhard E. Bernold, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p492-501.

Optimization of Water Supply System Operation, Vilas Ni-tivattananon, Elaine C. Sadowski and Rafael G. Quimpo, WR Sept./Oct. 96, p374-384.

Public Transport Priority in Real-Time Traffic Control Systems, N. B. Hounsell and J. P. Wu, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p71-75

The Rapid Simulation of a Signalised Road Network, Gor-don Russell, Neil Ferguson, Paul Shaw and John McInnes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p449-454.

Real-Time Traffic Control for Alternative Route Guidance Systems Based on the Dynamic Assignment Model, Reinhart D. Kühne, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Streamflow Forecasting for Han River Basin, Korea, Hait-ham M. Awwad, Juan B. Valdés and Pedro J. Restrepo, WR Sept./Oct. 94, p651-673.

Tennessee Tests Water Treatment, CE July 96, p20-21.

Using Probabilistic Balancing Rules in the Development of Multi-Purpose Multi-Reservoir Systems Operation Mod-els, Emmanuel U. Nzewi and Wen Chen, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1948-1955.

Verifying the Timing Requirements of Multiprocessor Con-trol Systems, John W. Baugh, Jr., (Analysis and Compu-tation, Franklin Y. Cheng, ed., 1996), p278-285.

Receiving waters

Assessing Water Quality Impacts of Stormwater Runoff, G. Fred Lee and Anne Jones-Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3103-3108.

Pilot Testing of a Zero-Discharge Treatment Process, Pascale Lagacé, Paul R. Stuart and Ronald Zaloum, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p99-104.

Flushing and Recharge of Inlet Channel for an Ephemeral Coastal River, Howard H. Chang and Daniel Pearson, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p659-668.

Optimal Well Locations for Groundwater Mound Control, Maili Wang and Kevin Lansey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p940-945.

Computation of Shallow Recirculating Flow Dominated by Friction, S. Babarutsi, M. Nassiri and V. H. Chu, HY

July 96, p367-372.

Drainage Recirculation Project for Water Quality, Kevin Johansen and Robert Stoddard, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1105-1110. Modeling Two-Dimensional Turbulent Offset Jets, Ruo-

chuan Gu, HY Nov. 96, p617-624.

Recreational Impoundments Retrofit of Existing and Design of New Facilities, Dream L. Atallah and Michael P. Rudinica, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2945-2950.

Fostering Reclamation through Cooperation, Cheryl K. Davis, Olujimi O. Yoloye and Mary Grace Pawson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Groundwater Recharge with Reclaimed Water Another Step Closer to Potable Reuse, William R. Mills, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3898-3903.

Reclamation

Fostering Reclamation through Cooperation, Cheryl K. Davis, Olujimi O. Yoloye and Mary Grace Pawson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3696-3700.

Morphological Impact Assessment of Artificial Islands for the Øresund Link Between Denmark and Sweden, Kar-sten Mangor, Andrew M. Driscoll, Ida Broker and Ann Skou, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p939-950.

Reclaiming Denver's Central South Platte River, Nick Skifalides, Leo Eisel, Brian Kolstad and Ben Urbonas (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3527-3532.

The Reclamation Drought Index: Guidelines and Practical Applications, Karen Weghorst, (North American Water nent Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p637-642.

Wetland Restoration in Southern North Sea Coastal Areas: The Experience of Britain and The Netherlands, Henk Smit and John S. Pethick, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3740-3745.

Reconnaissance

Furthering Local Knowledge of Earthquake Related Disasters, Experiences Learned from the Kobe Earthquake of January 17, 1995, David B. Swanson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p90-91.

Remotely Controlled Salvage Machines, Vladimir Kemurdjian, Anatoly Osipov, Boris Safonov and Peter Astafurov, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p206-212.

Use of a Technical Clearinghouse during Emergencies, Carl E. Mortensen, Richard K. Eisner, James F. Davis and Michael S. Reichle, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p309-310.

Reconstruction

The 1994 California State University, Northridge Earth-quake Experience - A Case Study, Gerry Simila, (Natu-ral Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p45.

Airfield Pavement Reconstruction at DFW International Airport, Dwain K. Brown and Darryl Boyd, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p140-150.

The Analysis of Freeway Reconstruction Impacts on Travellers, Vittorio Astarita, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996).

Apron Reconstruction at Kansas City International Airport, John R. Anderson and Renita M. Mollman, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka

Seneviratne, ed., 1996), p158-169.

Florida Department of Transportation Aviation Office Statewide Pavement Maintenance Management Program, J. David Scherling, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p263-272.

Lessons Learned from Multiphase Reconstruction Project, Raymond J. Krizek, Wei Lo and Ahmad Hadavi, CO Mar. 96, p44-54.

Major Brooklyn Interchange Being Upgraded, CE July 96, p12.

Orthotropic Steel Deck for the Williamsburg Bridge Reconstruction, R. B. Gajer, J. Patel and D. Khazem, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p491-498

Pavement Design for Rehabilitation and Minimizing Construction Effects on Aircraft Operations, R. Barry Pierce and Lino H. Neri, Jr., (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996),

p128-139.

Perspectives of Rebuilding Inner City Airports in the Emerging Post-Soviet Environment, V. L. Khazanet, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p34-44.

Reconstruction of Bergstrom Air Force Base to Austin-Bergstrom International Airport, James P. Amick and John Almond, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), pl-11.

U.S. Engineers See the Before and After in Kobe a Year after the Big Earthquake, NE June 96, p8.

Windsor Bridge Pier Repairs, Phillip Pierce and Joseph Mieczkowski, SC May 96, p79-81.

Records management

Korean Gas Company Digitizes Maps, Records, CE Dec. 96, p20.

Recovery planning

ASCE and American Red Cross Sign Pact on Disaster Aid, NE Oct. 96, pl.

The Debris Management Cycle: An Overview, Robert C. Swan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p171-172.

Housing Losses, Mary C. Comerio, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p167.

Recreation

Picacho Reservoir Enhancement Study for Water Recharge, Reparian Enhancement, and Water-Based Recreation Purposes, Ira Mark Artz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1413-1418.

Upper Mississippi River System Environmental Management Program (EMP), Doyle W. McCully, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3320-3325.

Recreational facilities

Benefits of the Santa Ana River Mainstern Project, William L. Zaun, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2176.

Design and Construction of Zero-Gravity Gymnasium, Pa-Trick Collins, Sunao Kuwahara, Tsuyoshi Nishimura and Takashi Fukuoka, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p200-

New Orleans Rolls the Dice (Available only in Structures Special Issue), Richard G. Weingardt and John F. Davis,

CE May 96, p3A-7A.

Recreational Impoundments Retrofit of Existing and Design of New Facilities, Dream L. Atallah and Michael P. Ru-dinica, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2945-2950.

Retrofitting an Urban Watershed for Improved Water Quality, David Ennis, Michael Clar, Candace Szabad and Chien Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4202-4207.

Swimming in Style, Gary Steficek, P.E., CE Aug. 96, p36-

Recruiting

Can A/E Grads Do Facility Design and Construction?, ME Sept./Oct. 96, p10-11.

Emerging High-Tech Areas of Civil Engineering Attract Women, Wesley Scott and Walter Boles, El Jan. 96,

Merit Shop Recruitment and Selection Practices in Alabama, Roger S. Wolters and Rebecca C. Burleson, CO June 96, p152-157.

Recursive functions

Optimization of Composite Highway Bridge Systems, M. Z. Cohn and J. J. Werner, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p135-146.

Concrete Reinforcement with Recycled Fibers from Carpet Industrial Waste, Youjiang Wang, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p792-798.

Coping with EPA's Storm Water Permit for Hazardous Waste Facilities, Industrial Landfills, Wastewater Treatment Plants, and Recyclers, James P. Amick, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2631-2635.

A Cost Effective Rehab Scheme for URM Structures, M. Ala Saadeghvaziri, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p262-

263

Design Considerations for the Use of Plastic Lumber in Structural Applications, Richard G. Lampo, Thomas J. Nosker and Richard W. Renfree, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1492-1500.

EcoBlocks: Nontraditional Use for Mixed Wastepaper, A. M. Springer, Marc Rose and Rich Ryu, EE May 96, p437-444

Effects of an Extended Set-Control Admixture on the Properties of Fresh and Hardened Concrete, Steven A. Ragan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1617-1626.

Evaluating Paint-Sludge Chars for Adsorption of Selected Paint Solvents, Byung R. Kim, Edward M. Kalis, Irving T. Salmeen, Carl W. Kruse, Ilham Demir, Stephen L. Carlson and Massoud Rostam-Abadi, EE June 96, p532-

The Fabric Dyers' Use of Recycled Water, Chuck Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Fly Ash and Tire Chips for Highway Embankments, M. Basheer, C. Vipulanandan and M. W. O'Neill, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Glascrete? - Disposing of Non-Recyclable Glass, Venkata S. Panchakarla and Millard W. Hall, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p509-518.

Low Temperature Solidification of CaCO, Using Hydro-thermal Hot-Pressing, Kazuyuki Hosoi, Toshiyuki Hashi-da, Hideaki Takahashi, Nakamichi Yamasaki and Takashi Korenaga, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p694-700.

Managerial Fuzzy Optimal Planning for Solid-Waste Man-agement Systems, Ni-Bin Chang and S. F. Wang, EE July 96, p649-658.

A New Kind of Rubber Drive, CE Nov. 96, p94-95.

Pilot Testing of a Zero-Discharge Treatment Process, Pascale Lagacé, Paul R. Stuart and Ronald Zaloum, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p99-104.

Potential of Waste Glass for Concrete Masonry Blocks, Christian Meyer, Stephen Baxter and Weihua Jin, (Mate-rials for the New Millennium, Ken P. Chong, ed., 1996), p666-673.

Recycling of Spent Abrasive Media in Nonstructural Con-crete, Matthew T. Webster and Raymond C. Loehr, EE Sept. 96, p840-849.

Risk Model Applied Backwards, Monica Maldonado, ET

Oct./Nov. 96, p1,7. Sand Reinforced with Shredded Waste Tires, Gary J. Foose, Craig H. Benson and Peter J. Bosscher, GT Sept. 96, p760-767.

Savannah River Recycles Metals, Saves Money, CE Oct.

96, p14.

30, p.14.
Strength Properties of Polyester Mortar Using PET and Fly Ash Wastes, Karim S. Rebeiz, Julia W. Rosett and Andrew P. Craft, EV Apr. 96, p10-20.
Technology Development and Sustainable Construction, Yasuyoshi Miyatake, ME July/Aug. 96, p23-27.

Use of Recycled Aggregates for Pavement, S. Abdol Chini, Timothy J. Sergenian and Jamshid M. Armaghani, (Ma-terials for the New Millennium, Ken P. Chong, ed.,

1996), p154-162.

Utilization of Recycled Fibers in Concrete, H. C. Wu, Y. M. Lim, V. C. Li and D. J. Foremsky, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p799-808.

The Water Customer in Space, Tony Rachwal, Colin Waters and Tony Wachinski, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p663-667.

After Oklahoma City, Structural Redundancy Should Be Required, A. Longirow, CE Feb. 96, p28,31

Building Codes Exist for Progressive Collapse, J. Jeff Davies, P.E., CE July 96, p31-32.

Conceptual Seismic Design Methods for Railroad Bridges, Zolan Prucz, Kenneth E. Bruestle and Vinaya Sharma, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p191-198.

Implementation of Structural Redundancy in Bridge Design
— A Probabilistic Approach, Robert W. Kritzler and
Jamshid Mohammadi, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and
Jamshid Mohammadi, ed., 1996), p682-687.

Loading and Material Behavior Effects on System Redun-dancy, Dan M. Frangopol and Keito Yoshida, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p674-681.

Redundancy of Prestressed Concrete I-Beam Bridges, Michel Ghosn and Fred Moses, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p688-695.

Repetitive Member Adjustment for Wood Structural Design, Ron Wolfe and Steve Cramer, (Building an International Community of Structural Engineers, S. K. C ed. and Jamshid Mohammadi, ed., 1996), p804-811

Structural Redundancy and Fracture in Composite Lattice/ Skin Structures, A. K. Maji, E. Fosness and D. Satpathi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

System Factors for Design of Wood Structural Assemblies, Bradford K. Douglas and Philip Line. (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p798-

Updates on Steel Moment Frames, David Bonowitz, CE Aug. 96, p30.

Evaluation of Select Trade-Offs between Ground-Water Remediation and Waste Minimization for Petroleum Refining Industry, Craig D. Andrews, William F. McTer-nan and Keith D. Willett, EY Aug. 96, p41-60.

Modeling Ground-Water Remediation at an Oil Refinery, Ko-Hui Liu and Greg McNulty, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p824-835

Defect Detection (Available only in Geo/Environmental Special Issue), Tracy Brettmann and Larry Olson, CE July 96, p2A-6A.

Exterior Reflections in Elliptic Harbor Wave Models, Bingyi Xu, Vijay Panchang and Zeki Demirbilek, WW May/June 96, p118-126.

Wave Forces on an Array of Vertical Cylinders, Shohachi Kakuno, Yoshihiro Nakata and Philip L.-F. Liu, WW May/June 96, p147-149.

Integrating the Refraction Seismic Method into Stream Crossing Characterization for Scour and Excavation Conditions, Michael L. Rucker, (Uncertainty in the Geologic Environment: From Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1163-1177.

Regeneration

Ozone Layer Could Regenerate, CE Feb. 96, p8.

Regeneration of Adsorbents Using Heterogeneous Photoca-talytic Oxidation, Junbiao Liu, John C. Crittenden, David W. Hand and David L. Perram, EE Aug. 96, p707-713.

Rainfall Depth—Duration Relationship for South Italy, Vito Ferro and Vincenzo Bagarello, HE Oct. 96, p178-

Salary Growth Slows for Civils; Location a Major Factor, Says New ASCE Survey, NE May 96, p1,5.

Salys New Asia: Survey, New Jong 20, 1913.

Water Use "Recession" in San Diego Region, James Zhou, Kenneth A. Steele and Richard C. Pyle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2958-2963.

Regional development

The Three Gorges Project: Relocation of Reservoir Popula-tion, Chien-kuo Lo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3841-3846.

Consensus Building Model to Select CASIS in Small Communities, Steven W. McCrary, Colin O. Benjamin and Vijay E. Ambavanekar, UP June 96, p46-70.

Identification of Regional (Third Party) Impacts Associated with the Truckee River Operating Agreement, Charles Borda, Tom MacDiarmid, Rangessan Narayanan, Thomas Harris, Karl MacArthur and Shawn Stoddard, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4036-4041.

An Introduction to Taipei Suburban Sewage Collection and Treatment Systems, Chiang-Tsai Lin and Der-Liang Sheen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3170-3175.

Optimal Regional Scheduling of Solid Waste Systems. I: Model Development, Jess W. Everett and Abhijit R. Modak, EE Sept. 96, p785-792.

Optimal Regional Scheduling of Solid Waste Systems. II: Model Solutions, Abhijit R. Modak and Jess W. Everett,

EE Sept. 96, p793-799.

Regional Flood Frequency with Hierarchical Region of Influence, Zolt Zrinji and Donald H. Burn, WR July/Aug. 96, p245-252

Resettlement of the Three Gorges Project in China, Wenzheng Ma and Zonglou Guo, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3847-3851.

Registration

Grounded by History: Airports and Historic Resources, Charlene K. Roise, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p223-233

Trademark Mention, Dana H. Toups, CE Feb. 96, p32.

Regression analysis

Regression analysis
Analysis of Bivariate Censored Low Flows, Shiping Liu,
Jye-Chyi Lu and Cemal Unal, HY Feb. 96, p97-103.

Average and Peak Traffic Volumes: Neural Nets, Regression, Factor Approaches, Pawan Lingras and Mario
Adamo, CP Oct. 96, p300-306.

Development of a Robotic Bridge Painting System, Yong Bai and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p185-191.

Estimation of High Spring Floods Causing Inundation in Non-Studied Rivers of the West Siberian Plain, E. A. Asabina, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3702-3703.

Minimizing Uncertainties in Geotechnical Investigations, Yakov M. Reznik, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p149-166.

Modeling Uncertainty in Prediction of Pier Scour, Peggy A. Johnson and Bilal M. Ayyub, HY Feb. 96, p66-72. Peak Outflow from Breached Embankment Dam, David C.

Froehlich, WR Jan./Feb. 95, p90-97.

Predicting Breakup Ice Jams Using Logistic Regression, Kathleen D. White, CR Dec. 96, p178-189.

Regression and Inverse Analyses in Regional Ground-Water Modeling, Andrew R. Piggott, A. Ghosh Bobba and Kent S. Novakowski, WR Jan./Feb. 96, p1-10.

Urbanization and Hydrologic Consequences in Simi Valley, California, M. Ali Tabidian, James M. Evensen, Jr., Don D. Adelman and Steve Elliott, (North American Water

D. Adeiman and Steve Elmott, (Norm American Water, and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3332-3337.
Wind-Induced Failures of Steel Roof Decks, Víctor Figueroa Díaz, Ali Saffar, Samuel I. Díaz Santiago and Bernardo Deschapelles, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p894-897.

Regression models

Measuring and Modeling Dynamic Loads Imposed by Moving Crowds, A. Ebrahimpour, A. Hamam, R. L. Sack and W. N. Patten, ST Dec. 96, p1468-1474.

Nonequilibrium Thermodynamical Model for Spent Fuel Dissolution Rate, Ray B. Stout, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p393-395.

Regulated flow

Impact of Reservoir Flood-Control Operation on Interior-drainage Facilities, Michael Lindquist, David Ford and Pete Hall, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2939-2944.

The Case Against Markets, Joseph W. Dellapenna, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p. 293-2938. Managing Great Lakes Water Levels: An International Partnership, Anthony J. Eberhardt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1317-1322.

President Nominates ASCE Fellow to NIBS Board, NE Sept. 96, p15.

Reflections on the Regulatory Reform Debate, Leonard Shabman, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed.

and Eugene Z. Stakhiv, ed., 1996), p1-9. Simulation of Interaction between Canal Regulation and Groundwater, Hsin-Chi J. Lin and Hwai-Ping Cheng. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1587-1591.

White House Proposes Design-Build Regulation, Michael

Charles, CE Oct. 96, p116.

Biosphere Modelling for Radioactive Waste Disposal, Richard A. Klos and Frits Van Dorp, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p237-239.

Classroom Simulation of Public Involvement in H.L.W. Issues Featuring STS Concepts, Z. T. Bieniawski, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p505-506.

Critical Groups for Geological Disposal Performance As-sessments, Graham M. Smith and John Kessler, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p234-236.

Dense Organic Liquids Reduce GA-4 Reactivity Margin, B. Snyder, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p333-335.

Discussion of Environmental Engineering Forum:
Backflow Prevention and Water Quality in Residential Sprinkler Systems (September/October 1993, Vol. 119, No. 5, by Thomas M. Walski (Environmental Engineering Forum)), Ralph E. Wilbur, EE Jan. 96, p80-82.

Economic Efficiency of Regulations for Allocation and Control of Surface Water Withdrawals in Humid Regions, J. Wayland Eheart and Kenneth W. Harrison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2713-2718.

Final WIPP Compliance Criteria (40 CFR Part 194), Mary

Kruger and Elizabeth Forinash, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p224-225.
Future Changes/Improvements in Construction Safety, Enno "Ed" Koehn and Mahendar R. Surabhi, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p121-128.

1990), p121-128.
Indoor Environmental Quality Needs Warrant Multi-Faceted Actions, David A. Harris, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p77-83.
Intended Validation in the Swedish Program for Spent Nu-

clear Fuel, Bjorn Cronhjort and Grant Sheng, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p67-69.

Issues in Risk Perception and Communication of Impor-tance to a Regulator: Results of an International Seminar Sponsored by HMIP, Daniel A. Galson, Roger D. Wil-mot and Ray V. Kemp, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p502-504.

Keys to Opening the Nation's First Deep Geological Re-pository in 1998, Michael H. McFadden and Leif G. Eriksson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p220-223

Liability of Engineers When Wetlands Laws Change, Peter J. Coote, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p970-975.

Management of Contaminated Groundwater Using Natural Attenuation, David F. Laney, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2011-2020. Methodology to Group DOE Fuels for the Purpose of Repository Technical Acceptance, Robert Einziger, Ray Stout, Henry Loo and Scott Gladson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p432-434.

No More Bullish Predictions, CE Dec. 96, p13-14.

NRC's Refocused Prelicensing High-Level Waste Regula-tory Program, M. V. Federline, R. L. Johnson and J. T. Greeves, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p196-198.

oli Spills: Prevention, Prediction, and Preparation, Richard E. Burke, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p770-775.

OSHA Safety Regulations, CE Nov. 96, p28.

Pipeline Crossings and the Corps Regulatory Process in New England, Karen Kirk Adams and David H. Killoy, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p409-417.

Regulatory Assessment of Evapotranspiration at Yucca Mountain, Neil M. Coleman and Michael P. Miklas, (High Level Radioactive Waste Management, Technical

Program Committee, 1996), p199-200.

Regulatory Perspective on Future Climates at Yucca Mou egutatory Perspective on Future Climates at Yucca Moun-tain, Neil M. Coleman, Norman A. Eisenberg and David J. Brooks, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p255-257.

Site Selection and Evaluation of Geological Disposal of Radioactive Waste: Regulatory Aspects, G. Guentchev and L. Katzarska, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p86-88.

Storm Water General Industrial Permit Non-Filers Identification and Outreach, L. Donald Duke and Y. Jae Chung, (North American Water and Environment Con-& Destructive Water, Chenchayya Bathala, ed., 1996), p2619-2624.

The Tracks of a Contractor's Tiers, CE Nov. 96, p95.

Use of Expert Judgment in the HLW Regulatory Program: U.S. NRC Staff Draft Guidance, Janet P. Kotra, Michael P. Lee, Norman A. Eisenberg and Aaron R. DeWispelare, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p247-249.

Use of Limited Information in a License Application to Construct a Repository, J. Michael McGarry, III and F. Stanley Echols, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p201-204.

Use of Radio Frequency Spectrum in Lunar Environment, Shayla E. Davidson and Robert M. Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p847-853.

A User's Guide to Federal Architect - Engineer Contracts, 2nd edition, James B. Goodowens, 1996, 0-7844-0145-4,

Who Springs for Water? Eric Rasmussen, CE Sept. 96, p65-67.

Rehabilitation

Aluminum Has History, Kurt P. Thompson, CE Sept. 96,

Are Bridge Conditions Improving Under Bridge Management: A Panel Discussion, Bojidar S. Yanev, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p282-289.

Balancing on the Tides, Boris Levintov, P.E. and Joseph Klein, P.E., CE Oct. 96, p48-51.

Bridge Deck Performance and Rehabilitation: A Reliability-Based Analysis, Paul D. DeStefano and Dimitri A. Grivas. (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1072-1081.

Bridge Rehabilitation Permits Higher Live Loads, Dennis W. Stolldorf, P.E. and Thomas A. Holm, P.E., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1082-1090.

Community Involvement Drives Chicago Viaduct Reconstruction, CE Apr. 96, p10.

Composite Bridge Reopens Trail to Historic Lighthouse, CE Apr. 96, p96.

A Cost Effective Rehab Scheme for URM Structures, M. Ala Saadeghvaziri, (Natural Disaster Reduction, Georg W. Housner, ed. and Riley M. Chung, ed., 1997), p262-

Design Methodology for Strengthening of Continuous-Span Composite Bridges, H. A. El-Arabaty, F. W. Klaiber, F. S. Fanous and T. J. Wipf, BE Aug. 96, p104-111. Determining Rehabilitated Sewer Flow Capacity, ASCE Task Committee on Flow Characteristics of Pipeline Infrastructure Committee of the Pipeline Division, TE May/June 96, p258-261.

Barsoom, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p97-104.

Development of a Miter Gate Reliability Model, D. B. Cleary, C. J. Hookham and J. W. Waller, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p862-865.

Effect of Welding on a High-Density Polyethylene Liner, Reda M. Bakeer and Michael E. Barber, MT May 96,

An Elevated Train Rises Again, CE Nov. 96, p10. Engineering Vietnam's Waterways, CE July 96, p8.

Evaluation and Rehabilitation of Victoria Bridge, G. Oommen, A. Lim and S. Tselios, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p207-214.

Evaluation of Bridge Strengthening Measures Using Forced Vibration Tests, Kosal Krishnan, Frieder Seible and Ger-ald Pardoen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

Mohammadi, ed., 1996), p845-852.

Evaluation of Reliability of Pile-Supported Structures, Wil-liam M. Isenhower and Reed L. Mosher, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p666-684.

An Expert System as Support in Maintenance of Road Pavement Surface, P. Giannattasio, M. Crispino, V. Nicolosi, G. Ambrosino and M. Boero, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p500-504.

Feds Study Seismic Guidelines, CE Dec. 96, p8.

The FEMA Program of Seismic Safety of Buildings, Ugo Morelli, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p159-160.

A Finite Element Damage Model for the Evaluation and Rehabilitation of Brick Masonry Shear Walls, Luigi Gambarotta and Sergio Lagomarsino, (Worldwide Ad-vances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p72-81.

Firehouse Becomes Building-Trade Classroom for Women,

CE June 96, p10.

Florida Department of Transportation Aviation Office Statewide Pavement Maintenance Management Program, J. David Scherling, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p263-272.

The French Experience in Bursting Rehabilitation for Pipe-line Crossings, Y. G. Diab and P. Perrotin, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996),

p. 10. Stale Fatigue Test of the Williamsburg Bridge Orthotropic Deck, Mark R. Kaczinski, Frank E. Stokes, Peter Lugger and John W. Fisher, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p. 329-336.

Genetic-Algorithm Programming of Road Maintenance and Rehabilitation, T. F. Fwa, W. T. Chan and C. Y. Tan, TE

May/June 96, p246-253.

Golden Gate Bridge Gets Its Color Back, CE Sept. 96, p12. Grand Plans for Grand Central, CE Apr. 96, p24.

Guidelines and Commentary for the Seismic Rehabilitation of Buildings (ATC - 33), L. D. Reaveley, D. Shapiro, J. Moehle, T. Atkinson, C. Rojahn and W. Holmes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1123-1130.

High-Speed Rail Meets Historic Station, CE Dec. 96, p8. HMA Overlays to Rehabilitate PCC Pavements, Dale S. Decker and Matthew W. Witczak, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1418-1428.

An Interception by Boston, Dennis J. Doherty, P.E. and Irene McSweeney Woodfall, P.E., CE Oct. 96, p45-47.

Longest Suspension Bridge Overhauled, CE Feb. 96, p19-

Marine Borers are Back, Vahan Tanal and Alex Matlin, CE Oct. 96, p71-73.

Materials for the New Millennium, 2 vols., Ken P. Chong, ed., 1996, 0-7844-0210-8, 1776pp.

Meeting the Challenge: Rebuilding Inner City Airports, Pri-anka Seneviratne, ed., 1996, 0-7844-0179-9, 300pp.

Nationally Applicable Guidelines for the Seismic Rehabiliattonary Applications for the session Renamination of Existing Buildings, Christopher Rojahn, Daniel Shapiro, Lawrence D. Reaveley, William T. Holmes, Jack P. Moehle, James R. Smith and Ugo Morelli, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p276-277.

New Materials and Methods for Insitu Rehabilitation of Underground Pipe, Richard D. Blackmore, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1298-

Non-Federal Flood Control Works Inspection Program, Jim Crum, Ruh-Ming Li and Henry M. Fehlman, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1796-1800.

The O'Hare International Airport Pavement Management System, Margaret Broten, George Schwandt and William Weiss, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p273-283.

Offshore Platform's Failure and Repair - Case Studies, T. S. Thandavamoorthy and A. R. Santhakumar, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p181-182.

On the Use of Fiber Reinforced Composites for Infrastruc-ture Renewal— A Systems Approach, Vistasp M. Kar-bhari, Frieder Seible and Gilbert A. Hegemier, (Materi-als for the New Millennium, Ken P. Chong, ed., 1996), p1091-1100.

Optimal Rehabilitation of Locally Damaged Structures Using the Pseudo Distortion Method, Prafulla V. Makode, Ross B. Corotis and Martin R. Ramirez, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p606-612

Oregon Engineers Repair Century-Old Catenary-Shaped

Sewer, CE Feb. 96, p83.

Panel on Composites for Infrastructure, Srinivasa Iyer, Charles McClasky, Mark P. Henderson, Hota GangaRao and Peter Head, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p781. Pigging Submarine Outfalls, Jonathan A. French, EE May 95, p396-401.

Plumbing the Quality of a Sewer System, Thomas M. Galeziewski, Samuel A. Edmondson and Robert Webb,

CE Jan. 96, p55-57.

Precast Concrete Low-Head Pressure Pipe Significant in Historic Irrigation Canal Rehab, John J. Meyer and Steven K. Wagner, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p265-274.

Preserving Williamsburg's Cables, Maria Grazia Bruschi and Terry L. Koglin, ČE Mar. 96, p36-39.

Probabilistic Assessment of Miter Gates, Nathan M. Kathir, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p866-869.

Ranking Models Used for Condition Assessment of Civil Infrastructure Systems, L. E. Chouinard, G. R. Andersen and V. H. Torrey, III, IS Mar. 96, p23-29.

Rehab by Helicopter, Hans H. Torabi, Harold B. Tennat, A. John Burnell and Thomas C. Benson, Jr., CE Jan. 96,

Rehabilitating Arctic Tundra in Alaska, Jay D. McKendrick, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p764-769.

Rehabilitation of a Concrete Bridge Using FRP Laminates, Joseph W. Tedesco, J. Michael Stallings, Mahmoud El-Mihilmy and Michael W. McCauley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p631-637.

Rehabilitation of Masonry Buildings per the ATC-33 Guidelines, Daniel P. Abrams, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1131-1138. Rehabilitation of Steel Beams Using Composite Materials, William Edberg, Dennis Mertz and John Gillespie, Jr.,

(Materials for the New Millennium, Ken P. Chong, ed., 1996), p502-508.

551

Rehabilitation of Taxiway "NB" at IAH with Concrete Overlay, Adil Godiwalla, Keith E. Chapman, Charles Juhasz, William Stamper and Wayne Overman, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p.170-186.

Reliability Analysis in the Rehabilitation of Corps Structures with Time-Dependent Needs, Mary Ann Leggett, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene

Z. Stakhiv, ed., 1996), p134-141.

Returning Veteran, Charles A. Baumgartner and William E. Beyer, CE Apr. 96, p68-71.

Risk Based Analysis of Major Rehabilitation of Hydraulic Structures Using REPAIR, David Moser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2498-2503.
San Diego's Historic Dulzura Conduit: New Solutions, Hans H. Torabi and Harold B. Tennant, (*Pipeline Cross-*

ings 1996, Lawrence F. Catalano, ed., 1996), p340-347.

Scary Bridge Rehabbed for Economic Boon, CE Mar. 96, p12,14.

Seepage Stoppers, V. J. Hebert, P.E., Juan Lelito, P.E. and A. Naudts, CE Oct. 96, p68-70.

Seismic Isolation of Bridges in New York City, Jagtar S. Khinda and Feng-Bao Lin, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p24-32.

Seismic Rehabilitation of a Non-Ductile Concrete Frame

Building Using Shearwalls, Paul A. Murray and James Building Using Shearwalls, Paul A. Murray and James H. Parker, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p373-380.

Seismic Rehabilitation of Earth Dams, W. F. Marcuson, III, P. F. Hadala and R. H. Ledbetter, GT Jan. 96, p7-20.

Simple Method for Upgrading an Existing Reinforced-Concrete Structure, Hong Sioe Oey and Carlos J. Al-drete, SC Feb. 96, p47-50.

Subjective Probability Assessment in Water Resources Planning, Charles Yoe, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p294-314. Success or Failure: A Tale of Two Projects, Dov Kam-

inetzky and Benjamin Lavon, CE June 96, p62-63. Tenneco's Risk Management Approach to Pipeline Crossings, J. S. Street and J. C. Bowles, (Pipeline Crossings) 1996, Lawrence F. Catalano, ed., 1996), p14-21.
Unique Pile Combination Supports New Tennis Complex,

CE Dec. 96, p10,12

Wastewater System Design and Evaluation, Leonard Bell and Troy Norris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p949-957.

Willie B in the Doghouse, CE June 96, p14,16.

Windsor Bridge Pier Repairs, Phillip Pierce and Joseph Mieczkowski, SC May 96, p79-81.

Reinforcement

Behavior of RC Bridge Decks with Flexible Girders, L. Cao, J. H. Allen, P. B. Shing and D. Woodham, ST Jan. 96, pl 1-19.

Collapse of Geogrid-Reinforced Retaining Structure, Gerald A. Leonards, J. David Frost and Jonathan D. Bray, CF Nov. 94, p274-292.

Corrosion Effects of Cement Stabilized Backfill on Galvanized Steel Reinforcement, S. N. Popova, B. N. Popov, R. E. White, M. F. Petrou and D. Morris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p988-

Crack Growth in Uniaxially Aligned Fiber Reinforced Mor-tar, Mohsen A. Issa and A. B. Shafiq, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p624-627. Creep Behavior of FRP-Reinforced Wood Members, Niko-

laos Plevris and Thanasis C. Triantafillou, ST Feb. 95, p174-186.

Creep Deformation and Stress Relaxation in Preloaded/ Prestressed Geosynthetic-Reinforced Soil Retaining Walls, Fumio Tatsuoka, Taro Uchimura, Masaru Tateyama and Katsumi Muramoto, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p258-272. Effect of Geogrid Reinforcement in Model Track Tests on

Pavements, Fereidoon Moghaddas-Nejad and John C. Small, TE Nov./Dec. 96, p468-474.

Evaluation of Bridge Decks and Pavements at Highway Speed using Ground Penetrating Radar, Kenneth R. Maser. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p820-828.

Failure of Fiber-Reinforced Granular Soils, Radoslaw I Michalowski and Aigen Zhao, GT Mar. 96, p226-234.

Michaiowski and Aigen Zhao, G1 Mar. 96, p226-234. Historic Concrete Structures Assessment and Repair, Je-rome P. O'Connor, James M. Cutts and Gregory R. Yates, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1055-1062. Hybrid Columns of FRP and Concrete, Mohsen Shahawy, Amir Mirmiran and Michel Samaan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p73-82. Hybrid Moment Resisting Precast Beam-Column Connec-

Hybrid Moment Resisting Precast Beam-Column Connections, John Stanton, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p266-277.

Laboratory and Field Electrochemical Monitoring Techniques of Reinforcement Corrosion, C. Andrade and C. Alonso, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1501.

Premature Deterioration of Concrete Structures—Case Study, Ishtiaque Ahmed and M. Zakaria Ahmed, CF

Nov. 96, p164-170.

Re-Assessment of Concrete Bridges, P. Thoft-Christensen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p613-620.

Sand Reinforced with Shredded Waste Tires, Gary J. Foose, Craig H. Benson and Peter J. Bosscher, GT Sept. 96, p760-767.

Shear Strength of Reinforced Geosynthetic Clay Liner, Robert B. Gilbert, Federico Fernandez and David W. Horsfield, GT Apr. 96, p259-266.

Standard Specifications for Structural Concrete (ACI 301-96) by ACI Committee 301, AE Sept. 96, p120.

Static Behavior of Noncomposite Concrete Bridge Decks under Concentrated Loads, Michael F. Petrou, Philip C. Perdikaris and Mingzhu Duan, BE Nov. 96, p143-154.

Strengthening Requirements of Old, Timber Warren Truss-es, H. C. Foo and G. Akhras, CF Aug. 96, p127-134. Structural Strength of Bridge Decks Reinforced with Weld-ed Wire Fabric, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Sept. 96, p989-997.

Reinforcing steels

Concrete/Reinforcing Steel Bond Strength of Low-Temperature Concrete, Herbert P. Schroeder and Thomas B. Wood, CR June 96, p93-117. Coring Technique Reinforces Historic Masonry, CE May

96, p13-14.

Corrosion-Resistant Steel Reinforcing Bars, David Darwin, Carl E. Locke, Jr., Matthew R. Senecal, Shawn M. Schwensen and Jeffrey L. Smith, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p482-491.

Evaluation of Bond Characteristics of Steel and Glass-Fiber Reinforcing Bars, James R. Lundy and Damian I. Ka-chlakev, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p638-647. Evaluation of Grout Materials for Anchor Embedments in

Hardened Concrete, Willie E. McDonald, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p958-

Evaluation of Reliability of an Existing Concrete Bridge: A Case Study, Andrew Scanlon, (Probabilistic Mechanics

Case Study, Andrew Scanion, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p522-525.
Evaluation of the Performance of Sprayed Zinc Anodes for Protecting Reinforcing Bars, John S. Tinnea and R. P. Brown. (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1531-1539.

Field Performance of FRP Composite Prestressing Cables, Richard G. Lampo, David E. Hoy and Robert J. Odello, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p400-408.

Fundamental Modeling of Chloride Diffusion in Concrete, Pankaj. Arora, B. N. Popov and R. E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p203-212

The Nature of Passivity of Reinforcing Steel, Farrel Martin and Jan Olek, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1111-1120.

New Alloy Prevents Corrosion, ET Oct./Nov. 96, p1.9.

On Estimating the Effect of Passivating Inhibitors on the Time for Corrosion Initiation of Steel in Concrete, A. A. Sagüés, S. C. Kranc and R. G. Powers, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1522-1530.

Sensitivity Analysis of the Seismic Capacity for a RC Silo Due to Variance of Its Material Properties, Takeshi Kitahara and Hitoshi Seya, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p530-533.

The Use of Xypex Admixture to Concrete as an Inhibitor to Reinforcement Steel Corrosion, Robert J. Scancella, (Materials for the New Millennium, Ken P. Chong, ed.,

1996), p1276-1280.

Relative density

Correlations Between a Simple Field Test and Relative Density Test Values, Danny K. McCook, GT Oct. 96,

Determining Relative Density of Sands from CPT Using Fuzzy Sets, C. H. Juang, X. H. Huang, R. D. Holtz and J.

W. Chen, GT Jan. 96, p1-6.

Posttesting Correction Procedure for Membrane Compliance Effects on Pore Pressure, Atilla M. Ansal and Ayfer Erken, GT Jan. 96, p27-38.

Setup and Relaxation in Glacial Sand, Donald L. York, Walter G. Brusey, Frank M. Clemente and Stephen K. Law, GT Sept. 94, p1498-1513.

Relaxation, mechanics

Age, Deformation, and Temperature Effects of Viscoelastic Materials Under Large Deformations, Ashok Gurjar, Tianxi Tang, Dan Zollinger and Kenneth Slavick, (Mate-rials for the New Millennium, Ken P. Chong, ed., 1996), p1398-1407.

Setup and Relaxation in Glacial Sand, Donald L. York, Walter G. Brusey, Frank M. Clemente and Stephen K. Law, GT Sept. 94, p1498-1513.

Theory and Simulations of Relaxation and Cyclic Granular Flows, Marijan Babic and William J. Bocchieri, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p108-111.

Reliability

Reliability
Achieving Reliable Designs for Pipelines Traversing Unstable Slopes, Dimitri A. Grivas, Chakravarthy Bhagvati, B. Cameron Schultz, Verne C. McGuffey, Gregg O'Neil and Gordon Simmonds, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p426-433.
Application of a Reliability-Based Fatigue Life Model to a Gas Turbine Engine Structure, Robert G. Tryon, Thomas A. Cruse and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mijrea D. Grigoriu ed. 1996), p636-639.

and Mircea D. Grigoriu, ed., 1996), p636-639.

Application of the Concurrent Finite Element Method to Solution of the Fokker-Planck Equation, W. Yi, B. F. Spencer, Jr. and L. A. Bergman, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p10-13.

Asymptotic Approximation of Reliability Integrals for Un-certain Systems, C. Papadimitriou, J. L. Beck and L. S. Katafygiotis, (*Probabilistic Mechanics & Structural Re*liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p574-577.

Autoregressive Decision Rule in Aggregated Reservoir Op-eration, Qingfu Liang, Lynn E. Johnson and S. Mohan, WR Nov/Dec. 96, p438-440.

Boolean Modeling and Analysis of Smart Material Properties, S. Dobson, M. Noori and A. Crespo, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p838-841.

553

- Bridge Deck Performance and Rehabilitation: A Reliability-Based Analysis, Paul D. DeStefano and Dimitri A. Grivas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1072-1081.
- Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.
- A Combined Fuzzy and Random-Set Approach to the Multiobjective Optimization of Uncertain Systems, Alberto Bernardini and Fulvio Tonon, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p314-317.
- Construction of Performance Contours on the Storage-Yield Plane of a Within-Year Reservoir System, K. Sudhir and K. Srinivasan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2951–2957.
- The CSG 2000 Programme: Modernising Europe's Spaceport for the Next 20 Years, Juan de Dalmau, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p413-418.
- Design of Optimal Reliable Multiquality Water-Supply Systems, Avi Ostfeld and Uri Shamir, WR Sept/Oct. 96, p322-333.
- Determining Bridge Inspection Requirements for Fatigue Damage Using Reliability, Theodore Hopwood, II, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p454-457.
- Development of Design Factors for Redundant Concrete Bridges, Michel Ghosn, Youhong Hang and Fred Moses, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p716-719.
- Effect of Concrete Workmanship on Strength Reliability of R/C Beams, E. H. Khor, D. V. Rosowsky and M. G. Stewart, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p.238-241.
- Effects of Testing, Inspection and Repair on the Reliability of Offshore Structures, Guoyang Jiao and Oddvar I. Eide, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p154-157.
- Engineering Judgment in the Evolution from Deterministic to Reliability-Based Foundation Design, Fred H. Kulhawy and Kok Kwang Phoon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p29-48.
- Evaluating Risk to the Environment from Mining Using Failure Modes and Effects Analysis, Kelvin Dushnisky and Steven G. Vick, Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p848-865.
- A Finite Element Based Probability Contouring Method for Structural Analysis, David S. Riha, Harry R. Millwater, George Vellathottam and P. R. Perumalswami, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p922-925.
- Hydrologic Risk, Robert C. Patev, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p416-418.
- The Impact of Multiple Failure Modes in Risk Analysis for Civil Infrastructure Management, James H. Lambert, Lori R. Johnson and Yacov Y. Haimes, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p80-105.
- Improvement of Road Network Reliability under Different Route Choice Principles, Shinji Nakagawa, Hiroshi Wakabayashi and Yasunori lida, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p594-598.

- Incorporating Damage Control in Structural Design, Dan M. Frangopol, Marek Klisinski and Kai-Yung Lin, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p598-605.
- Issues Related to Intelligent Bridge Monitoring, A. Emin Aktan, Arthur J. Helmicki and Victor J. Hunt, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p750-757.
- Limit State Design Method of Structural System Using Reliability-Based Optimization and Efficient Monte-Carlo Simulation Technique. Wataru Shiraki, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p635-642.
- Load Space Formulation for Reliability Estimation of Complex Structures, X. L. Guan and R. E. Melchers, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p688-691.
- Low Building Wind Load Variability for Code Applications, T. C. Eric Ho, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1053-1060.
- Measures of Water Distribution System Reliability, Rafael G. Quimpo, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p388-395.
- A Method for Structural Reliability Analysis of Marine Structures Using Combined Plate and Frame Structure Models, Hiroo Okada, Koji Masaoka, Yoshisada Murotsu, Shigeyuki Hibi and Wataru Kiyokawa, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p150-153.
- Model Uncertainty for the Advection-Dispersion Equation, Wade E. Hathhorn, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p881-896.
- Modeling Reliability of Train Arrival Times, L. Ferreira and A. Higgins, TE Nov./Dec. 96, p414-420.
- Monitoring Stable Crack Propagation in Metals, Luis A. de Bejar, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p890-893.
- A Multi-Loop Strategy for Performance-Based Optimization with Probabilistic Constraints, Robert H. Sues, David R. Oakley and Graham S. Rhodes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p126-129.
- A New Method for Efficient Reliability-Based Design Optimization, Y.-T. Wu and W. Wang, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p274-277.
- On Communicating Hydrologic Risk, Rafael G. Quimpo, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p265-271.
- Optimum Reliability-Based Design Earthquake Load, Jun Kanda and Khaled A. Ahmed, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p194-197.
- Performance Characteristics of a Smart Hinge for Solar Array Deployment, Dirk B. Warnaar and Rodney G. Galloway, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1162-1168.
- Performance Evaluation of Dual-Level Versus Current Design Using 1994 Northridge Earthquake Records, K. J. Elwood and Y. K. Wen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p796-799.
- Practical Probabilistic Approach Using Spreadsheet, B. K. Low, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1284-1302.

- Probabilistic Evaluation of Wood-Joist Floor Vibrations, Omar A. Jaradat. Arshad A. Al-Foqaha'a and Kenneth J. Fridley, (Probabilistic Mechanics & Structural Reliabiliry, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p342-345.
- Probability Based Design Requirements for Ship Structures, Alaa E. Mansour, Paul H. Wirsching, Bilal M. Ayyub and Gregory J. White, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p98-101.
- Probability Based Design Requirements for Unstiffened Panels in Ship Structures, Bilal M. Ayyub, Gregory J. White, Alaa E. Mansour and Paul H. Wirsching, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p102-105.
- Probability-Based Design Requirements with Respect to Fatigue in Ship Structures, P. H. Wirsching, A. E. Mansour, B. M. Ayyub and G. J. White, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p114-117.
- Reliability and Restoration of Water Supply Systems Following Earthquakes, Donald Ballantyne, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p203-204.
- Reliability Applied to Levee Seepage Analysis, Douglas A. Crum, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p946-949.
- Reliability Based Design for Oil Country Tubular Goods, P. R. Brand, D. B. Lewis and M. A. Maes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p534-537.
- Reliability Based Design of Reinforced Earth Structures, Adnan A. Basma and Ali S. Al-Harthy, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p788-791.
- Reliability Evaluation of Slender HSC Columns, Sofia M. C. Diniz and Dan M. Frangopol, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p242-245.
- Reliability Methods for Stability of Existing Slopes, John T. Christian, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p409-418.
- Reliability of a Cast Duplex Stainless Steel Elbow by Using Probabilistic Fracture Mechanics, P. Hornet and P. Le Delliou, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p756-759.
- Reliability of Code Provisions for Wind-Induced Discomfort, Rwey-Hua Cherng, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p494-447.
- Reliability of High-Strength Concrete Columns, Sofia M. C. Diniz and Dan M. Frangopol, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p213-222.
- Reliability of Post-Tensioned Concrete Slab Bridges, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p712-715.
- The Reliability of Soil Classification Derived from Cone Penetration Test, Zhongjie Zhang and Mehmet T. Tumay, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p383-409
- Reliability of the Navigation Channel of the Upper Mississippi River, Vijay Tulsiani, James H. Lambert, Yacov Y. Haimes and S. K. Nanda, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p142-153.
- Reliability of Underground Pipelines Subject to Corrosion, M. Ahammed and R. E. Melchers, TE Nov./Dec. 94, p989-1002.

- Reliability Procedures as a Design Tool for Structures and Mechanical Components, G. I. Schuëller, M. Gasser, J. Hartl and G. Lener, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), 980-803.
- Reliability-Based Design of Water-Distribution Systems, Rajesh Gupta and Pramod R. Bhave, EE Jan. 96, p51-54.
- Reliability-Based Exit Gradient Design of Water Retaining Structures, D. V. Griffiths, Gordon A. Fenton and G. M. Paice, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p518-534.
- Reliability-Based Maintenance Strategy Using NDI, Achintya Haldar and Zhengwei Zhao. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p364-367.
- Reliability-Based Optimization of Composite Structures, Xiaoping Liu and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p122-125.
- Reliability-Based Optimum Bridge Repair Strategy, Allen C. Estes, Dan M. Frangopol and George Hearn, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p372-375.
- Resistance Factors for High Strength Blind Bolts, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliabiliry, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p784-787.
- Risk Analysis in Dam Safety Practice, Steven G. Vick and R. A. Stewart, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p586-603.
- Risk-Based Planning and Management of Maintenance Dredging, L. Leigh Skaggs and David A. Moser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2403-2408.
- Safety of Concrete Members Designed by ACI 318 Chapter 9 and Appendix C Load Combinations, Sami W. Tabski, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), n218-221
- A Simulation Procedure for First Passage Problems of Nonlinear Structures, Veit Bayer and Christian Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p816-819.
- Site-Specific Live Load Models for Bridge Evaluation, Michel Ghosn and Dan M. Frangopol, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p30-33.
- Space Shuttle Program-Defining a Needed Paradigm for Efficient Access to Space, Lyle M. Jenkins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p426-434.
- Statistical Characteristics of Strength and Load Random Variables of Ship Structures, Khaled Atua, Ibrahim Assakkaf and Bilal M. Ayyub, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p106-109.
- Statistics of Fractional Occupation Time for Nonlinear Stochastic Response, Armen Der Kiureghian and Chun-Ching Li, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), pl 16-119.
- Strength and Reliability of Reinforced Concrete Columns with Sustained Loading, Stuart G. Reid, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p234-237.
- Structural Load Modeling and Combination for Performance and Safety Evaluation by Y.-K. Wen, T. Igusa, EM Feb. 96, p183-184.
- A System Approach for Identifying and Improving Hydraulic Numerical Modeling Reliability, Bernard B. Hsieh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2725-2730.

Target Safety Level for Bridges, Andrzej S. Nowak and Vijay K. Saraf, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p696-703.

555

Towards a Probabilistic Model for Marine Corrosion of Steel, Robert E. Melchers, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p660-663.

Reliability analysis

Application of the Limit-State Method for Probabilistic Un-saturated Flow Modeling, Yanyong Xiang and Srikanta Mishra, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p108-110.

Assessment and Implications of Local Channel Instability on the Prediction of Bridge Scour, Thomas M. Heil and Peggy A. Johnson, (North American Water and Environ ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3286-3293.

Development of a Miter Gate Reliability Model, D. B. Cleary, C. J. Hookham and J. W. Waller, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p862-865.

Effects of Load Path and Load Correlation on the Reliabilito Concrete Columns, Dan M. Frangopol, Yutaka Ide and Ichiro Iwaki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p206-209.

Evaluation of Reliability of an Existing Concrete Bridge: A Case Study, Andrew Scanlon, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p522-525.

Evaluation of Reliability of Pile-Supported Structures, Wil-liam M. Isenhower and Reed L. Mosher, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p666-684.

Expert System for Assessing Main Pipeline Reliability and Residual Lifetime, Sviatoslav A. Timashev and Inessa L. Yablonskikh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p322-325.

Fatigue Reliability Analysis Based on Time Dependent First Passage, C.-J. Kuo and P. H. Wirsching, (Probabi-listic Mechanics & Structural Reliability, Dan M. Fran-gopol, ed. and Mircea D. Grigoriu, ed., 1996), p466-469.

Fire Reliability at Earthquake Occasions, Mamoru Kohno, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p198-201.

Ignorance Factors Using Model Expansion, Marc A. Maes, EM Jan. 96, p39-45.

Loading Cycles for Fatigue Reliability Assessment of Miter Gates at Navigation Locks on the Upper Mississippi River, Bilal M. Ayyub, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p854-857.

Mode Search Algorithm for System Reliability under Earthquake Load, Hideki Idota and Tetsuro Ono, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p978-981.

Nonlinear Finite Element Reliability Analysis of Concrete, Dan M. Frangopol, Yong-Hak Lee and Kaspar J. Willam, EM Dec. 96, p1174-1182.

On Quantifying Inherent Soil Variability, Kok Kwang Phoon and Fred H. Kulhawy, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p326-340.

On Reliability Assessment of Infrastructure Systems under Strong Earthquake, Hitoshi Furuta and Naruhito Shiraishi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p632-635.

Optimal Reliability-Based Design of Check Dam Structure, Satoshi Katsuki, Nobutaka Ishikawa and Kazuo Itoh, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p91-98.

Probabilistic Stability Analysis of Shallow Arches, R. P. Nordgren and K. S. Hussain, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p124-127.

Probabilistic Stability Robustness of Structural Systems, R. V. Field, Jr., P. G. Voulgaris and L. A. Bergman, EM

Oct. 96, p1012-1021. Reliability Analysis and Full-Scale Testing of Transmission Tower, M. J. Alam and A. R. Santhakumar, ST Mar. 96, p338-344.

Reliability Analysis for Deep-Seated Stability of Pile-Supported Structures, William M. Isenhower, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p870-873.

Reliability Analysis in the Rehabilitation of Corps Structures with Time-Dependent Needs, Mary Ann Leggett, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p134-141.

The Reliability Analysis of a Major Dam Project, J. Bar-neich, D. Majors, Y. Moriwaki, R. Kulkarni and R. Davidson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1367-1382

Reliability Analysis of Beam with Initial Deflection by Entropy Model, Yoshiro Kohama, Toyofumi Takada and Atsunori Miyamura, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p652-655.

Reliability Analysis of Bolted Wood Connections, William M. Bulleit and Dennis B. Decator, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p326-329.

Reliability Analysis of Masonry Walls, A. S. Al-Harthy and D. M. Frangopol, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-

goriu, ed., 1996), p338-341.

Reliability Analysis of Nonlinear Structures Using Stochas-tic Finite Elements, C. E. Brenner and C. Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p596-599.

Reliability Analysis of Pipeline on Elastic Seafloor, H. Y. Yeh and Hengyun Li, (Probabilistic Mechanics & Struc tural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p752-755.

Reliability Applied to Slope Stability Analysis, John T. Christian, Charles C. Ladd and Gregory B. Baecher, GT

Dec. 94, p2180-2207.

Reliability Assessment Methodology for Sliding Stability of Gravity Structures, Bilal M. Ayyub and Ru-Jen Chao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Reliability Assessment of Dike and Levee Embankments, Thomas F. Wolff, Edward C. Demsky, Jeffrey Schauer and Edward Perry, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p636-650.

Reliability of a Box Culvert Structure under a Levee during Project Floods, Robert C. Patev and Mary Ann Leggett (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p118-133.

Reliability of Ocean Structure Using Spectrum-Consistent Excitation, Yunshen Zhou, Zhikun Hou, Mikhail F. Dimentberg and Mohammad Noori, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p982-985.

Reliability-Based Model for Predicting Pavement Thermal Cracking, Said M. Easa, Ahmed Shalaby and A. O. Abd El Halim, TE Sept./Oct. 96, p374-380.

Reliability-Based STructural Optimization-Software Development, M. Gasser and G. I. Schuëller, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p531-534.

Reliability-Based Structural System Optimization: State-of-the-Art versus State-of-the-Practice, Dan M. Frangopol and Ross B. Corotis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p67-78. Stochastic Snow Load Process Model from Daily Climatological Data, Kenneth J. Fridley, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p210-213.

Time-Dependent Reliability Analysis of Redundant Brittle Systems, Animesh Dey and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996).

Transition from Partial Factors Method to Simulation Based Reliability Assessment in Structural Design, Pavel Marek and Milan Gustar, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-

cea D. Grigoriu, ed., 1996), p558-561.

Ultimate Transverse Strength and Reliability Analysis of Offshore Production Ships, Xiaozhi Wang and Lars M. Sørhaug. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p146-149.

Uncertainty of Hydraulic Parameters, Peggy A. Johnson,

HY Feb. 96, p112-114.

Water Distribution Network Reliability: Connectivity Anal-ysis, Shu-li Yang, Nien-Sheng Hsu, Peter W. F. Louie and William W-G. Yeh, IS June 96, p54-64.

Water Distribution Network Reliability: Stochastic Simula-tion, Shu-li Yang, Nien-Sheng Hsu, Peter W. F. Louie and William W-G. Yeh, IS June 96, p65-72.

Aggregates for Construction from Vitrified Chromium Contaminated Soils, Jay N. Meggoda, W. Kamol-pormwijit, David A. Vaccari, A. S. Ezeldin, L. Walden, W. A. Ward, B. A. Noval, R. T. Mueller and S. Santora, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p31-46.

Applications Surge for New Jersey Cleanup Funds, CE

Feb. 96, p22.

Assessment and Implications of Local Channel Instability on the Prediction of Bridge Scour, Thomas M. Heil and Peggy A. Johnson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3286-3293.

Biotransformation of Trichloroethylene by a Phenol-Induced Mixed Culture, Mathew M. Shurtliff, Gene F. Parkin, Lenly J. Weathers and David T. Gibson, EE July 96, p581-589.

Bugs Clean Tunnels, CE Aug. 96, p22.

Characterization and Remediation of a Fuel Oil Plume, Dorinda L. Clause and Stacey R. Leake, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p762-775.

Cleaning Up Clay, Eric C. Lindhult and Daniel A. Kwiecin-ski, CE May 96, p49-51.

A Computerized Decision Support System Applied to NAPL Cleanup, Dale W. Lough and Wade E. Hathhorn, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p693-704.

Conceptual Design of Soil Venting Systems, David W. DePaoli, James H. Wilson and Carl O. Thomas, EE May

96, p399-406.

Controlled Field Experiments for Assessment of Subsurface NAPL Behaviour and Remediation, J. A. Cherry and D. J. A. Smyth, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p3-24.

Denitrification Incorporating Microporous Membranes, R. Reising and E. D. Schroeder, EE July 96, p399-604.

Design Guidelines for Bioengineered Bank Stabilization, Dale E. Miller, (North American Water and Environ Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3085-3090.

Designing SVE to Remove Volatile LNAPLs, Richard Haimann, Kathleen Schoen, Mark Underwood, Jeff Munic and Jim Hartley, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p431-441. A Diffusion-Type Adsorption Batch Test Method for De-termination of Benzene Adsorption on Regina Clay, Xiao Zhang, S. Lee Barbour and John V. Headley, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p175-186.

Discussion of Two SVE/Bioventing Pilot Studies, Robin D. Wankum, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p751-761.

Do-Nothing Cleanups, Randall T. Hicks and Rais Rizvi, CE Sept. 96, p54-57.

Dynamic Duo, John Prendergast, CE July 96, p40-43. Editor's Note, Thomas L. Theis, EE Nov. 96, p956.

EDTA-Enhanced Electrokinetic Extraction of Lead, Albert T. Yeung, Cheng-non Hsu and Rajendra M. Menon, GT Aug. 96, p666-673.

Electrode Placement for Subsurface Electric Field Generation, William O. Rasmussen and Muniram Budhu, EE

Aug. 96, p764-768.

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Electrokinetic Remediation. I: Pilot-Scale Tests with Lead-Spiked Kaolinite, Yalçın B. Acar and Akram N. Alshawabkeh, GT Mar. 96, p173-185.

Electrokinetic Remediation: II: Theoretical Model, Akram N. Alshawabkeh and Yalçın B. Acar, GT Mar. 96, p186-

Environmental Engineers Take Aim at Firing Range, CE Aug. 96, p18.

Environmental Site Investigation Guidance Manual (M&R No. 83), Task Committee on Hazardous Waste Site Assessment Manual of the Environmental Engineering Division of the American Society of Civil Engineers, (Yee K. Cho, chmn.), 1996, 0-7844-0096-2, 141pp.

Evaluation of Select Trade-Offs between Ground-Water Remediation and Waste Minimization for Petroleum Refining Industry, Craig D. Andrews, William F. McTer-nan and Keith D. Willett, EY Aug. 96, p41-60.

Field-Scale Application of In-Situ Cosolvent Flushing: Evaluation Approach, M. D. Annable, P. S. C. Rao, R. K. Sillan, K. Hatfield, W. D. Graham, A. L. Wood and C. G. Enfield, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p212-220.

Firms Form Brownfield Alliance, CE Dec. 96, p22.

Flushing of a Pb(II) Contaminated Soil Using HCl, EDTA, and CaCl₂, Brian E. Reed, Patrick C. Carrière and Roder-ic Moore, EE Jan. 96, p48-50.

Fracturing for In-situ Bioremediation (Available only in Focus on Geo/Environmental Special Issue), Sankar N. Venkatraman, John R. Schuring, Thomas M. Boland and David S. Kosson, CE Mar. 96, p14A-16A.

From Wasteland to Paradise, CE Feb. 96, p10,12.

Ground-Water Remediation with Granular Collection Sys-tem, Richard W. Frieseke and Erik R. Christensen, EE June 96, p546-549.

In Situ Groundwater Treatment by Granular Zero-Valent Situ Groundwater Treatment by Granular Zero-Valent Iron Design, Construction and Operation of an In Situ Treatment Wall, Frank S. Szerdy, John D. Gallinatti, Scott D. Warner, Carol L. Yamane, Deborah A. Hankins and John L. Vogan, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p245-256.

In Situ Plume Interception and Treatment Technologies: An Overview, George P. Korfiatis and Alexandros Makari-gakis, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Laksh-

mi N. Reddi, ed., 1996), p66-88.

Innovative Evaluaton Methods for Bioremediation, Eric A. Seagren, David J. Hollander, David A. Stahl and Bruce E. Rittmann, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p381-392.

Investigation of Interwell Tracer Tests Used with Cosolvent Nestigation of mice was a strong the Condense Weight, Cindy M. Lee, John T. Coates and Ronald W. Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p151-162.

Iron Filing Installation Cleans Contaminants, CE Nov. 96,

Mechanisms Involved in Vibratory Destabilization of NAPL Ganglia in Sands, Lakshmi N. Reddi and Hui Wu, EE Dec. 96, p1115-1119.

Microbial Decontamination of Polluted Soil in a Slurry Process, M. J. Geerdink, R. H. Kleijntjens, M. C. M. van Loosdrecht and K. C. A. M. Luyben, EE Nov. 96, p975-982

Modeling Ground-Water Remediation at an Oil Refinery, Ko-Hui Liu and Greg McNulty, (Non-Aqueous Phase Liquids (INAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p824-835.

Modeling Kinetics of Illuminated and Dark Advanced Oxidation Processes, Andrew Hong, Mark E. Zappi, Chiang Hai Kuo and Donald Hill, EE Jan. 96, p58-62.

A New Direction in Remediation, Paul P. Parmentier and Ronald M. Klemovich, CE Apr. 96, p55-57.

New Jersey Fund Offers Help, H. Michael Sklar, CE June 96, p27.

Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996, 0-7844-0203-5, 864pp.

Numerical Modeling of Biologically Reactive Transport Near Nutrient Injection Well, T. Prabhakar Clement, Brian S. Hooker and Rodney S. Skeen, EE Sept. 96, p833-

Numerical Simulation of Field Air Sparging Operations, Andrew G. Larson and Ronald W. Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p551-562.

An Observational Approach to Removing LNAPL, Richard Haimann, Kathleen Schoen, Hooshang Nezafati and Jim Hartley, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p719-730.

Optimizing Soil Vapor Extraction System Design and Operations for NAPL Remediation, John M. Farr, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p201-211.

Owner-Contractor Relationships on Contaminated Site Remediation Projects, Cynthia M. Ruff, David A. Dzombak and Chris T. Hendrickson, CO Dec. 96, p348-353. Permeable Barriers to Remove Benzene: Candidate Media

Permeable Barriers to Remove Benzene: Candidate Media Evaluation, J. Rael, S. Shelton and R. Dayaye, EE May 95, p411-415.

Phytoremediation: Plant Uptake of Atrazine and Role of Root Exudates, Joel G. Burken and Jerald L. Schnoor, EE Nov. 96, p958-963. Predictions on Federal Cleanup Market, CE July 96, p21-

Predictions on Federal Cleanup Market, CE July 96, p21-22.

Preliminary Overview of Radiological Data Validation:

Preliminary Overview of Radiological Data Validation: Problems Found in Laboratory Data, LeRoy F. Wenrick, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p312-314.

Process Upscaling of Nonaqueous Phase Liquid Behavior in Heterogenous Aquifers, Tissa H. Illangasekare, John E. Ewing and Kris O. Pytte, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p25-45.

Pump and Treat and Wait (Available only in the Geo/ Environmental Special Issue), Richard A. Sullivan, P.E., CE Nov. 96, p8A-12A.

Pump-and-Treat Ground-Water Remediation System Optimization, Daene C. McKinney and Min-Der Lin, WR Mar/Apr. 96, p128-136.

Radwaste Management in Reracking of Korean Nuclear Power Plants, Seung Ick Yoo, Young Ho Shin, Chan Do Kim and Do Soon Jun, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p379-381.

Removal of Arsenic from Ground Water by Iron Oxide-Coated Sand, Arun Joshi and Malay Chaudhuri, EE Aug. 96, p769-771.

Removal of DNAPL Pools Using Upward Gradient Ethanol Floods, Stuart Lunn and Bernard Kueper, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p345-356.

Review of Factors Affecting In Situ Air Sparging, Daniel M. Baker and Craig H. Benson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p292-310.

A Review of NAPL Modeling Approaches for Remediation, James W. Mercer, Zafar Adeel and Charles R. Faust, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p46-65.

Risk Variability Due to Uniform Soil Remediation Goals, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE July 96, p612-621.

Risk-Cost Decision Framework for Aquifer Remediation Design, Bruce R. James, Jin-Ping Gwo and Laura Toran, WR Nov/Dec. 96, p414-420.

Scaling Bacterial Filtration Rates in Different Sized Porous Media, Michael J. Martin, Bruce E. Logan, William P. Johnson, David G. Jewett and Robert G. Arnold, EE May 96, p407-415.

Simulation of Bioventing for Soil and Ground-Water Remediation, Paul D. McClure and Brent E. Sleep, EE Nov. 96, p1003-1012.

Solid Waste and Materials Systems Alternatives Study Summary, John R. Kasper and Stephen T. Smith, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p374-378.

Strategies for Remediation Managers, Gary Dunbar and Scot Foster, CE June 96, p53-55.

Successful Free Product Removal of NAPLs, Daniel S. Sauvé and Jeffrey L. Pintenich, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p233-244.

Surfactant Enhanced Gravity Drainage (SEGD) of Dense Nonaqueous Phase Liquids: A New Concept in the Insitu DNAPL Remediation, Milind D. Deo and Ju-Woung Yoon, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), 393-404.

Surfactant-Enhanced Extraction and Biodegradation of a Non-Aqueous Phase Contaminant in Soil, Satishkumar Santharam, Larry Eugene Erickson and Liang-tseng Fan, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p419-430.

Systematic Evaluation of Pollutant Removal by Urban Wet Detention Ponds, Jy S. Wu, Robert E. Holman and John R. Dorney, EE Nov. 96, p983-988.

A Technique for the Direct Measurement of the Aerated Zone Resulting from Field Air Sparging Operations, Lee D. Morton, Ron W. Falta, David S. Henderson and Chris A. Kern, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), pl 27-138.

Two-Dimensional Hydraulics of Recirculating Ground-Water Remediation Wells in Unconfined Aquifers, W. M. Stallard, K. C. Wu, N. Shi and M. Yavuz Corapcioglu, EE Aug. 96, p692-699.

Unique Coalition Plans to Revitalize Neighborhood, CE Nov. 96, p12-13.

Upscaling of Pore-Scale Concepts to Develop Models of NAPL Ganglion Dynamics, Rao S. Govindaraju and Lakshmi N. Reddi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p454-465.

Use of Remediated Petroleum Contaminated Soils in Highway Construction, Jay N. Meegoda, Robert T. Mueller and Frank Palise, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p1-16.

The Use of Surfactants to Remediate NAPL-Contaminated Aquifers, Kurt D. Pennell, Linda M. Abriola and Laura E. Loverde. (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed. 1996), p221-232. Value and Reliability of DNAPL-Source Location Programs: A Preliminary Framework, Travis C. McGrath, Robert B. Gilbert and Daene C. McKinney, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p187-198.

Venting Test Analysis Using Jacob's Approximation, Kenneth B. Edwards, EE Mar. 96, p232-234.

Waste Using Organic-Clay Complex, Irene M.-C. Lo, EE Sept. 96, p850-855.

When Toxics Meet Metal, Virginia Fairweather, CE May 96, p44-48.

"Do Nothing" Title Misleading, Bruce E. Rittmann, Mi-chael C. Kavanaugh and Jacqueline A. MacDonald, CE Nov. 96, p36,38.

Remote control

Canal Control and Automation for the Central District Sys-tem, Michael A. Drain and Eric R. Hixson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2384-2389.

CISC-Computer Integrated Spatial Control for Autonomous Trenching and Pipe-Laying, Xiaodong Huang and Leonhard E. Bernold, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p502-509.

Considerations for Realistic Lunar Excavation, Michael J. Lally, Scott P. Mackey and Laurie R. Gaskins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p896-902.

Control of Construction Robots using Camera-Space Ma-nipulation, Emilio Gonzalez-Galvan, Michael Seelinger, John-David Yoder, Eric Baumgartner and Steven B. Skaar, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p57-63.

Demonstration of the Smart Crane Ammunition Transfer System, E. Craig Bradley, Steven M. Killough and John C. Rowe, (Robotics for Challenging Environments, Lau-ra A. Demsetz, ed., 1996), p192-198.

Faster, Cheaper, Better: Teleoperated Space Robots, Tom Billings, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p150-156.

A. Deffiselz, ed., 1990), p130-130.
The Gaudi-Marseille Experiment: An Example of a Multiservice Remote Payment System, D. Danflous and G. Coquet, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p542-546.

Lunar Base Scenario for Middle School with RC Rover, Louise Fayette, Ruth M. Fruland and Carolyn Evans McDonald, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p317-322.

Mobile Robots for Security, Anatoly Osipov, Vladimir Kemurdjian and Boris Safonov, (Robotics for Challeng-ing Environments, Laura A. Demsetz, ed., 1996), p290-

Overview of International Space Station Extra Vehicular Robotics, Amin Rezapour, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p490-496.

Overview of the ISS Large Manipulator Operations, Catherine D. Bole, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p497-

The Ranger Telerobotic Flight Experiment: Mission, Techhe Ranger Telectootic Fight Experiment: Mission, technologies, and Programmatics, Joseph C. Parrish and David L. Akin, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p136-142.

remotely Controlled Salvage Machines, Vladimir Kemurdjian, Anatoly Osipov, Boris Safonov and Peter Astafurov. (Robotics For Challenging Environments, Laura A. Demsetz, ed., 1996), p206-212. Remotely

Telerobotic Servicing with Virtual Reality Calibration and Semi-Automatic Intermittent Model Updates, Won S. Kim and Robert Brown, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p43-49.

Applications of Space Technology to Aid in Identification of Seismic Hazards, Ronald Blom, Robert Crippen, Andrea Donnellan, Gilles Peltzer and Paul Rosen, (Natural Diaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p305-306.

Coast, T. M. Peck, R. J. M. Sweet, H. N. Southgate, S. Boxall, A. Matthews, R. Nash, J. Aiken, H. Bottrell and R. Wilson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1024-1034.

Engineering, Construction, and Operations in Space, 2 vols, Stewart W. Johnson, ed., 1996, 0-7844-0177-2, 1365pp.

Operational Satellite Remote Sensing for Mineral Explora-tion, Charles Sabine, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Operations in Space, Security 237-244.

PC-Based Remote Monitoring of an Instrumented Structure: Case Study and Lessons Learned, R. J. Helgeson, S. Chen and K. Kuhl, (Analysis and Computation, Franklin 1998) 2410-2410-24 Y. Cheng, ed., 1996), p310-321.

 Cheng, ed., 1996), p310-321.
 Remote Sensing in Investigation of Engineered Underground Structures, William F. Kane, Douglas C. Peters and Robert A. Speirer, GT Aug. 96, p674-681.
 Remote Sensing of the Polish Coasts Morphology, Kazimierz Furmańczyk and Stanisłław Musielak, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1018-1023.

Renewable resources

Conceptual Design of Enertopia in Korea, Kiryun Choi, EY Dec. 96, p102-113.

Infrastructure Plannin and Sustainable Development, frastructure Planning and Sustainable David W. Wright, UP Dec. 96, p111-117

New Sunshine Program: Comprehensive Approach to the 21st Century, Mitsugi Chiba, EY Dec. 96, p93-101.

Renovation

558

Another Times Square Attraction (Available only in Structures Special Issue), Howard Shin, CE May 96, p12A-

Augmented Reality in Architectural Construction, Inspection, and Renovation, Anthony Webster, Steven Feiner, Blair MacIntyre, William Massie and Theodore Krueger,

Diair Macintyre, william Massie and Theodore Krueger, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p913-919.

Automated Code Compliance Checking for Building Inspection, Tang Hung Nguyen, Claude Bédard and Kinh Huy Ha, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1020-1026.

Capital Facelift Takes Flight, Richard Cullerton and Albert J. Gravallese, CE Apr. 96, p40-43.

Cast-Iron-Column Strength in Renovation Design, Donald Friedman, CF Aug. 95, p220-230.

Chicago Returns Traffic to Pedestrian Mall, CE June 96,

p14.

Chicago's Micropile Debut, Steven D. Scherer, William H. Walton and Ron Johnson, CE Aug. 96, p51-53.
Cold Neutron Facility Gets a Face-Lift, ET Mar/Apr. 96,

pr.
An Elevated Train Rises Again, CE Nov. 96, p10.
Innovative Design/Build Approach: Ambassador Bridge
Project, Jay B. Shah, ME July/Aug. 96, p58-61.
Lessons Learned from Multiphase Reconstruction Project,
Raymond J. Krizek, Wei Lo and Ahmad Hadavi, CO Mar. 96, p44-54.

Mississippi State Students Take Top Chapter Title Again, NE Oct. 96, p2.

Re-engineering Cowboy Heaven (Available only in Focus on Structures Special Edition), Richard G. Weingardt and John F. Davis, CE Jan. 96, p10A-13A.

Recasting a Foundry (Available only in Structures Special Issue), Gary W. Loomis and Dave P. Knepper, CE May 96, p14A-16A.

Rehab by Helicopter, Hans H. Torabi, Harold B. Tennat, A. John Burnell and Thomas C. Benson, Jr., CE Jan. 96,

Retail Renovations (Available only in Structures Special Issue), Abdol Haghayeghi, CE May 96, p10A-12A. Saving Scotland's Busiest Bridge, Rita Robison, CE Jan.

96, p48-51. Simple Method for Upgrading an Existing Reinforced-Concrete Structure, Hong Sioe Oey and Carlos J. Al-

drete, SC Feb. 96, p47-50. Steel Tops Off Chicago Orchestra Hall, CE Dec. 96, p17.

Forecasting House Rental Levels: Analytical Rent Model versus Neural Network, Heng Li and Vera Li, UP Dec. 96, pl 18-127.

- Alternative Strategies for Temporary Support during Struc-tural Repair of Reinforced-Concrete Beams, John Cairns, ST Mar. 96, p238-246.
- Composite Repair/Upgrade of Concrete Structures, Orange S. Marshall, Jr. and John P. Busel, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p932-938. Concrete Cures Runway Woes by Morning, CE May 96,

p16.19.

- Construction Applications of Polyolefin Fiber Reinforced Concrete, D. Strand, C. N. MacDonald, V. Ramakrishnan and V. N. Rajpathak, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p103-112.
- Control of Floor Vibrations, Linda Morley Hanagan, ontrol of Floor Vibrations, Linda Morley Hanagan, Cheryl Rottmann and Thomas M. Murray, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p428-435

Design and Repair for Surficial Slope Failures, Robert W. Day, SC Aug. 96, p83-87.

Effect of Sheet Bonding Condition on Concrete Members Having Externally Bonded Carbon Fiber Sheet, Hiroyuki Yoshizawa, Toru Myojo, Masayoshi Okoshi, Mutuki Mizukoshi and Howard S. Kliger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1608-1616.

Effects of Testing, Inspection and Repair on the Reliability of Offshore Structures, Guoyang Jiao and Oddvar I. Eide, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p154-157.

Emergency Repair of An Ocean Outfall, Gail Lynch, John Linder and Robert Ooten, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2039-2043.

Evaluation of Service Load Behavior of Small Bridges Using Strain Measurement, Ben T. Yen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p667-

Exterior Accessibility for Structural Repair, Retrofit and Enhancement, Kenneth Hallam and Dudley McFarquhar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p772-775

Externally Bonded Carbon Fiber for Strengthening Concrete, Jay Thomas, Thomas Kline, Peter Emmons and Howard Kliger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p924-931.

Fatigue Crack Repair of Steel Beams with Tapered Cover Plate Details, Ahmed F. Hassan and Mark D. Bowman,

ST Nov. 96, p1337-1346.

Florida Department of Transportation Aviation Office Statewide Pavement Maintenance Management Program, J. David Scherling, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p263-272

Florida DOT Applies Gravity Sealer to Seaway Bridges, CE Sept. 96, p96.

Grout Repair of Dent-Damaged Steel Marine Tubulars, James Ricles and Troy Gillum, WW May/June 96,

Grouted Anchors for Carbon FRP Tendon, Antonio Nanni and Jay Thomas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p527-534.

Historic Concrete Structures Assessment and Repair, Jerome P. O'Connor, James M. Cutts and Gregory R. Yates, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1055-1062.

Implementing the Knowledge Worker System (KWS) in an Engineering Environment, Bruce C. Goettel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p288-293.

Integrated Infrastructure Maintenance Management, Carol Subick and Ilker Adiguzel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p207-213.

Investigating and Repairing of Wood Bowstring Trusses, Richard J. Kristie and Arne P. Johnson, SC Feb. 96, p25-30.

Laminate Bonding for Concrete Repair and Retrofit, D. V. Reddy, G. B. Gervois and L. A. Carlsson, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1579-1591.

Offshore Platform's Failure and Repair - Case Studies, T. S. Thandavamoorthy and A. R. Santhakumar, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p181-182.

Panel on Composites for Infrastructure, Srinivasa Iyer, Charles McClasky, Mark P. Henderson, Hota GangaRao and Peter Head, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p781.

Reliability-Based Optimum Bridge Repair Strategy, Allen C. Estes, Dan M. Frangopol and George Hearn, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p372-375.

Repair and Retrofit of Reinforced Concrete Columns, Riyad S. Aboutaha, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p313-

Repair of Damaged Slab-on-Grade Foundations, Robert W. Day, SC May 96, p69-73.

Repair of Main Pass 69 Waterflood Platform, G. E. Sgouros, T. E. Webster and N. M. Hennegan, WW July/ Aug. 96, p165-171.

Risk Based Analysis of Major Rehabilitation of Hydraulic Structures Using REPAIR, David Moser, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2498-2503

Roosevelt Dam Reaches a New Height of Safety, CE May

Seismic Vulnerability and Repair Cost of the University of Seismic vumeraniny and repair Cost of the Christian, of Memphis Buildings, Howard H. M. Hwang, Min Xu and Jun-Rong Huo, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p143-144. A Simulator to Study the Effects of Earthquakes on Seg-

mental Paving, John Clifford, Rob Avenall and Don Brown, (Natural Disaster Reduction, George W. Hous-

ner, ed. and Riley M. Chung, ed., 1997), p1-2.
Strengthening Concrete Block Walls Using Carbon Fiber.
Dan Engebretson, Rajan Sen, Gray Mullins and Alfred
Hartley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1592-1600.

Chong, ed., 1996), p1322-1998.
Strengthening Steel Composite Beams with CFRP Laminates, Rajan Sen, Larry Liby, Gray Mullins and Ken Spillett, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1601-1607.

Structures Firm Adds Industrial Focus, CE Dec. 96, p22 A System for the Institution of Effective Repairs to Concrete Structures, Chimay J. Anumba and John Bowron, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p160-166.

Paul Chinowsky, ed., 1990, p.100-150.

Three Repair/Retrofit Procedures for Welded Moment Frames, J. C. Anderson, Z. Yin and X. Duan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), 7968-71.

Vulnerability Assessment within BMS, Edgar P. Small and

Steven B. Chase, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p446-449.

Repeated loading

Cumulative Plastic Deformation for Fine-Grained Subgrade Soils, Dingqing Li and Ernest T. Selig, GT Dec. 96, p1006-1013.

Effect of Rest Periods on Fatigue Response of Asphalt Concrete Mixtures, Tung-Wen Hsu and Kuo-Hung Tseng, TE July/Aug. 96, p316-322.

Very Low Cycle Failure Process of Steel Angle Members, Yeon-Soo Park, Satoshi Iwai, Hiroyuki Kameda and Taijiro Nonaka, ST Feb. 96, p133-141.

Reporting

Rita Robison, An Engineering Writer for CE, Dies at 70, CE Oct. 96, p76,78.

American Rivers Rates Worst Waterways, CE Oct. 96, p19-20.

A Concept in Networking, Kevin A. Taylor, ME Nov./Dec. 96, p9-10.

Corps' Shoreline Work Assessed, CE Oct. 96, p11.

EPA Targets Suspected Fertility Disrupters, CE July 96,

Honing the Writing Skills of Engineers, P. M. Berthouex, El July 96, p107-110.

MPO's Conform to ISTEA Requirements, CE Oct. 96, p12,14.

Plain Words in Construction, David Purdy, SC Feb. 96, p55-57

Roadkill Studied, CE Sept. 96, p27

Speed Is In Your Head, CE Sept. 96, p12.

Study Concludes Feds Should Exit Water Business, CE June 96, p12.

Tunnelers Probe Policy Ponder Baseline Reports, CE June 96, p16-18.

21st Century Earth Observing Systems: Emerging Role for Spaceports, Stanley A. Morain, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p245-253.

Alternative Scenarios for Military Deployment of Un-manned Ground Vehicles, John G. Blitch and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p36-42

ASCE Task Group Lays Foundation for Structural Institute, Eric Rasmussen, NE June 96, p14.

Asphalt Update, Rita Leahy, R. Gary Hicks and Carl L. Monismith, CE Apr. 96, p58-61.

Building on the Moon, CE Oct. 96, pl 1.

Catching Up on Composites, Harry Goldstein, CE Mar. 96, p47-49

CERF Aids NSF in Revising Program That Reflects Needs of Construction Industry, NE July 96, p15. Compendium of Design Office Problems—Volume II, Committee on Design of Steel Building Structures of the Committee on Metals, Structural Division, ST Feb. 96, pl16-124.

Construction Industry Research Prospectuses for the 21st Century, CERF Report # 96-5016.T, Civil Engineering Research Foundation, 1996, 0-7844-0186-1, 130pp.

Construction System for Lunar Base, Shinji Matsumoto, Nobuo Isome, Koji Oishi, Hiroshi Kanamori, Kenji Takagi, Yoshiro Kai, Michiya Suzuki and Satoru Suzuki, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p140-144.

Correction, CE Mar. 96, p31.

Creating the 21st Century through Innovation, CERF Report # 96-5016.E, Civil Engineering Research Foundation, 1996, 0-7844-0185-3, 60pp.

Crystal Growth in Microgravity, Grant Meyer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1295-1297.

Current U.S. - Japan Collaborative Activities in Wind Engineering, B. Bienkiewicz, T. Ohkuma and K. Fujii, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1075-1082.

Dan Pletta, Prominent Engineering Educator, Dies at 92, NE Oct. 96, p6.

Data Acquisition and Handling for the Minnesota Road Re-search Project, David E. Newcomb and Joseph A. Cornell, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p510-514.

Design of a Laboratory Facility for Longshore Sediment Transport Research, Julie D. Rosati, David G. Hamilton, Jimmy E. Fowler and Jane M. Smith, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p771-782

Developments in the Use of Infrasound for Protecting Fish at Water Intakes, E. P. Taft, N. A. Brown, T. C. Cook, J. P. Ronafalvy and M. W. Haberland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p171-176.

Digital Image Analysis of Two-Dimensional Fluidized Beds at Lunar Gravity, D. J. Brueneman, L. L. Sorge, M. A. Gibson, C. W. Knudsen and H. Kanamori, (Engineer-ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p769-775.

The Economics of Space Solar Power, Carissa Bryce Christensen, Douglas A. Comstock and John C. Mankins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p260-268.

Editorial, Dennis Mertz, BE Feb. 96, pl.

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Editorial, Manohar P. Kamat, AS July 96, p63.

Education and Research Needs for Appropriate Technology, Maurice L. Albertson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2760-2765.

The Educational Ozone Researcher: A University Satellite, Linden H. McClure and Ellen L. Riddle, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1327-1333.

The Effect of Climatic Change on Hydrologic Variables, Jason R. Westmacott and Donald H. Burn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1465-1470.

Effects of an Extended Set-Control Admixture on the Prop erties of Fresh and Hardened Concrete, Steven A. Ragan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1617-1626.

The Elements of Academic Research, Richard H. McCuen, ed., 1996, 0-7844-0171-3, 290pp.

Engineering Features of the Red Bluff Research Pumping Plant, K. Warren Frizell, Charles R. Liston and Stephen Atkinson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p316-321.

Enhancing Creativity when Solving Contradictory Techni-cal Problems, Sergey Drabkin, El Apr. 96, p78-82. Environmental Hydraulics: New Research Directions for the 21st Century, ASCE Task Committee on Hydraulic Engineering Research Advocacy, HY Apr. 96, p180-183. EPA Targets Suspected Fertility Disrupters, CE July 96.

Evaluating Earth Retaining Systems, CE Aug. 96, p10.

Evaluation of Engineering Properties of Problematic Soils in Highway Construction, W. Virgil Ping, Sean Evaluation of Engineering Properties of Profermatic Soits in Highway Construction, W. Virgil Ping, Sean McDonald and Robert K. H. Ho, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p721-730.

Fabrication and Testing of High Performance Steel I-Girders Research in Progress, William Wright, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p1571-1578.

Feasibility of Modeling Phosphorus Dynamics in Stormwa-ter Wetlands, Karina T. Lopez Ivich, William James, Isobel W. Heathcote and John Fitzgibbon. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p524-529. Flora Wang, Noted Hydrologist, Was Louisiana State Pro-

fessor, NE Oct. 96, p6.

High Frequency Access to Low Gravity Experimentation in Organic Crystal Growth from Solutions, Michael G. Sportiello, Paul Todd, Ching-Yuan Lee, Craig E. Kun-drot, Steve C. Schultz, Louis S. Stodieck and John M. Cassanto, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p378-384.

Historical Development of Bridge Scour Evaluations, E. V. Richardson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3-27

History of Coastal Engineering in Canada, J. William Kamphuis, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p89-102.

History of Coastal Engineering in Taiwan, Ching-Ton Kuo, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p500-512.

History of Coastal Engineering in the USA, Robert L. Wiegel and Thorndike Saville, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996). p513-600.

Improving the Effectiveness of Post Earthquake Investigations, Susan K. Tubbesing, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p327-328.

Influence of Backwater on Headcut Advance, Kerry M. Robinson and Gregory J. Hanson, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p117-122. Information Models for Integrated Building Design at the Preliminary Stage, Claude Bédard, (Analysis and Com-putation, Franklin Y. Cheng, ed., 1996), p246-252.

Innovation Award Named for Charles Pankow, NE Feb. 96.

Interdisciplinary Research of Mountainous Areas: Past, Present, and Future, Robert D. Jarrett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2445.

International Collaboration in the Design of Three Boundary Layer Wind Tunnels, César Farell, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1061-1068.

Interport Modelling with State Automata, Maurizio Maz-zucchelli, Valerio Recagno and Giuseppe Sciutto, (Appli-cations of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p104-108.

Kentucky Researchers Complete Composite Foot Bridge,

CE Dec. 96, p14-15.

Letters to the Editor, SC Aug. 96, p60-61. Lunar Excavating Research, Walter W. Boles and John F. Connolly, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p699-705.

Materials for Tomorrow's Infrastructure: A Ten Year Plan for Deploying High Performance Construction Materials and Systems, CERF Report #94-5011E, Civil Engineer-ing Research Foundation, 1994, 0-7844-0066-0, 55pp.

Materials for Tomorrow's Infrastructure: A Ten Year Plan for Deploying High Performance Construction Materials and Systems, CERF Report #94-5011E, Civil Engineering Research Foundation, 1994, 0-7844-0059-8, 150pp.

Metacomputing on the Horizon, CE Dec. 96, p20.

Methods of Experimental Research of Asteroid Properties in Space Missions, D. V. Petrov, V. A. Simonenko and O. N. Shubin, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p68-73.

Minnesota Intelligent Transportation Systems' Laboratory, Lowell A. Benson, Dennis L. Foderberg and Yorgos Stephanedes, (Applications of Advanced Technologies of Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p525-534.

Mitigation, Preparedness & Sustainable Development: Linking Research & Resources in the Global Information Infrastructure, Robert J. Coullahan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p321-322.

Multi-Hazard Risk Assessment of Lifelines: Methodologies and Research Needs, Erik Vanmarcke and Ricardo Palma, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p359-360.

Myron Goldsmith, Structural Engineer, Architect, Dies at

77, CE Oct. 96, p78.

A Nationwide Survey of Civil Engineering-Related R&D, CERF Report #93-5006, Civil Engineering Research Foundation, 1993, 0-87262-970-8, 80pp.

Natural Disaster Losses to Conventional Construction and their Mitigation (An Insurance Company Response to Catastrophic Losses Since Hurricane Hugo), Edward M. Laatsch, Rose Geier Grant and Laird Macdonald, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p778-785.

Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997, 0-7844-0153-5, 432pp.

New Applications for Gypsum Products, Semyon Shimano-vich and Christian Meyer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1687-1693. New Faces in Familiar Places, NE Nov. 96, p15.

Northern Climate Weathering Tests on Sealed Concrete, Luh-Maan Chang, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p141-152

Numerical Morphodynamic Modelling of Keta Lagoon, Tim J. Chesher, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p927-938. On New Materials, Thanks All Around, Christopher Y. Tuan and Lawrence C. Muszynski, CE Feb. 96, p31.

Overview of DoD Research in Groundwater Modeling, J. P. Holland, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2565-2570.

1990, p230-230. Overview of the US Army Corps of Engineers Flood Control Channels Research Program, Ronald R. Copeland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1501-1506.

pi301-1306.

Particulate Sampler to be Carried on a High Altitude Balloon, Christopher Benning and Jared Whitaker, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1334-1338.

Performance Characteristics of a Smart Hinge for Solar Array Deployment, Dirk B. Warnaar and Rodney G. Gal-

John D. Johnston, Richard S. Foster, David L. Eby and John D. Johnston, et al. (1996), p. 162-1168. Recent Progress in Thermally Induced Vibrations Research, John D. Johnston, Richard S. Foster, David L. Eby and Earl A. Thornton, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1134-

ngineering Infrastructure Research, F. H.(Bud) Griffis, El Jan. 95, pl 1-18.

Research Agenda on Sustainability of Irrigated Agriculture, Luis S. Pereira, James R. Gilley and Marvin E. Jensen,

IR May/June 96, p172-177

The Research of the Relationship Between Earthquakes and the 30 Years of Intensive Geological Surveys in Xin Feng River, China, Ru-Qi Lu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p388.

1977), 1986.
Research Program for Reducing Frost Heave with Geosynthetic Capillary Barriers, Karen S. Henry and Earl Ellis, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p266-277.
Research Relevance: Communication is Key. John B. Scal.

Research Relevance: Communication is Key, John B. Scal-

zi, CE Aug. 96, p6.
Secret Strategies Revealed, ME May/June 96, p1.
Signal Processing Study for an FM/CW Collision Avoidance System, Pascal Deloof, Atika Menhaj, Jamal Assaad, Nathalie Haese and Christian Bruneel, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p661-665. Siting Low Profile Grade Control Structures for the Muddy

Creek Demonstration Stream Restoration Research Project, R. J. Wittler, D. R. Eby, S. D. Keeney, C. C. Watson and S. R. Abt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p105-110. SOCRATES - From Research Towards Commercial Implementation, Ian Catling and Richard Harris, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p588-593.

Solving Aviation and Intermodal Transportation Related Issues — "A New Prototype for the 21st Century", Clifford Bragdon and Carl Berkowitz, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p212-222. Some Thoughts from the Editor, Robert B. Harris, CO Dec.

96, p297.

A Space Systems Testbed for Situated Agent Observability and Interaction, Sam Siewert and Gary Nutt, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p122-128.

Standpipe Solids Transfer Behavior in a Lunar Gravity Fludidzed Bed, Les L. Sorge, David J. Brueneman, J. Dale Ortego, Jr., Michael A. Gibson, Christian W. Knudsen, Hiroshi Kanamori and B. Kent Joosten, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p776-782.

The Status of Cold Regions Research, Thomas C. Kinney, Robert Carlson and Howard Thomas, (Cold Regions En-gineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p196-202.

Steel Connections Need More Research, A. Plumier, CE Sept. 96, p35.

Strengthening Concrete Block Walls Using Carbon Fiber, Dan Engebretson, Rajan Sen, Gray Mullins and Alfred Hartley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1592-1600.

Structural Control: Basic Concepts and Applications, Y. Fujino, T. T. Soong and B. F. Spencer, Jr., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p1277-1287.

pl21/1-12d.

Structural Design for Vehicular Bombs, Task Committee on Structural Design for Physical Security, (Paul F. Mlakar, FASCe, Chair, chm.), (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), pl269-1276.

Studded Tire Research in Norway, Finland and Sweden, Eric Johnson, Tony Barter and David Sterley, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p676-687.

Student Guide for Space Conference Research Papers, Mal-va A. Knoll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1319-1326.

A Study into Effectiveness of Urban Best Management Practises, Robert G. Traver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1852-1857

Talk Needed for Research Application, Neil S. Grigg, CE

Oct. 96, p38.

Technologies for a Multimedia Based Highway Information System in the Gigabit Networking Environment, Kelvin C. P. Wang, Robert P. Elliott and James P. Turner, (Applications of Advance) plications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p490-499.

Toning Asphalt, ET Aug./Sept. 96, p1,7.

Toward a Generic Kernel for Air Traffic Management System, C. Dujardin, G. Joly, D. Hollinger and O. Palmade, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p87-91.

The Tram Simulation in Helsinki - A New Research Meth-od, Jarkko Niittymäki and Kari J. Sane, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed.,

1996), p76-80.

Undersea Engineering Feat, CE Oct. 96, p12.

Use of Lunar Type Soil for Concrete Construction, Jay N. Meegoda, Hsin-Yu Shan, Jing-Fu Huang, Jia-Wen Tseng and Su-Hwa Cheng, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996). p614-620.

The Use of Xypex Admixture to Concrete as an Inhibitor to Reinforcement Steel Corrosion, Robert J. Scancella, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1276-1280.

Web Tour: Antonio Baptista, ET June/July 96, p10-11. Why Satisfied Customers Defect, Thomas O. Jones, ME

Nov./Dec. 96, p11.

Worldwide Advances in Structural Concrete and Mason A. E. Schultz, ed. and S. L. McCabe, ed., 1996, 0-7844-0164-0, 580pp.

'SPS 2000" and its Internationalisation, Patrick Collins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p269-279.

Research and development

1997 Budget, Casey Dinges, CE May 96, p98.

ASCE's Strategic Plan in Action: The Civil Engineering Research Foundation, NE Oct. 96, p7.

Bioenergy in Transition, Ralph P. Overend, Charles M. Ki-noshita and Michael J. Antal, Jr., EY Dec. 96, p78-92.

CERF, U.K. Agree to Broaden Ties, CE May 96, p73. Conceptual Design of Enertopia in Korea, Kiryun Choi, EY Dec. 96, p102-113.

Control of Legged Robots, S. T. Venkataraman, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p100-106.

Earthquakes, Bombs and Mines, CE July 96, p8.

Editorial, Patrick K. Takahashi, EY Dec. 96, p75-77.

High-Performance Pipe Products Fabricated with Reactive Powder Concrete, Edward F. O'Neil and William M. Dowd, (Materials for the New Millennium, Ken P.

Chong, ed., 1996, pl. 320-1329.

History of Coastal Engineering in Mexico, J. Antonio Maza, Rodolfo Silva and Carlos Sánchez, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed.,

1996), p375-389.

A Nationwide Survey of Civil Engineering-Related R&D, CERF Report #93-5006, Civil Engineering Research Foundation, 1993, 0-87262-970-8, 80pp.

New Aluminum Decks Cut Loads, Add Life, CE Aug. 96, p12.

562

New Sunshine Program: Comprehensive Approach to the 21st Century, Mitsugi Chiba, EY Dec. 96, p93-101.

Research Conclave Takes Aim at Global Sustainable Development, CE Apr. 96, p76.

Retention-Tank Systems: A Unique Operating Practice for Managing Complex Waste Streams at Research and Development Facilities, Shari Brigdon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1771-1776.

Solving the Innovation Puzzle, Harvey M. Bernstein and Andrew C. Lemer, 1996, 0-7844-0023-7, 130pp.

Technology Development and Sustainable Construction, Yasuyoshi Miyatake, ME July/Aug. 96, p23-27.

Two Federal Legislators Named ASCE Honorary Fellows during Society's National Policy Week, NE Apr. 96, p2.

Research management

History of Coastal Engineering in France, Luc Hamm, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p142-168. Reengineering Infrastructure Research, F. H.(Bud) Griffis,

El Jan. 95, pl 1-18.

Research needs

ASCE's Strategic Plan in Action: The Civil Engineering Research Foundation, NE Oct. 96, p7.

Design Guidance - Instream and Bank Restoration Struc-tures, J. Craig Fischenich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3079-3084.

Economic Risk Analysis as a Research Directing Paradigm, Ken Young, Stuart Stein, David Pearson and Roy Trent, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p2775-2780.

Engineering and Construction for Sustainable Development in the 21st Century: Assessing Global Research Needs, CERF Report #96-5016A, Civil Engineering Research Foundation, 1995, 0-7844-0142-X, 145pp.

History of Coastal Engineering in Japan, Kiyoshi Hori-kawa, (History and Heritage of Coastal Engineering,

Nicholas C. Kraus, ed., 1996), p336-374.

New Materials for the 21st Century, Edward E. DiTomas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p14-22.

Scour at Culvert Outlets: Considerations Present and Future, Steven R. Abt and Phillip L. Thompson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3927-3931.

Urban Knowledge Parks and Economic and Social Devel-opment Strategies, George Bugliarello, UP June 96, p33-45.

Viewpoint, George Seaden, IS Sept. 96, p103-107.

Reserves

Chebyshev Model for Water-Quality Management, Andrews K. Takyi and Barbara J. Lence, WR Jan./Feb. 96, p40-48

Reservoir design

Debris Basin Design Procedures, J. J. DeVries and T. V. Hromadka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1657-1662.

Design of the Inlet/Outlet Tower for the Eastside Reservoir Project, Robert P. McBean and Clifford D. Dillon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1783-1788.

Optimization and Simulation in Design and Operation of Reservoirs, A. Afshar and F. Peyrovian, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1956-1961.

Reservoir management

Identification of Regional (Third Party) Impacts Associated with the Truckee River Operating Agreement, Charles Borda, Tom MacDiarmid, Rangessan Narayanan, Thom-as Harris, Karl MacArthur and Shawn Stoddard, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4036-4041.

Managing Conflicting Demands from Endangered Species: Taking the Challenge, Kenneth W. Kirby, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4142-4147.

Operating Rule Optimization for Missouri River Reservoir System, Jay R. Lund and Inês Ferreira, WR July/Aug.

96, p287-295.

Sediment Deposition in the Navigation Approach Channel of Three Gorges Project, Yitian Li and Jianheng Xie, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3852-3855.

Using Probabilistic Balancing Rules in the Development of Multi-Purpose Multi-Reservoir Systems Operation Mod-els, Emmanuel U. Nzewi and Wen Chen, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1948-1955.

Reservoir operation

Autoregressive Decision Rule in Aggregated Reservoir Op-eration, Qingfu Liang, Lynn E. Johnson and S. Mohan, WR Nov/Dec. 96, p438-440.

Deriving a General Operating Policy for Reservoirs Using Neural Network, H. Raman and V. Chandramouli, WR Sept./Oct. 96, p342-347.

Designing Instream Flows to Satisfy Fish and Human Water Needs, Hal Cardwell, Henriette I. Jager and Mi-chael J. Sale, WR Sept./Oct. 96, p356-363.

Effect of Reservoir Hedging on Crop Yield Under Deficit Irrigation Conditions, Arathi T. Seshan and K. Srinivasan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4226-4232.

Fuzzy Rule-Based Modeling of Reservoir Operation, Bi-jaya P. Shrestha, Lucien Duckstein and Eugene Z. Sta-

khiv, WR July/Aug. 96, p262-269.

Impact of Reservoir Flood-Control Operation on Interiordrainage Facilities, Michael Lindquist, David Ford and Pete Hall, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2939-2944.

Modeling of Surface Water Pumps in TVA Reservoirs, Boualem Hadjerioua, Mark H. Mobley, Gary E. Hauser and W. Gary Brock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3188-3193.

Modeling Water-Resource Systems for Water-Quality Management, R. G. Willey, Donald J. Smith and James H. Duke, Jr., WR May/June 96, p171-179.

Moving from a Model to a Decision Support System: Salt River Project's Experience with a Reservoir Simulation System, Jon Behrens and Yvonne Reinink, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4113-4118.

Multiobjective Optimization of Multireservoir System, S.
Mohan, K. Elango and M. G. Devamane, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1968-1975.

Numerical Modeling for Sediment-Pass-Through Reservoirs, Howard H. Chang, Larry L. Harrison, Wing Lee and Scott Tu, HY July 96, p381-388.

Operating Rule Optimization for Missouri River Reservoir System, Jay R. Lund and Ines Ferreira, WR July/Aug. 96, p287-295.

Optimization and Simulation in Design and Operation of Reservoirs, A. Afshar and F. Peyrovian, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1956-1961.

Optimum Storage Reallocation and Gate Operation in Mul-tipurpose Reservoirs, Abbass Afshar and Hamid Morad-Khani, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1962-1967.

Reservoir Operating Rules with Fuzzy Programming, Samuel O. Russell and Paul F. Campbell, WR May/June

96, p165-170.

Risk Analysis of Joint Reservoir Operation in Central Tai wan, Jan-Tai Kuo, Chang-Shian Chen and Yuan-Hsi Liao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3158-3163.

Using Probabilistic Balancing Rules in the Development of Multi-Purpose Multi-Reservoir Systems Operation Models, Emmanuel U. Nzewi and Wen Chen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1948-1955.

Water-Supply System Operations: Critiquing Expert-System Approach, Anne Shepherd and Leonard Orto-lano, WR Sept./Oct. 96, p348-355.

Yields from Ground-Water Storage for California State Water Project, L. Jeffrey Lefkoff and Donald R. Kendall, WR Jan./Feb. 96, p72-74.

Reservoir performance

Construction of Performance Contours on the Storage-Yield Plane of a Within-Year Reservoir System, K. Sudhir and K. Srinivasan, (North American Water and Sudhir and K. Srinivasan, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p.2951-2957.Numerical Modeling for Sediment-Pass-Through Reservoirs, Howard H. Chang, Larry L. Harrison, Wing Lee and Scott Tu, HY July 96, p381-388.Performance of Two Reservoirs during 1994 Northridge Earthquake, C. A. Davis and J. P. Bardet, GT Aug. 96, p613-627.

p613-622

Reservoir sedimentation

Dynamic Effects of Sediment and Foundation on Dam Hyvarious carrier and roundation on Dain Ty-drodynamic Pressure Under Vertical Ground Accelera-tions, Kuo-Chyang Chang, Tin-Kan Hung, David A. Margo and Jeen-Shang Lin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p511-514.

Impacts of Reservoir Sedimentation on Decommissioning of Dams, George W. Annandale, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2114-2119. Sediment Impacts on Yield from a Two-Reservoir System in Puerto Rico, Gregory L. Morris, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2103-2108. Temporal Variation of Sediment Yield, U. C. Kothyari, A.

K. Tiwari and Ranvir Singh, HE Oct. 96, p169-176

Uncertainty Analysis of Reservoir Sedimentation, Hyun-Suk Shin and Jose D. Salas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2294-2299.

Reservoir storage Construction of Performance Contours on the Storage Yield Plane of a Within-Year Reservoir System, K. Sudhir and K. Srinivasan, (North American Water and Sudhir and K. Srinivasan, (vorth American Pract and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2951-2957. Drought in California: When Does It Begin and When Does

it End? Maurice Roos, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1081-1086.

Identification of Regional (Third Party) Impacts Associated Identification of Regional (Third Party) Impacts Associated with the Truckee River Operating Agreement, Charles Borda, Tom MacDiarmid, Rangessan Narayanan, Thomas Harris, Karl MacArthur and Shawn Stoddard, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4036–4041.
Impact of Sedimentation Caused by Runoff, Dilip Khatri,

(North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Multiobjective Optimization of Multireservoir System, S. Mohan, K. Elango and M. G. Devamane, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1968-1975.

Khani, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1962-1967.

Robustness of Reservoir Storage Reallocation Decisions to Climate Change, Andrew W. Wood, Dennis P. Letten-maier and Richard N. Palmer, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996),

Reservoir system regulation

An Economy and Risk Analysis of Installed Capacity Ex-pansion at the Three Gorges Power Plant, Liping Wang, pansion at the Three Gorges Power Plant, Lipning wang, Nianhua Xue and Changming Ji, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3874-3879.

Moving from a Model to a Decision Support System: Salt River Project's Experience with a Reservoir Simulation System, Jon Behrens and Yvonne Reinink, (North Amer-ican Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4113-4118.

Reservoir systems

Multiobjective Optimization of Multireservoir System, S. Mohan, K. Elango and M. G. Devamane, (North American Water and Environment Congress & Destructive

Water, Chenchayya Bathala, ed., 1996), p1968-1975.
Project Object, Richard M. Shane, Edith A. Zagona, Dave McIntosh, Terrance J. Fulp and H. Morgan Goranflo, CE Jan. 96, p61-63.

Technology Has Bright Future, Darryl W. Davis, CE May 96, p26-27.

Using Probabilistic Balancing Rules in the Development of Multi-Purpose Multi-Reservoir Systems Operation Models, Emmanuel U. Nzewi and Wen Chen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1948-1955.

The 1993 Flood: A Vindication of Federal Levees and Reservoirs or A Call for "Back to Nature"? Richard J. Di-Buono and Gary R. Dyhouse, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p163-164.

Aeration of Reservoirs and Releases TVA Porous Hose Line Diffuser, Mark H. Mobley and W. Gary Brock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1311-1316.
Calibration of Sediment Transport Model for the Upper End of Elephant Butte Reservoir, Mohammed A. Samad, Drew C. Baird and Frank P. Montoya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2288-2293.

Chenchayya Bathala, ed., 1996), p.2288-2293.
A Combined Physical and Mathematical Modeling Scheme for Kapichira Hydropower Project, Malawi, K. Sivakumaran and E. Cole, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.3806-3811.
Construction Forum, SC Nov. 96, p.99-103.
Corps Estimates \$4 Billion in Flood Protection Savings, CE Apr. 96.

Apr. 96, p8.

Coupled Processes of Gas Hydrates Dissociation and Fluid Filtration in Saturated Porous Media, Alexey Maksimov, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Design of the Inlet/Outlet Tower for the Eastside Reservoir Project, Robert P. McBean and Clifford D. Dillon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1783-1788.

Earth Slide on Geomembrane, A. C. Stamatopoulos and P.

C. Kotzias, GT May 96, p408-411.
Eddy Pump Dredging Demonstration at Cresta Reservoir, Larry L. Harrison and Harry P. Weinrib, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2091-2096. An Evaluation of Drainage Conditions in the San Joaquin Valley, M. Manucher Alemi and George Nishimura, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p177-182.

Evaluation of Modelling Needs for Central Valley Project Operations, John Burke and Donald Frevert, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p806-811.

Flood Control in the Brazilian Electric System Reservoirs at Parana River Basin, A. L. Lopes and V. F. Rocha, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996).

Identification of a General Linear Model for Reservoir Inflows Forecasting, J. Ribeiro, J. Rousselle, J. D. Salas and H. Ta Trung, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2354-2359.

Impacts due to Density Current Deposition in Reservoirs, Jiahua Fan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2097-2102.

564

The Importance of Water Depth for Sparger Performance, Charles Clauss, John S. Gulliver and Steven C. Wilhelms, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1305-1310.

Lake/Reservoir Restoration Activities in Taiwan, Shaw L. Yu, Jan-Tai Kuo, Ching-Gung Wen, Shang-Lien Lo and Jen-Yang Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4208-4213.

The Largest Water Reservoirs of Russia in Flood Control, S. E. Bednarouk, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2538.

Managing Sediments in Reservoirs at FERC, Shou-shan Fan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2084-2090.

Mixing in Distribution System Storage Tanks: Its Effect on Water Quality, Robert M. Clark, Farzaneh Abdesaken, Paul F. Boulos and Russell E. Mau, EE Sept. 96, p814-

Modeling Reservoir Evaporation Losses by Generalized Networks, Yung-Hsin Sun, Shu-li Yang, William W-G. Yeh and Peter W. F. Louie, WR May/June 96, p222-226.

Nation's Largest Grouting Contract Under Way, CE Aug. 96, p22.

Picacho Reservoir Enhancement Study for Water Recharge, Reparian Enhancement, and Water-Based Recreation Purposes, Ira Mark Artz, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1413-1418.

Plans for Testing and Evaluating the New Autoventing Tur-bines at TVA's Norris Hydro Project, Paul Hopping, Pa-trick March, Thomas Brice and Joseph Cybularz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1299-1304. Polyethylene Piping Eases Drought, CE Nov. 96, p94.

Reservoir Sediment Management Practices of the Los An-geles County Department of Public Works, Sree Kumar and Martin Moreno, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1651-1656.

Reservoir Targets for Urban Water Supply Systems, B. J. C. Perera and Gary P. Codner, WR July/Aug. 96, p270-

Resettlement of the Three Gorges Project in China, Wen-zheng Ma and Zonglou Guo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3847-3851.

Santa Ana River Mainstem Project, Brian M. Moore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2169-2175. Sediment Deposition in the Navigation Approach Channel of Three Gorges Project, Yitian Li and Jianheng Xie, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3852-3855.

Simulation of Channel Changes Induced by a Reservoir, Howard H. Chang, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2109-2113.

The Three Gorges Project: Relocation of Reservoir Population, Chien-kuo Lo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3841-3846.

Residence time

Hydraulic Residence Time of CSTRs under Unsteady-State Condition, Jian Peng, EE Nov./Dec. 94, p1446-1458.

Numerical Modeling of Flows in Ultraviolet Disinfection Channels, D. A. Lyn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3005-3009.

A Landslide of Litigation, Walter F. Crampton, P.E., CE Oct. 96, p61-63.

Take-Home Toxin Pathway, John Zirschky, EE May 96, p430-436.

Residential location

Curbside Collection of Yard Waste: I. Estimating Route Time, Jess W. Everett and Shiv Shahi, EE Feb. 96, p107-114.

Curbside Collection of Yard Waste: II. Simulation and Application, Jess W. Everett and Shiv Shahi, EE Feb. 96, p115-121.

Engineers Outfox Nature to Bury Sewer Line, CE Dec. 96.

Intensity, Duration, and Frequency of Residential Water Demands, Steven G. Buchberger and Greg J. Wells, WR Jan./Feb. 96, p11-19.

Retaining Wall Enhances Flowering Residential Site, CE Jan. 96, p77.

Residual soils

Appalachian Piedmont Regolith: Relations of Saprolite and Residual Soils to Rock-Type, Milan J. Pavich, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p1-11.

Applications of Soil Nailing in Residual Soil, James W. Sigourney, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson,

ed., 1996), p57-65.

Deformation Characteristics of Piedmont Residual Soils, Chainchye E. Wang and Roy H. Borden, GT Oct. 96,

p822-830.

Design with Residual Materials: Geotechnical and Construction Considerations, Geotechnical Special Publica-tion No. 63, Gordon Matheson, ed., 1996, 0-7844-0207-

Dynamic Properties of Piedmont Residual Soils, Roy H. Borden, Lisheng Shao and Ayushman Gupta, GT Oct.

Effect of Degree of Weathering on Dynamic Properties of Residual Soils, Emir José Macari and Laureano Hoyos,

Jr., GT Dec. 96, p988-997.

Estimation of In Situ Hydraulic Properties of Saprolite, Gordon M. Matheson, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p66-73.
Rethinking Foundation Design in Karst Residuum, Ray-

mond A. DeStephen and Steven E. Conner, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p49-56.

Determination of Post-Liquefaction Strength: Steady State vs Residual Strength, S. Thevanayagam, C. C. Wang and K. Ravishankar, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1210-1224.

Grout Repair of Dent-Damaged Steel Marine Tubulars, James Ricles and Troy Gillum, WW May/June 96,

p110-117.

Residual stress

Decay of Residual Stress in Stochastic Fatigue, Loren D. Lutes and Shahram Sarkani, ST Jan. 96, p92-98

Finite Element Analysis of Longitudinally Stiffened Cylinders in Bending, Q. Chen, A. E. Elwi and G. L. Kulak, EM Nov. 96, p1060-1068.

Ultimate Strength of Steel Outstands in Compression, Han-bin Ge and Tsutomu Usami, ST May 96, p573-578.

Comparisons between Laboratory Measured and FWD Backcalculated Resilient Moduli, Anand J. Puppala, Steven L. Cumbaa and William H. Temple, (Enginee Mechanics, Y. K. Lin and T. C. Su, 1996), p347-350.

Non-Linear Models for Resilient Modulus Characterization of Granular Soils, Anand J. Puppala, Louay N. Mohammad and Aaron Allen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p559-562.

Resilient Modulus of Cement-Stabilized Phosphogypsum, M. I. Pericleous and J. B. Metcalf, MT Feb. 96, p7-10.

Flexure for Polymer Concrete Using PET Waste, K. S. Re-

Flexure for Polymer Concrete Using PET Waste, B. S. Re-beiz and D. W. Fowler, P.E., (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1037-1044. The Next Generation in Composite Rebars for Concrete Reinforcement, Salem S. Faza, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p905-913.

Performance of Repair Materials Exposed to Fluctuation of Temperature, A. S. Al-Gahtani, Rasheeduzzafar and A. Al-Mussallam, MT Feb. 95, p9-18.

Resistance

Bed Configuration and Hydraulic Resistance in Alluvial-Channel Flows, Fazle Karim, HY Jan. 95, p15-25.

Cone Penetration in Very Weakly Cemented Sand, Anand J. Puppala, Yalcin B. Acar and Mehmet T. Tumay, GT Aug. 95, p589-600.

Estimation of Driven Pile Resistance at an Overconsolidated Clay Site Using Geostatistical Methods, Gil L. Yoon and Michael W. O'Neill, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p950-953.

Frost Resistance of Roller-Compacted High-Volume Fly Ash Concrete, Michael Pigeon and V. Mohan Malhotra,

MT Nov. 95, p208-211.

Hydraulics of Subsurface Flow Constructed Wetlands, A. T. Hjelmfelt, Jr. and A. L. Thompson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p52-57.

Sizing Dumped Rock Riprap, David C. Froehlich and Craig A. Benson, HY July 96, p389-396.

Strain Rate and Preshear Effects in Cyclic Resistance of Soft Clay, G. Lefebvre and P. Pfendler, GT Jan. 96, p21-26.

Resistance coefficients

Friction-Term Response to Boundary-Condition Type in Flow Models, Raymond W. Schaffranek and Chintu Lai, HY Feb. 96, p73-81.

A New Technique for Measuring Vegetation Density, Syn-di J. Dudley, Steven R. Abt, Charles D. Bonham and J. Craig Fischenich, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3656-3661.

Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

Standard for Load and Resistance Factor Design (LRFD) for Engineered Wood Construction (St No. 95-016), American Society of Civil Engineers and American Forest & Paper Association, 1996, 0-7844-0041-5, 125pp.

Stretching Span Capability of Prestressed Concrete Bridges under AASHTO LRFD, Yohchia Chen and Alex Aswad, BE Aug. 96, p112-120.

Application of Chaotic Dynamics to Stochastic Resonance, Marek Franaszek and Emil Simiu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p86-89.

Resonance Induced Steel Cross-Arm Fatigue Failures, Markus Ostendorp, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p983-986.

Resonances in Nonlinear Stochastic Systems, Agnessa Kovaleva, (Probabilistic Mechanics & Structural Reliabili-ty, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p736-739

Resonance tests

Resonance tests
Assessment of Damage Identification Algorithms on Experimental and Numerical Bridge Data, David V. Jauregui and Charles R. Farrar, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p892-899.

Dynamic Properties of Piedmont Residual Soils, Roy H. Borden, Lisheng Shao and Ayushman Gupta, GT Oct. 96, p813-821

96, p813-821.

Resource allocation

Construction Resource Scheduling with Genetic Alog-rithms, Weng-Tat Chan, David K. H. Chua and Govindan Kannan, CO June 96, p125-132.

Interseasonal Irrigation System Planning for Waterlogged Sodic Soils, S. N. Panda, S. D. Khepar and M. P. Kaushal, IR May/June 96, p135-144.
Ranking Models Used for Condition Assessment of Civil

Infrastructure Systems, L. E. Chouinard, G. R. Andersen and V. H. Torrey, III, IS Mar. 96, p23-29.

Resource conservation

An Environmental Ethic for ASCE, John F. Scott, (North American Water and Environment Congress & Destruc tive Water, Chenchayya Bathala, ed., 1996), p3265-3270.

Resource development

Carbon Reduction of Iron Oxides in Lunar Simulants, Scott Hayes, Heather Hamlett and Roberta Bustin, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p734-740.

Design and Operation of the Sub-Orbital Lunar Explorer, Walter Collins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p949-

Location of a Lunar Base: A Site Selection Strategy, Lawrence A. Taylor and Dong-Hwa S. Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p741-755.

Market Value of Asteroidal Precious Metals in an Age of Diminishing Terrestrial Resources, Jeffrey S. Kargel, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p821-829. Project Blue Revolution, Patrick K. Takahashi, EY Dec. 96,

p114-124.

Sample Returns to Enable Asteroid Mining, Alan J. Willoughby, Alan L. Friedlander, Darla J. German, Mark K. Jacobs, Jeffrey A. George and Kurt J. Hack, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p840-846.

Technology for Mining of Building Materials at First Stages of Moon Development, Oleg V. Nagovicin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p830-839.

Volcanic Glass -- Oxygen Ore on the Moon, Carlton C. Allen, John M. Woodell and David S. McKay, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p756-761.

Resource management
Company-Level Cash-Flow Management, R. Navon, CO
Mar. 96, p22-29.

Mai: 70, p2c-23.

Decision Support, R. B. Allen, CE July 96, p53-55.

An Environmental Ethic for ASCE, John F. Scott. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3265-3270.

HERMES: An Integrated Environment for the Design of On-Line Decision Support Systems, Franco Arcieri and Ettore Apollonis, Applications of Advanced Technologies in Transportation Engineering, Yogos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p315-319.

Infrastructure Planning and Sustainable Development, David W. Wright, UP Dec. 96, p111-117.

Resource recovery

Author Responds to Accusations of Carelessness, Mark L. Peckham and David A. Sutter, CE July 96, p28-29.

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Construction Resource Scheduling with Genetic Alog-rithms, Weng-Tat Chan, David K. H. Chua and Govin-dan Kannan, CO June 96, p125-132.

Editorial, Patrick K. Takahashi, EY Dec. 96, p75-77.

New Approach for Optimization of Overall Construction Schedule, Shirong Li, CO Mar. 96, p7-13.

Response spectra

Accelerations and Time Histories for Earthquakes Affecting Kentucky's Bridges, I. E. Harik, R. Street, Z. Wang and D. L. Allen, (Analysis and Computation,

wang and D. L. Alsen, vanarysis and companion, Franklin Y. Cheng, ed., 1996), p464-471.
Analytical Approaches for the Design of Base-Isolated Structures, Vahid Sattary and Mason T. Walters, (Analysis and Computation, Franklin Y. Cheng, ed., 1996).

Considering Uncertainty in Earthquake Response Spectra, Sara Wadia-Fascetti and Burcu Vuran Gunes, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p211-212.

Dynamics of Structures: Theory and Applications to Earth-quake Engineering by Anil K. Chopra, T. Igusa, EM Feb. 96, p183.

Earthquake Resistance Assessment of Some Selected Existing Buildings, M. Nazih Eilouch and Taleb Omran, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p145-146.

Generation of Ground Motion Time Histories as Non-Stationary Vector Processes: Response Spectrum Compatible Seismograms, George Deodatis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p616-619.

Probabilistic Seismic Analysis Including Soil-Structure In-teraction, Dan M. Ghiocel, Paul R. Wilson and Gary G. Thomas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p620-623

Response Spectral Densities of Stochastically Excited Nonesponse spectral Densines of Stochastically Exercit Vollinear Systems, G. Q. Cai and Y. K. Lin, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p732-735.

Seismic Hazard Assessment of the NPPS in the ČR, Dana Procházková, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p179-180. Simplified Response-Spectrum Seismic Analysis of Nonlinear Structures, Roberto Villaverde, EM Mar. 96, p282-

Spatial Seismic Coefficients, Some Sensitivity Results, Zbigniew Zembaty, EM Apr. 96, p379-382.

Statistical Aspects of Damages Due to the Great Hanshin Earthquake, Hitoshi Seya and Michio Sugimoto, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Vertical Seismic Forces on Elevated Concrete Slabs, M. N. Palaskas, Limin He and Michael Chegini, SC Aug. 96, p88-90.

Response time

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Automated On-Scene Management of Traffic Accidents, George M. Vasilakis and Yorgos J. Stephanedes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p292-295.

Response Surface Method for Time-Variant Reliability Analysis, Timothy H.-J. Yao and Y.-K. Wen, ST Feb.

96, p193-201.

Training of Highway Maintenance Personnel for Hazmat Incident Response, Eugene R. Russell, Sr., El Apr. 96, p83-85.

Responsibilities

Managing Construction Risks, Ossama A. Abdou, AE Mar. 96, p3-10.

Supervise, Inspect, or Observe? The Structural Engineer's Role in Construction, Otto Avvakumovits, SC Aug. 96, p79-80.

Responsibility

Brownfields Boom, Monica Maldonado, CE May 96, p36-

Design-Build Continues to Grow in U.S., CE Dec. 96, p18-19.

Does ASCE Have a Responsibility to Mandate Continuing Education? Tony Huff, P.E., CE Nov. 96, p72-73.

Ethical Responsibilities of Engineering Profession, Mark J. Holliday, El July 94, p270-272.

Ethics Not Dependent on Consequences, Robert F. Brown, P.E., CE Nov. 96, p40-41.

Ethics, Uncertainty and Postaudits, Charles G. Gunnerson, CE Dec. 96, p27.

More Ethical Practice, Not Training, Dan Feger, P.E., CE Nov. 96, p38,40.

Reasonable Care Must Be Taken, CE Dec. 96, p24. Statute of Limitations for Civil Engineering Liability, Robert W. Day and Michael M. Angello, El Apr. 96,

Restoration

Acquisition and Restoration of a Drainage District in the Snohomish River Valley, John Engel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3950-3955.

Application of a Hydrodynamic Model in Design of the Kingman Lake Wetland Restoration Project, Karen M. Nook and William G. Grosskopf, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p58-63.

Application of One- and Two-Dimensional Flow Models for an Evaluation of Riverine Wetland Hydrologic Func-tions, C. Charles Tai, Chou Fang and Apurba K. Borah, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Channel Restoration of Incising, Mixed Grain Size Streams: Lessons Learned, F. D. Shields, Jr., M. W. Doyle, S. S. Knight and C. M. Cooper, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3363-3368.

Channel Restoration Project Along Toby Creek, Dennis N. Jermeland, Daniel Billman and William R. Tingle, (North American Water and Environment Congress & Destructive Water, Chenchavya Bathala, ed., 1996). p3521-3526.

Computer Model Aids Everglades Restoration, CE Apr. 96,

Cost Effectiveness and Incremental Cost Analyses for Environmental Planning, William Hansen, Kenneth Orth and Ridgley Robinson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4220-4225.

The Costs and Benefits of Dam Removal on the Elwha River, Paula M. Engel, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p4288-4293.

Design Guidance - Instream and Bank Restoration Structures, J. Craig Fischenich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3079-3084.

Diagnosis and Treatment of Structures in Distress by R. N. Raikar, Kenneth L. Carper, CF Feb. 96, p42.

Ecological and Biological Considerations in River Restoration, Dudley W. Reiser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2601-2606.

Environmental Restoration Measures on the Tennessee Tombigbee Waterway (TENN-TOM), Nathaniel D. McClure, IV and Norman L. Connell, Sr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3326-3331.

European Progress on river Renaturalisation, Richard D. Hey, (North American Water and Environment Congress Destructive Water, Chenchayya Bathala, ed., 1996), p2595-2600.

Features of a Chevron Weir Rock Ramp, R. J. Wittler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p111-116.

Hydraulic and Engineering Considerations in Designing Constructed Treatment Wetlands for a Lake Restoration, C. Charles Tai, Donthamsetti V. Rao and Jonathan Polinkas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p257-262

Hydraulic and Sediment Models for Design of Restoration of Former Tidal Marshland, Guang-dou Hu, M. L. Johnson and R. B. Krone, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

p215-228.

Hydraulic Studies for a Large Wetland, Stephane Asselin, Phillip R. Mineart and Pierre-Yves Saugy, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p512-517

Lake/Reservoir Restoration Activities in Taiwan, Shaw I Yu, Jan-Tai Kuo, Ching-Gung Wen, Shang-Lien Lo and Jen-Yang Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4208-4213.

Mitigation Wetland Losses for a Major Transportation Improvement Project in New Hampshire, Craig A. Wood, William J. Barry, Albert S. Garlo and William Arcieri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p982-987

Parking Lot Corrosion Cure, Scott Greenhaus, CE Nov. 96,

Quail Creek: A Case Study of Restoration Using Native Materials, James W. Gracie, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2891-2896. Reduction of Sediment Loads in DEC Streams, Chester C.

Watson, Tom Pokrefke and Daniel Gessler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2885-2890. Reliability and Restoration of Water Supply Systems Fol-

lowing Earthquakes, Donald Ballantyne, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p203-204.

Restoration Design for Urban Streams: Anacostia River Basin, Maryland, Meg Burns, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4198-4201.

chayya Bathala, ed., 1996), p4198-4201.
Restoration of Abandoned Meanders on the Middle Fork Forked Deer River, Tennessee, B. J. Doeing, R. A. Gaines and W. A. Thomas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3375-3380.
Retrofitting an Urban Watershed for Improved Water Quality, David Ennis, Michael Clar, Candace Szabad and Chien Lin. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4202-4207.

ed., 1996), p4202-4207.

River Restoration Considerations Beyond Channel Design, William T. Fullerton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3091-3096.

Role of Vegetation in Hydraulics of Channel Restoration, Marcelo H. García, (North American Water and Environ ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2607-2612.

Santa Ana River Salt Marsh Restoration: Orange County, California, U.S.A. Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p536-540.

The Sawmill Creek Watershed Restoration Project, Larry Lubbers, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p2873-2878.

Siting Low Profile Grade Control Structures for the Muddy Creek Demonstration Stream Restoration Research Project, R. J. Wittler, D. R. Eby, S. D. Keeney, C. C. Watson and S. R. Abt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p105-110.

South Platte River Restoration Through Maintenance, Ben R. Urbonas and Bryan W. Kohlenberg, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3533-3538.

Tributary No. 9 Restoration, Maryland State Highway Administration, James W. Gracie, Robert Shreeve and Linda Kelbaugh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3539-3544.

Two-dimensional Sheetflow Modeling for Wetland Restoration, Robert A. Laura and Ananta K. Nath, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p263-267.

Water Control Structure Choice for Wetland Restoration/ Creation, Roger C. Smith, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p268-273.

Wetland Restoration in Southern North Sea Coastal Areas: The Experience of Britain and The Netherlands, Henk Smit and John S. Pethick, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3740-3745.

Restraint systems

Parameters in Bridge Restrainer Design for Seismic Re-trofit, M. Saiidi, E. Maragakis and S. Feng, ST Jan. 96,

Ultimate Behavior of Tie Plates at High-Speed Tension, Makoto Obata, Yoshiaki Goto, Sei Matsuura and Hideyuki Fujiwara, ST Apr. 96, p416-422.

Retaining walls

Analysis and Design of Retaining Structures Against Earthquakes, Geotechnical Special Publication No. 60, Shamsher Prakash, ed., 1996, 0-7844-0206-X, 144pp.

Centrifuge Modeling of Geotextile-Reinforced Cohesive Soil Retaining Walls, A. Porbaha and D. J. Goodings, GT Oct. 96, p840-848.

Collapse of Geogrid-Reinforced Retaining Structure, Gerald A. Leonards, J. David Frost and Jonathan D. Bray, CF Nov. 94, p274-292.

Common Causes of Retaining-Wall Distress: Case Study, Edred T. Marsh and Richard K. Walsh, CF Feb. 96,

Creep Deformation and Stress Relaxation in Preloaded/ Prestressed Geosynthetic-Reinforced Soil Retaining Walls, Fumio Tatsuoka, Taro Uchimura, Masaru Tateyama and Katsumi Muramoto, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p258-272.

Design of Sheet Pile Walls, U.S. Army Corps of Engineers, 1996, 0-7844-0135-7, 75pp.

Dynamic Modeling and Response of Soil-Wall Systems, Anestis S. Veletsos and Adel H. Younan, GT Dec. 94, p2155-2179.

p2153-2119.

Dynamic Response of Cantilever Retaining Walls, A. S. Veletsos and A. H. Younan, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p19-20.

Dynamic Response of Flexible Retaining Walls, A. H. Younan and A. S. Veletsos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p310-313.

Earthquake Destructiveness, Potential Factor and Permanent

Earthquake Destructiveness Potential Factor and Permanent Displacements of Gravity Retaining Walls, Teresa Crespellani, Claudia Madiai and Giovanni Vannucchi, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p124-133.

Excavation Cautious for Memorial at Arlington Cemetery, CE Sept. 96, p14.

Forced Vibration of Full-Scale Wall-Backfill System, Ahmed-W. Elgamal, Sreenivas Alampalli and Paul Van Laak, GT Oct. 96, p849-858.

Generalized Coulomb Active Earth Pressure for a Distanced Surcharge, Ernesto Motta, GT June 94, p1072-

Geotextiles Cut Costs for Temporary Retaining Wall, CE July 96, p84.

Observation and Conditional Stochastic FEM, M. Hoshiya and I. Yoshida, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p178-181

On Seismic Displacements of Rigid Retaining Walls, Yingwei Wu and Shamsher Prakash, (Analysis and De-sign of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p21-37.

Optimization and Sensitivity of Retaining Structures, Aşkin Saribaş and Fuat Erbatur, GT Aug. 96, p649-656.

Protection Against Flooding: A New Delta Plan in the Netherlands, Frank P. Hallie and Richard E. Jorissen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3019-3020.

Reliability Assessment Methodology for Sliding Stability of Gravity Structures, Bilal M. Ayyub and Ru-Jen Chao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Reliability Based Design of Reinforced Earth Structures, Adnan A. Basma and Ali S. Al-Harthy, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p788-791.

Retaining Wall Enhances Flowering Residential Site, CE Jan. 96, p77.

Rotation of Large Gravity Walls on Rigid Foundations under Seismic Loading, R. S. Steedman and X. Zeng. (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p38-56.

Seismic Analysis and Model Studies of Bridge Abutments. K. L. Fishman and R. Richards, Jr., (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p77-99.

Slope Stabilization Using Old Rubber Tires and Geotex-tiles, Paul S. H. Poh and Bengt B. Broms, CF Feb. 95, p76-79

Threshold Accelerations for Rotation or Sliding of Bridge Abutments, Rowland Richards, Jr., Kenneth L. Fishman and Randall C. Divito, GT Sept. 96, p752-759.

Boolean Modeling and Analysis of Smart Material Properties, S. Dobson, M. Noori and A. Crespo, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p838-841.

Effective Subsurface Retention/Detention Systems, James E. Milligan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2276-2281.

Reliability-Based Exit Gradient Design of Water Retaining Structures, D. V. Griffiths, Gordon A. Fenton and G. M. Paice, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p518-534

Retention-Tank Systems: A Unique Operating Practice for Managing Complex Waste Streams at Research and Development Facilities, Shari Brigdon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1771-1776.

Upscaled Soil-Water Retention Using van Genuchten's Function, Timothy R. Green, James E. Constantz and David L. Freyberg, HE July 96, p123-130.

Retention basins

Are Erosion Control Programs Reducing Sedimentation? D. P. Roseboom, R. Sinclair, Gary Eicken and Pat Woods, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2879-2884.

Reti, G. Andrew

Proud to Be a Civil Engineer, G. Andrew Reti Makes Major Gift to ASCE Building Campaign, NE Nov. 96, p2.

Concrete Beams and Slabs Retrofitted with CFRP Laminates, M. Arockiasamy, Ahmed Amer and M. Shahawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p776-779

A Cost Effective Rehab Scheme for URM Structures, M. Ala Saadeghvaziri, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p262Cost-Performance Criteria for Seismic Retrofitting, Alberto L. Guzmán, Ali Saffar and Leandro Rodríguez Agrait, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p902-905.

Cyclic Testing of Existing and Retrofitted Riveted Stiffened Seat Angle Connections, Majid Sarraf and Michel Bruneau, ST July 96, p762-775.

Bruneau, ST July 96, p762-775.
Eliminating Backflow in Retrofit BNR Systems, Gregory J. Daviero and Terry W. Sturm, EE Oct. 96, p950-954.
Engineering Ethics, Stanley H. Goldstein, P.E and Robert A. Rubin, CE Oct. 96, p40-44.
Evaluation of Structural Integrity of Damaged Masonry Building, Sherif A. Mourad and Farouk A. El-Hakim, CF

May 96, p73-78.

Exterior Accessibility for Structural Repair, Retrofit and Enhancement, Kenneth Hallam and Dudley McFarquhar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Fatigue Cracks at Stringer-Floorbeam Connections, Leon htgue Cracks at Stringer-Prooffician Community of Struc-L-Y Lai, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p483-490.

Foundation Retrofit at Savoonga "A Retrospective Study G. Scott Crowther, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p278-

Laminate Bonding for Concrete Repair and Retrofit, D. V. Reddy, G. B. Gervois and L. A. Carlsson, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1579-1591

New Aluminum Decks Cut Loads, Add Life, CE Aug. 96, p12

On the Use of Fiber Reinforced Composites for Infrastructure Renewal— A Systems Approach, Vistasp M. Kar-bhari, Frieder Seible and Gilbert A. Hegemier, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1091-1100.

Quake Proofing a Palace, John Casey, CE Aug. 96, p32-35. Repair and Retrofit of Reinforced Concrete Columns, Riyad S. Aboutaha, (Natural Disaster Reduction, George . Housner, ed. and Riley M. Chung, ed., 1997), p313-314

Retrofit of Black Butte Hydroelectric Project Penstock, George A. Inverso, John A. Schwartz, Stephen M. Hart, Erik Bodholt and Billy Ferguson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p469-476.Retrofitting a Nuclear Lab, CE Dec. 96, p12,13.

Retrofitting for Flood Protection: A Status Report, French Wetmore, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p278-279.
Roof Sheathing Uplift Resistance for Hurricanes, Edward

Sutt, Kallem Muralidhar and Timothy Reinhold, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p974-981.

Seattle's Kingdome Receives Rigorous Seismic Study, CE Apr. 96, p12

Seismic Analysis and Retrofit Design of the Anheuser-Busch Bevo Building in St. Louis, Missouri, Nathan C. Gould and Christopher I. Deneff, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p381-388

Seismic Analysis of Concrete Towers of the San Diego-Coronado Bridge and Evaluation of a High Performance Concrete Retrofit, Robert A. Dameron and Daniel R. Parker, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p530-541.

Seismic Analysis, Design and Evaluation of Hospitals-Vulnerability Studies by Energy Methods, Omar D. Car-dona and Jorge E. Hurtado, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p319-320.

Seismic Base Isolation Study for a Kentucky Building, John P. Miller and Nathan C. Gould, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p389-

Seismic Behavior of Older Steel Structures, Charles W. Roeder, Brett Knechtel, Eric Thomas, Anne Vaneaton, Roberto T. Leon and F. Robert Preece, ST Apr. 96, p365-373.

p365-373.
Seismic Behavior of Precast Parking Structure Diaphragms,
R. B. Fleischman, R. Sause, A. B. Rhodes and S. Pessiki,
(Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed.,
1996), p1139-1146.
Seismic Evaluation and Retrofitting of U.S. Long-Span
Suspension Bridges—Issues and Solutions, Subcommittee

Suspension Bridges—Issues and Solutions, Subcommutee on Seismic Performance of Bridges, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p56-90. Seismic Isolation of Bridges in New York City, Jagtar S. Khinda and Feng-Bao Lin, (Building an International

Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p24-32.

Seismic Isolation of Bridges in the Midwest, Mark R.

Capron, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Moham-

madi, ed., 1996), p48-55. Seismic Isolation of Bridges Using Elastomeric Isolation Systems, Ronald L. Mayes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p33-40.

Seismic Isolation Retrofit of Large Historic Building,

Anoop S. Mokha, Navinchandra Amin, Michael C. Constantinou and Victor Zayas, ST Mar. 96, p298-308

Seismic Retrofitting of Bridge Pier Columns, William L. Gamble and Neil M. Hawkins, (Building an International Community of Structural Engineers, S. K. and Jamshid Mohammadi, ed., 1996), p16-23 K. Ghosh, ed.

Seismic Strengthening of Low Rise Buildings, Theodore A. Pruess and John C. Theiss, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p397-404. Shear-wall Retrofit, Mark Jokerst, CE Feb. 96, p36-39.

Simple Method for Upgrading an Existing Reinforced-Concrete Structure, Hong Sioe Oey and Carlos J. Aldrete, SC Feb. 96, p47-50.

Telerobotic Pavement Marker Application, Rami A. Rihani and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p171-177

Three Repair/Retrofit Procedures for Welded Moment Frames, J. C. Anderson, Z. Yin and X. Duan, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p768-771.

Upgrading of Braced Frames for Potential Local Failures, Hae In Kim and Subhash C. Goel, ST May 96, p470-475. Washington State's Stormwater Management Program, Shari Scaftlein, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p4245-4250. "Ethics" Credit, CE Nov. 96, p30.
"SIMCON—A Novel High Performance Fiber-Mat Rein-

forced Cement Composite for Repair, Retrofit and New Construction", Neven Krstulovic-Opara, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p288-297

Return flow

Serura now 2D Velocity Distributions in Nearshore Currents, Marek Szmytkiewicz, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p366-376.

Distributions of Return Flow in Navigable Waterways, Ta Wei Soong, Renjie Xia and Nani Bhowmik, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2855-2860.

From Natural Disaster to Human-Caused Disaster, Antoni Palau and Jorge Alcázar, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3497.

Shallow and Surfacing Ground Water in an Arid Urban Environment, D. L. Smith and J. C. Guitjens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1495-1500.

Rehabilitating Arctic Tundra in Alaska, Jay D. McKendrick, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p764-769.

The Sawmill Creek Watershed Restoration Project, Larry Lubbers, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2873-2878.

Revenue

Revenues
Solving Collection Problems to Increase Revenue: The
Houston Experience, Karen Philippi, (North American
Water and Environment Congress & Destructive Water,
Chenchayya Bathala, ed., 1996), p4282-4287.
Utilizing Coordinated Billing and Metering Systems Analysis to Enhance Utility Revenue on a Shared Revenue

of the Charles (March American Water, and

Basis, Randy P. Schuler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4275-4281.

Editor's Note, Thomas L. Theis, EE Apr. 96, p247. Modeling Concentration-Polarization in Reverse Osm Spiral-Wound Elements, Benito J. Mariñas and Richard Urama, EE Apr. 96, p292-298.

Constructability in Public Sector, G. E. Gibson, Jr., C. I. McGinnis, W. S. Flanigan and J. E. Wood, CO Sept. 96, p274-280

Design Formulas for Block Revetments, Adam Bezuijen and Mark Klein Breteler, WW Nov./Dec. 96, p281-287. Estimating Wave-Induced Kinematics at Sloping Struc-tures, Sleven A. Hughes and Jimmy E. Fowler, WW July/Aug. 95, p209-215.

Reviewing Corps Public Works In Jeopardy, Hugh Converse, CE June 96, p35.

90, p.35. Editorial, A. Jacob Odgaard, HY Jan. 96, p.2. Editorial, Thomas L. Theis, EE July 96, p.555. Editorial, Kumares C. Sinha, TE July/Aug. 96, p.263. Editorial, Harry Yeh, WW Nov./Dec. 96, pvii. Engineers On the Line, J. A. Morgan, CE Dec. 96, p.27. Guarding Against Litigation, Andrew Frano, ME July/Aug. 96, p.28-32.

Reviews 27 Years Documenting Engineering Heritage, Eric DeLony, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p162-

Abstracting Lessons Learned from Design Reviews, E. William East and Michael C. Fu, CP Oct. 96, p267-275. Civil Engineering Education: An Historical Perspective, Lawrence P. Grayson, (Civil Engineering History: Engi-

neers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p44-52

Editorial, A. Jacob Odgaard, HY July 96, p366. Editorial, Kumares C. Sinha, TE July/Aug. 96, p263. Editorial, Thomas L. Theis, EE Sept. 96, p777.

Engineering and History: Manifestations in Monuments, Henry Petroski, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p155-161.

ofessional Liability — An Approach that Works, John G. Tawresey, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Professional Liability -Mohammadi, ed., 1996), p1288-1295.

A Review and Assessment of the Journal of Computing in Civil Engineering, Sivand Lakmazaheri and William Rasdorf, CP Apr. 96, p95-96.

Reynolds number

Determination of Force and Surface Pressure Coefficients of High Reynolds Number Flow over Circular Cylinder by Discrete Vortex Method, Fusen He and Tsung-chow Su, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p979-982.

1990, ps/9-982.

Discussion of Some Grid-Independence Issues in the Context of κ—ε and κ—ω Models of Turbulence, Nabil Elkouh, Simone Sebben and B. Rabi Baliga, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p297-300.

Interactive RANS/Laplace Method for Nonlinear Free Surface Flows, Hamn-Ching Chen and Sing-Kwan Lee, EM

Feb. 96, p153-162.

Reynolds stress

Distribution of Reynolds Stress above a Packed Bed in Open Channel Flow, Mahesh Balakrishnan, Clinton Dan cey, Thanais Papanicolaou and Panos Diplas, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p665-668.

Velocity and Turbulence Distribution in Unsteady Open-Channel Flows, T. Song and W. H. Graf, HY Mar. 96, p141-154.

Rheological properties

Laboratory Aging Methods for Simulation of Field Aging of Asphalts, Shin-Che Huang, Mang Tia and Byron E. Ruth, MT Aug. 96, p147-152.

Verification of Vertically Rotating Flume Using Non-Newtonian Fluids, Richard J. Huizinga, HY Aug. 96, p456-459.

An Electrorheological Damper with Annular Duct, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1197-1204.

Evaluation of Long-Term Time-Rate Parameters of Subgla-cial Till, C. L. Ho, J. C. Vela, P. U. Clark and J. W. Jenson, (Measuring and Modeling Time Dependent Soil Be-havior, Thomas C. Sheahan, ed. and Victor N. Kaliakin,

ed., 1996), p122-136.

Granular-Flow Rheology: Role of Shear-Rate Number in Transition Regime, Cheng-lung Chen and Chi-Hai Ling,

EM May 96, p469-480.

Modeling of the Oscillatory Response of Electrorheological Fluids, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p894-897.

Rate-Dependent Undrained Shear Behavior of Saturated Clay, Thomas C. Sheahan, Charles C. Ladd and John T.

Germaine, GT Feb. 96, p99-108.

Rheology of Fresh Concrete, Leslie Struble and Richard Szecsy, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1121-1128.

Structural Control with Electrorheological Dampers: Viscoplastic Behavior and Anticipation, Scott A. Burton and Nicos Makris, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1261-1268.

Design of Runoff Recycling Irrigation System for Rice Cultivation, R. C. Srivastava, IR Nov. Dec. 96, p331-335.

Ridership

Largest California Highway Design-Build Project Opens, CE Oct. 96, p26,28. Los Angeles' Gateway Opens, CE Jan. 96, p20,22.

Rigging
ALPS: The Automated Lift Planning System, Mike Williams and Craig Bennett, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p812-817.

Multiple Heavy Lifts Optimization, Kuo-Liang Lin and Carl T. Haas, CO Dec. 96, p354-362.

Right of way, land

Engineers Cut a "Greenway" Through Atlanta, CE Oct. 96,

Scottsdale Builds Bird Haven in Shadow of Freeway, CE Feb. 96, p12,14.

Right-of-way

Coal Pipelines Crossing Railroads: Legal Issues, Peter N. Davis and Henry Liu, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p254-264.

Earthquake Destructiveness Potential Factor and Permanent Displacements of Gravity Retaining Walls, Teresa Crespellani, Claudia Madiai and Giovanni Vannucchi, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p124-133.

On Seismic Displacements of Rigid Retaining Walls, Yingwei Wu and Shamsher Prakash, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p21-37. Seismic Pressures Against Rigid Walls, Guoxi Wu and W. D. Liam Finn, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p1-18.

Rigid pavements

Cellular Rigid Pavement, John K. Bright and John R. Mays,

TE Sept/Oct. 96, p381-387.

Closed-Form Back-Calculation of Rigid-Pavement Parame-ters, Li Shuo, T. F. Fwa and K. H. Tan, TE Jan/Feb, 96. p5-11.

Equivalent Single-Axle Load Factor for Rigid Pavements, Pin-Sien Lin, Yuan-Ting Wu, Tien-Kuen Huang and C. H. Juang, TE Nov/Dec. 96, p462-467.

Modeling Damage to Rigid Pavements Caused by Subgrade Pumping, M. Asghar Bhatti, Jeffery A. Barlow and James W. Stoner, TE Jan/Feb. 96, p12-21.

Study of Parameters Affecting Impulse Response Method, Soheil Nazarian and Srinivasa Reddy, TE July/Aug. 96,

Rigid-body dynamics

Criteria for Initiation of Slide, Rock, and Slide-Rock Rigid-Body Modes, Harry W. Shenton, III, EM July 96, p690-693

Eigenproperties of Massive Rigid Body on Elastic Half-Space, Z. Sienkiewicz, GT June 96, p488-491.

Nonlinear Rocking Motions. I: Chaos under Noisy Periodic Excitations, H. Lin and S. C. S. Yim, EM Aug. 96, p719-727

Nonlinear Rocking Motions. II: Overturning under Random Excitations, H. Lin and S. C. S. Yim, EM Aug. 96, p728-735.

Singapore Showcase, T. Y. Lin and Tan See Chee, P.E., CE Nov. 96, p61-63.

Effective Moment of Inertia of Elasto-Plastic Beams, Barry T. Rosson and Ronald K. Faller, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p254-257.

Rigidities of One-Dimensional Laminates of Composite Materials, Shuguang Li, EM Apr. 96, p371-374.

Scaling-Up of Small-Scale Granular Sediment Transport Laws, J. Raghuraman and P. K. Haff, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p262-264.

Loading Tests on Circular and Ring Plates in Very Dense Cemented Sands, Nabil F. Ismael, GT Apr. 96, p281-287

Nonlinear Dynamics of Unidirectional, Fiber-Reinforced Tori, Raouf A. Raouf and Anthony N. Palazotto, EM Mar. 96, p271-276.

Whose Fault Was It? Alice C. Dillard, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1274-1277.

Calibration of Sediment Transport Model for the Upper End of Elephant Butte Reservoir, Mohammed A. Samad, Drew C. Baird and Frank P. Montoya, (North American Water and Environment Congress & Destructive Water. Chenchayya Bathala, ed., 1996), p2288-2293.

Forcing Function and Climate Change, Bijaya P. Shrestha, Lucien Duckstein and Eugene Z. Stakhiv, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2151-2156.

Waler, Chenchayya Bannaia, ed., 1996), p.2151-2150.
Policy and Engineering Decision-making under Global Change: Case of the Upper Rio Grande River Basin, Lucien Duckstein, Bijaya P. Shrestha and Marvin Waterstone, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p38-60.

Water Allocation on US/Mexico Boundaries, Conrad G. Keyes, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3429-3433.

Rip currents

Finite Amplitude Shear Wave Instabilities, H. Tuba Özkan and James T. Kirby, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p465-476.

Longshore Nonuniformities of Nearshore Currents, F. E. Sancho, I. A. Svendsen, A. R. Van Dongeren and U. Pu-trevu, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p425-436.

Looking for Wave Groups in the Surf Zone, Merrick C Haller and Robert A. Dalrymple, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p81-92.

Spingat, Frank, Hans-H. Dette and Karsten Peters, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p477-488.

ASCE Regulated Riparian Code and Florida's Regulated Riparian Experience: The Role for Voluntary Reallocation, Phyllis Park Saarinen and Mark D. Farrell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2927-2932.

The Great Lakes Storm Damage Reporting System, David Wallin and P. S. Chawla, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p183-184.

Reclaiming Denver's Central South Platte River, Nick Ski-falides, Leo Eisel, Brian Kolstad and Ben Urbonas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3527-3532.

Riparian waters

Design of Riparian Habitat Replacement in Active Floodplains, Bruce M. Phillips, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1406-1412.

Picacho Reservoir Enhancement Study for Water Recharge, Reparian Enhancement, and Water-Based Recreation Purposes, Ira Mark Artz, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1413-1418.

Watershed Riparian Management and Its Benefits to a Eutrophic Lake, R. Bruce Williamson, Christine M. Smith and A. Bryce Cooper, WR Jan./Feb. 96, p24-32.

Geometry of Sand Ripples due to Combined Wave-Current Flows, Hitoshi Tanaka and Van To Dang, WW Nov./ Dec. 96, p298-300.

Sediment Transport Mechanism Over Rippled Sand Beds, S. G. Sajjadi, J. N. Aldridge and D. J. Nicholas, (Estua-rine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p669-680.

Comparison and Evaluation of Different Riprap Stability Formulas Using Field Performance, Mahrez Ben Belfadhel, Guy Lefebvre and Karol Rohan, WW Jan/Feb. 96, p8-15.

Design of Guide Banks for Bridge Abutment Protection, P. F. Lagasse, E. V. Richardson and L. W. Zevenbergen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Field Data Collection and Analysis for Verification of Estu-arine Models, W. H. McAnally, T. C. Pratt, G. T. Stevens and T. M. Parchure, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p204-214.

Riprap and Concrete Armor to Prevent Pier Scour, Lisa M. Fotherby and James F. Ruff, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4178-4187.

Rock Riprap for Grade Control, Charles E. Rice, Kerry M. Robinson and Kem C. Kadavy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p588-593.

Sizing Dumped Rock Riprap, David C. Froehlich and Craig A. Benson, HY July 96, p389-396.

Successful Implementation of Grouted Boulder Grade Control Structures on Drainageways in the Denver Metropol-itan Area, John M. Pflaum, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p836-841.

Rick Contract Waived Rights to Recovery of Loss, CE Aug. 96, p24.

EPA in Limelight at WEFTEC Meeting, CE Dec. 96, p10. Extreme Winds as a Component of Catastrophic Risk, Gregory L. F. Chiu, (Probabilistic Mechanics & Struc-

tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p498-501.

Geophysical Investigation of Karst Collapse Features for a Proposed Waste Rock Stockpile Irian Jaya, Indonesia, Philip H. Duoos and Rowland B. Cromwell, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p86-100.

ed., 1990), poor-100.

Loading Cycles for Fatigue Reliability Assessment of Miter Gates at Navigation Locks on the Upper Mississippi River, Bilal M. Ayyub, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p854-857.

Possibilities of Fracture Mechanics Models Application to Optimisation of Operational Use of Large-Size Machine Components, Lech Bukowski and Piotr Artymiak, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p780-783

Reliability-Based Maintenance Strategy Using NDI, Achin-tya Haldar and Zhengwei Zhao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and

Mircea D. Grigoriu, ed., 1996), p364-367

Rethinking Foundation Design in Karst Residuum, Ray-mond A. DeStephen and Steven E. Conner, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p49-56.

Risk Factors for Physical Injury During Earthquakes: Lessons from Previous Studies, Robin M. Wagner, Nicholas P. Jones, Gordon S. Smith and Kirsten O. Waller, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p78-79.

Risk Model Applied Backwards, Monica Maldonado, ET

Oct./Nov. 96, p1,7.

Space Debris: A Growing Threat, Michelle Mancuso, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1290-1294. Tobin Preaches 'Covenant' for Seismic Safety, NE July 96,

p15.

Uncertainty in the Geologic Environment: from Theory to Practice, 2 vols., Geotechnical Special Publication No. 58, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996, 0-7844-0188-8, 1460pp.

Uncertainty Model is a Redundancy, William Hayden, CE Aug. 96, p31.

Use of Risk Models to Mitigate Financial Impacts from Catastrophic Natural Events, Auguste Boissonnade, Peter Ulrich and Richard D. Wales, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p199-200.

Risk acceptance

Environmental Worldviews and Water Resources, Robert E. O'Connor, Richard J. Bord and Ann Fisher, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p10-18.

Fear Not: The Art of Risk Communication, Christine Barr, ME Jan./Feb. 96, p18-22.

"Elevating the Importance & Visibility of Mitigation-Promoting Public Awareness", Kenneth A. Deutsch, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p165-166.

A New Model of Risk Allocation for Construction Con-tracts based on Fair Liabilities between Parties, Harkunti P. Rahayu and David G. Carmichael, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p35-41.

Risk Allocation in Lump-Sum Contracts—Concept of La-tent Dispute, Francis Hartman and Patrick Snelgrove, CO

Sept. 96, p291-296.

Risk analysis

572

The 1995 Flood in Southeastern Norway - Operational Forecasting, Warning, and Monitoring of a 200-year Flood, K. Repp, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2537

Approach, Methods and Results of an Individual Elicitation for the Volcanism Expert Judgment Panel, Bruce M. Crowe, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p56-58.

Assessing the Local Geologic Component of the Earth-quake Hazard in the Portland Metropolitan Area, Mat-thew A. Mabey and Ian P. Madin, (Natural Disaster Re-duction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p177-178.

Barge Collision Design of Highway Bridges, M. W. Whit-ney, I. E. Harik, J. J. Griffin and D. L. Allen, BE May 96, p47-58.

Catastrophic Floods and Their "Risk" in the Rivers of Albania, Miriam Bogdani, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p919.

Central Pacific Hurricanes-What Do We Know? Thomas A. Schroeder, (Natural Disaster Reduction, George Housner, ed. and Riley M. Chung, ed., 1997), p291-292.

Comparison of Hazard and Acceptable Risk Criteria, David S. Bowles, Loren R. Anderson and Terry F. Glover, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p346-366.

Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996, 0-7844-0182-9, 1090pp.

Critical Evaluation of Risk Assessment: A Look from the Inside Out, Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p419-421.

Dam Safety Policy for Spillway Design Floods, James R. Dubler and Neil S. Grigg, El Oct. 96, p163-169.

Damage Analysis of a Water Distribution System Subject to Natural Hazards, James Bates, Matthew J. Cassaro and Michael A. Cassaro, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p357-358.

A Damage Simulation Model for Buildings and Contents in a Hurricane Environment, N. Stubbs and D. C. Perry, (Building an International Community of Structural En gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p989-996.

Development of a Multivariate Vulnerability Indicator, Wilbert O. Thomas, Jr., Betty Bonn and Albert V. Romano, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p303-304.

The DIMAK Scale for Disaster Magnitude Measuring in Service, Mark Klyachko and Ilia Klyachko, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p76-77.

Economic Risk Analysis as a Research Directing Paradigm. Ken Young, Stuart Stein, David Pearson and Roy Trent, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

An Economy and Risk Analysis of Installed Capacity Ex-pansion at the Three Gorges Power Plant, Liping Wang, Nianhua Xue and Changming Ji, (North American Water And Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3874-3879.

Environmental Worldviews and Water Resources, Robert E. O'Connor, Richard J. Bord and Ann Fisher, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Sta-

khiv, ed., 1996), p10-18.

Evaluating Risk to the Environment from Mining Using Failure Modes and Effects Analysis, Kelvin Dushnisky and Steven G. Vick, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p848-865.

573

A Framework for Estimating Losses Due to Hurricane Extreme-Winds, Gregory L. F. Chiu, (Natural Disaster Reduction, George W. Houser, ed. and Riley M. Chung, ed., 1997), p287-288.

A Framework for Sanitation and Health Risk Assessment, Charles G. Gunnerson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2390-2395.

A Fuzzy Logic Paradigm for Fault Trees and Event Trees in Risk Assessment, Timothy J. Ross and Sunil Donald, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p369-375.

Geologic Uncertainties in Tunneling, Herbert H. Einstein, Vijaya B. Halabe, Jean-Paul Dudt and François Descoeudres, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p239-

A Geostatistically-Based Method to Assess Potential Hazardous Waste Sites Using Hard and Soft Data, Morris M. Dirnberger and Richard W. Stephenson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P., Nelson, ed. and Mary J. S. Roth, ed., 1996), p826-847.

Ground-Movement-Related Building Damage, Storer J. Boone, GT Nov. 96, p886-896.

Hazard Assessment of Debris Fans at Rico, Colorado, B. Christopher Wilbur, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1432-1445.

Hydrologic Risk, Robert C. Patev, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), 2416-418.

The Impact of Multiple Failure Modes in Risk Analysis for Civil Infrastructure Management, James H. Lambert, Lori R. Johnson and Yacov Y. Haimes, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p80-105.

The Influence of Trust on Risk-Based Decision Making, David L. McLain and B. Katarina Hackman, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p169-179.

Institutional Issues in Natural Hazard Mitigation, Daniel J. Alesch, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p367-368.

Integrated Planning Decision Support System (IPDS), Mario Mejía-Navarro and Luis A. García, (*Natural Dis*aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p189-190.

Integrated Planning Decision Support System (IPDS) Application: Glenwood Springs, Colorado, Mario Mejía-Navarro and Luis A. García, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p386-387.

Inundation Scenarios and Inundation Risk, M. P. C. Frijters and B. P. van den Bunt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p62-63.

Just One More Boring, and We'll Know for Sure! Sam S. C. Liao, David L. Druss, Thorn L. Neff and Brian R. Brenner, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p119-133.

Let the Buyer (and Seller) Beware, Gary Gough, CE Sept.

A Look at Technological Risk and Uncertainties in Flood Disaster Reduction, Shou-shan Fan and Nicholas C. Matalas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p253-255.

Minimum Risk Route Model for Hazardous Materials, B. Ashtakala and Lucy A. Eno, TE Sept./Oct. 96, p350-357.Modeling Reliability of Train Arrival Times, L. Ferreira and A. Higgins, TE Nov./Dec. 96, p414-420. Mortality and Morbidity Patterns Associated with the October 12, 1992 Egypt Earthquake, Josephine Malilay, Ibrahim Fayez Elias, David Olson, Thomas Sinks and Eric Noji, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p266-268.

Multi-Hazard Risk Assessment of Lifelines: Methodologies and Research Needs, Erik Vanmarcke and Ricardo Palma, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p359-360.

Next Generation Flood Damage Analysis Program, Michael W. Burnham, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3788-3793.

Non-Statistical Uncertainties in Liquefaction Risk Assessment, Khalid M. El Zahaby and M. S. Rahman, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1068-1082.

Numerical Modeling of Deep Well Injection Near a Fault, Peikang Jin and Michael E. Barber, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p912-926.

On Communicating Hydrologic Risk, Rafael G. Quimpo, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p265-271.

Peru's Program for Disaster Mitigation 1992-1995, Julio Kuroiwa and Dusan Zupka, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p84-85.

Preparing for the Big One - Risk Assessment and Mitigation of a Major Earthquake, David L. Pratt, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p207-208.

Probabilistic Approach for Cancer Risk Assessment, Paul S. Watkins, Timothy L. Jacobs, Rory B. Conolly and Warren T. Piver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2366-2371.

Probabilistic Risk Assessment for Tailings Impoundment Founded on Paleokarst, Dirk Van Zyl, Ian Miller, Victor Milligan and W. James Tilson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p563-585.

Probabilistic Seismic Analysis Including Soil-Structure Interaction, Dan M. Ghiocel, Paul R. Wilson and Gary G. Thomas, Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p620-623.

Recently Emphasized Objectives and Risk Analysis for Project Planning in Developing Countries, Alvin S. Goodman and Lampros E. Bourodimos, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p154-168.

Reflections on the Regulatory Reform Debate, Leonard Shabman, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p.1-9.

Regionalization of Annual Precipitation Maxima in Montana, Charles Parrett, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p57-58.

Regulatory Perspective on NAS Recommendations for Yucca Mountain Standards, Stephan J. Brocoum, Miguel A. Lugo, Steven P. Nesbit, Paul M. Krishna and James A. Duguid, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p272-273.

Reliability Analysis in Support of Risk Assessment for Non-Routine Closure/Shutdown of Hydroelectric Generating Stations, T. V. Vo, T. R. Blackburn, L. O. Casazza, P. G. Heasler, N. L. Mara, T. M. Mitts and H. K. Phan, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p326-345.

574

Reliability Analysis in the Rehabilitation of Corps Structures with Time-Dependent Needs, Mary Ann Legge (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p134-141.

Residential Vulnerability Functions and Their Variability Based on Claims Data, Ben Lashkari and Ronald Wardrop, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p307-308.

A Review (and Comparison) of DSHA and PSHA, Russell A. Green and William J. Hall, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p125-126.

Risk Analysis for Urban Stormwater Quality Management, James P. Heaney, Leonard Wright and Samsuhadi, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p219-248.

Risk Analysis in Dam Safety Practice, Steven G. Vick and R. A. Stewart, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p586-603.

Risk Analysis of Drinking Water Treatment and Supply Fa-cilities Handling Highly Hazardous Chemicals, Krishna Nand, Bruno Loran and Morley Male, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p776-780.

Risk Analysis of Joint Reservoir Operation in Central Tai-wan, Jan-Tai Kuo, Chang-Shian Chen and Yuan-Hsi Liao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Risk Analysis of Levee Closures Using Range/Confidence Estimates, W. D. Rowe and Michael Burnham, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p367-387.

Risk Analysis of Ship and Barge Collision Loads on Bridg-es, Michael A. Knott, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p724-727.
Risk as a Sustainable Development Criteria, Heidelore I.
Kroeger and Slobodan P. Simonovic, (North American
Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1531-1536.

Risk Assessment Approach to Dam Safety Criteria, David S. Bowles, Loren R. Anderson and Terry F. Glover, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p451-473.
Risk Assessment of Nambe Falls Dam, J. Lawrence Von

Thun, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p604-

Risk Assessment of Rockfall Hazard at Horse Mesa Dam: A Case History, Peter M. Kandaris and Kenneth M. Euge, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1402-

Risk Assessment of Vapors in Cold Regions, Robert A. Perkins, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p360-371.

Risk Based Analysis of Major Rehabilitation of Hydraulic Structures Using REPAIR, David Moser, (North American Water and Environment Congress & Destructive

Water, Chenchayya Bathala, ed., 1996), p2498-2503.
isk Communication: Guidelines and Commentary,
Clifford S. Russell and Duane D. Baumann, (Risk-Based) Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p396-400.

Risk Variability Due to Uniform Soil Remediation Goals, Paula A. Labieniec, David A. Dzombak and Robert L.

Siegrist, EE July 96, p612-621.
Risk-Based Decision Making in Water Resources VII, Yacov Y. Hairnes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996, 0-7844-0168-3, 450pp.

Risk-Based Planning and Management of Maintenance Dredging, L. Leigh Skaggs and David A. Moser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2403-2408.

Risk-Based Spatial Decision Support System for Mainte-nance Dredging of Navigation Channels, Samuel J. Ra-tick and Holly Morehouse Garriga, IS Mar. 96, p15-22.

Risk-Cost Decision Framework for Aquifer Remediation

Risk-Cost Decision Framework for Aquiter Remediation Design, Bruce R. James, Jin-Ping Gwo and Laura Toran, WR Nov./Dec. 96, p414-420.

Route Assessment Using Comparative Risk Factors Integrated through a GIS, Douglas M. Toth and William J. O'Connell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p363-365.

R. for Risk Communication, Steven D. Perry, CE Aug. 96. p61-63.

Safety Analysis Requirements for Robotic Systems in DOE Nuclear Facilities, W. H. McCulloch, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p235-240.

Seismic Hazard Analysis Without the Gutenberg-Richter Relationship, David Speidel, Peter Mattson and Bon Sy, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p129-130.

Seismic Microzonation and Development of an Earthquake Damage Scenario for Istanbul, Turkey, Mustafa Erdik and Jennifer N. Swift-Avci, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p341-342,

Seismic Risk Analysis for Vrancea Zone, Felicia Olariu and Ioan Olariu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p21-22.

Seismic Risk Assessment for Environmentally Sensitive Facilities in Northern Maine, Elizabeth A. Champeon, (Uncertainty in the Geologic Environment: from Theor to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1052-1067.

Site Vulnerability Assessment for Wellhead Protection Planning, Wade E. Hathhorn and Tyler Wubbena, HE Oct. 96, p152-160.

SoilRisk: Risk Assessment Model for Organic Contami-nants in Soil, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE May 96, p388-398.

Some Thoughts About Ecosystems: Management, Control, and Uncertainty, Daniel E. Willard, (Risk-Based Deci-sion Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p191-206.

Space Habitat Environmental Health Risk Assessment and Management, Gerald J. Smith and George W. Morgenthaler, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1008-1019.

Storm-Surge Flooding in Chittagong City and Associated Risk, M. Mozzammel Hoque, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3701.

Subjective Probability Assessment in Water Resources Planning, Charles Yoe, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p294-314.

Summary of Responses to Participant Questionnaire, Yacov Y. Haimes, David A. Moser and Eugene Z. Stakhiv, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p422-434.

System Risk for Multi-Storey Reinforced Concrete Building Construction, Deepthi Epaarachchi, Mark G. Stewart and David V. Rosowsky, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p230-233

Tornado and Hail Risk Modeling: An Event Based Approach, Khalid I. Bouzina, Mohan Sharma, Auguste Boissonnade and Surya Gunturi, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p19-20.

Toward Risk-Consistent Wind Hazard Design/Mitigation Criteria Using Probabilistic Methods, Lawrence A. Twisdale, Peter J. Vickery and Andrew C. Steckley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p256-257. Uncertainty and Risk Analyses for FEMA Alluvial Fan Method, Bing Zhao and Larry Mays, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p180-190.

Uncertainty and Risk Analyses for FEMA Alluvial-Fan Method, Bing Zhao and Larry W. Mays, HY June 96,

p325-332

Uncertainty in Comparative Analysis with Continuous Nonpoint Source Pollution Models, Dipmani Kumar and Conrad D. Heatwole, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1705-1710.

Understanding Why Stakeholders Matter, Richard C. Eschenbach and Ted G. Eschenbach, ME Nov./Dec. 96,

Urban Disaster Vulnerability Assessment & Lessening Is a Key for Safe Development, Mark Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley

M. Chung, ed., 1997), p11-12.

M. Chung, ed., 1997), p11-12.
Use of GIS Mapping to Illustrate the Sensitivity of Wind Hazard Insurance Loss Estimation to Modeling Parameters, Andrew Steckley, Lawrence A. Twisdale and Peter J. Vickery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p201-202.
Use of Probabilistic Methods for Analysis of Cost and Du-

ration Uncertainties in a Decision Analysis Framework, D. M. Boak and L. Painton, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p.250-251.

Vulnerability Curves for Buildings in Tropical-Cyclone Regions, John Holmes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p78-81.

Wind Hazards in the United States, Peter J. Vickery, Law-rence A. Twisdale and Andrew C. Steckley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p139-140.

Worth the Risk? Charles W. Lockhart and William J.

Roberds, CE Apr. 96, p62-64.

The Yucca Mountain Probabilistic Volcanic Hazard Analysis Project, Kevin J. Coppersmith, Roseanne C. Perman, Robert R. Youngs, Todd A. Crampton, Laurel A. DiSilvestro, Richard P. Smith, C. Allin Cornell, Peter A. Morris, Timothy Sullivan, Stephen T. Nelson and J. Carl Stepp, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p53-55.

A Comprehensive Strategy for Mitigation, R. T. Severn, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p13-14.

Risk management

Combined Flood Hazard Mitigation Techniques for Com-prehensive Planning - the Saugus River Coastal Flood Risk Reduction Plan, Barbara D. Hayes, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2312-2317.

Combined Structural and Non-Structural Flood Hazard Mitigation, Barbara D. Hayes, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p25-26.

Construction Project Control through Risk Management, E. N. Wirba, J. H. M. Tah and R. Howes, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-

sky, ed., 1996), p28-34.

sky, ed., 1990/j. p28-34.
Cooperative Efforts for Earthquake Risk Management in Developing Countries, Geoffrey Hoefer, Brian Tucker, Jeannette Fernández, Hugo Yepes, Jean-Luc Chatelain, Furnio Kaneko and Stephanie A. King, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p283-284.

Crung, etc., 1997), p.283-284.

Praining Himalayan Glacial Lakes Before They Burst, Richard Kattelmann and Teiji Watanabe, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1978.

Drought Management: Crisis vs. Risk Management, Michael J. Hayes, Donald A. Wilhite, Mark D. Svoboda and Kelly Halps Smith, (Natural Disease Reduction Geograph

Kelly Helm Smith, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p371-

Evaluating the Potential of ATT Technologies in Hazardous Materials Transportation Risk Management, Konstan-tinos G. Zografos and George M. Vasilakis, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p480-484.

Fuzzy Arithmetic for Ecological Risk Management, Jacques Ganoulis, Iraklis Bimbas, Lucien Duckstein and Istvan Bogardi, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p401-415.

The Impact of Multiple Failure Modes in Risk Analysis for to impact of multiple ratine modes in Nas Analysis in Civil Infrastructure Management, James H. Lambert, Lori R. Johnson and Yacov Y. Haimes, (Risk-Based De-cision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p80-105.

ed., 1990), pou-103.

A Knowledge-Based System For International Hurricane Risk Management, Surya K. Gunturi, Chris Austin, Aida RiveraMarzan, Ping Zhang, John Lieberman, Paul VanderMarck, Mark Broido and Auguste C. Boissonnade, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p15-16.

ano Kiefy M. Chung, etc., 1997), p13-10. Lightning Safety: A Risk Management Approach, Richard Kithil, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p17-18. Managing Construction Risks, Ossama A. Abdou, AE Mar.

96, p3-10.

A Minimum Risk Evaluation Methodology for Fault Tolerant Automotive Control Systems, P. Borodani, L. Gortan, R. Librino and M. Osella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Minimum Risk Route Model for Hazardous Materials, B. Ashtakala and Lucy A. Eno, TE Sept./Oct. 96, p350-357. More-Stable Owner-Contractor Relationships, Peter Dozzi, Francis Hartman, Neil Tidsbury and Rafi Ashrafi, CO

Mar. 96, p30-35.

Malai, 90, 1909-93.
Malai, 90, 1909-93.
Multi-Objective Analysis for Cyclone Shelter Planning in Bangladesh, Jahir U. Chowdhury, Rezaur Rahman, Fazlul Karim and David W. Watkins, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p213-214.

A New Approach to Airport Security, Sal DePasquale, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p53-62.

A New Model of Risk Allocation for Construction Con-tracts based on Fair Liabilities between Parties, Harkunti P. Rahayu and David G. Carmichael, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p35-41.

Optimum Risk Management with Uncertain Hazard and Vulnerability Information, Lawrence A. Twisdale and Peter J. Vickery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p88-89

Practitioners' Forum, Gary P. Ten Eyck, AE Mar. 96, p1-2. Practitioners' Forum, AE Sept. 96, p85-87.

Professional Liability - An Approach that Works, John G. Tawresey, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1288-1295.

Real Time Planning & Total Risk Management, Ali Jaafari, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p193-199.

Reflections on the Regulatory Reform Debate, Leonard Shabman, (Risk-Based Decision Making in Water Re-sources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p1-9.

and Logent Statement of Managing Risk of Aging Struc-tures, Bruce Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p590-597.

Risk Assessment Approach to Dam Safety Criteria, David S. Bowles, Loren R. Anderson and Terry F. Glover, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p451-473.

Risk in Geotechnical Engineering for Embankment Dams, Gil M. Lawton and Michael P. Forrest, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p550-562.

Risk Management for Response Planning, Roozbeh Kan-gari and Jacob Kovel, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p42-48.

Risk Management Principles of Transportation Facility Design Engineering, Andrew G. Cooley, TE May/June 96, p207-209.

Risk Reduction of Lead and Mercury in Michigan, Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p315-325.

Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene

Z. Stakhiv, ed., 1996, 0-7844-0168-3, 450pp.

Risky Business, ME Nov./Dec. 96, p12.

Safety Assessment of a Robotic System Handling Nuclear Material, Christopher B. Atcitty and David G. Robinson, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p255-261.

Space Habitat Environmental Health Risk Assessment and Management, Gerald J. Smith and George W. Mor-genthaler, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1008-1019.

Tenneco's Risk Management Approach to Pipeline Crossings, J. S. Street and J. C. Bowles, (Pipeline Crossings) 1996, Lawrence F. Catalano, ed., 1996), p14-21.

To Blast or Not to Blast? G. F. Revey, SC Aug. 96, p81-82. Train/Vehicles Wind-Induced Hazard and Its Mitigation, Masaru Matsumoto and Tatsuo Maeda, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p131-132.

Twinning Time and Cost in Incentive-Based Contracts, A.

Jaafari, ME July/Aug. 96, p62-72.

Urban Disaster Vulnerability Assessment & Lessening Is a Key for Safe Development, Mark Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p11-12.

Use of a National Loss Estimation Methodology for Risk Management, Thalia Anagnos, Scott Lawson, Jawhar Bouabid and Mourad Bouhafs, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p249-250.

Use of Fuzzy Logic and Similarity Measures in the Risk Management of Hazardous Waste Sites, Sunil Donald Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p376-382.

Worth the Risk? Charles W. Lockhart and William J. Roberds, CE Apr. 96, p62-64.

"Elevating the Importance & Visibility of Mitigation— Promoting Public Awareness", Kenneth A. Deutsch, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p165-166.

Changing Times for Engineers Is Focus of Triennial Con clave between U.S., Britain, Virginia Fairweather, NE Dec. 96, p1,10.

Closure to Discussion of Environmental Engineering Forum: Backflow Prevention and Water Quality in Resi-dential Sprinkler Systems, Thomas M. Walski, EE Jan. 96, p82.

scussion of Environmental Engineering Forum: Backflow Prevention and Water Quality in Residential Sprinkler Systems (September/October 1993, Vol. 119, No. 5, by Thomas M. Walski (Environmental Engineer-Discussion ing Forum)), Frederick L. Hart, EE Jan. 96, p78-79

The Enforceability of "Pay When Paid" Clauses, Michael C. Loulakis and William L. Cregger, CE Sept. 96, p40.

Engineers On the Line, J. A. Morgan, CE Dec. 96, p27. Ground Improvement Salvation, Peter J. Nicholson, CE May 96, p6.

Insolvency Does Not Excuse From Payment, CE June 96, p24.

Issues in Risk Perception and Communciation of Impor-tance to a Regulator: Results of an International Seminar Sponsored by HMIP, Daniel A. Galson, Roger D. Wil-mot and Ray V. Kemp, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Key Risk Attributes in the Perception of Engineering De-sign Options, P. Grindrod, D. J. Waters, H. Takase and F. Yousaf, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p499-501. Managing Construction Risks, Ossama A. Abdou, AE Mar.

Pay-When-Paid Risks are Limited, CE Aug. 96, p24 Wastewater and Condo Jobs Are Highest Risks, CE Dec.

96, p22.

River basin development Seawater Intrusion Solutions for the Salinas Valley, Howard Lauran L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4312-4316.

Automatized System of Runoff Forecasting for the Amu-darya River Basin, L. N. Borovikova, U. G. Konovalov and S. U. Myagkov, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p454.

Battiana, ett., 1990, pa34.
Prought Experiences of Ohio and Their Applications in the DAR-JAI River Basin of Taiwan, Tiao J. Chang, Wen C. Huang and Chian M. Wu, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p628-636.

Economic Issues Regarding Water Quality Objectives in the Grassland Basin, Dennis Wichelns and Laurie Houston, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p661-666.

Estimation of the Probable Maximum Rainfall and Snowmelt Floods Via Physically Based Model of River Runoff Generation, L. S. Kuchment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1337

Finite-Volume Two-Dimensional Unsteady-Flow Model for River Basins, D. H. Zhao, H. W. Shen, G. Q. Tabios, III, J. S. Lai and W. Y. Tan, HY July 94, p863-883.

Flood Control in the Brazilian Electric System Reservoirs at Parana River Basin, A. L. Lopes and V. F. Rocha, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1979.

Flood Risk Management: New Concepts for an Objective Negotiation, O. Gilard, P. Givone and G. Oberlin, (North American Water and Environment Congress & Destruc tive Water, Chenchayya Bathala, ed., 1996), p3918-3919.

Flooding in Southeastern United States From Tropical Storm Alberto, July 1994, T. C. Stamey, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p245-246.

Forcing Function and Climate Change, Bijaya P. Shrestha, Lucien Duckstein and Eugene Z. Stakhiv, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2151-2156

npacts of Climate Change in the Missouri River Basin, Rollin H. Hotchkiss, Steven F. Jorgensen, Ranjan S. Muttiah, Jeffrey G. Arnold, Thomas A. Fontaine, Scott J. Kenner and John M. Antle, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3399-3404.

Juvenile Fish Separator Design, Daniel M. Katz, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1117-1122.

The Last Two Extreme Floods in Germany - Analyses and Consequences, K. Wilke, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1716. Mixed Views Voiced on Book about the Northwest Pas-

sage, Augustine J. Fredrich, NE Feb. 96, p6,7

Modeling Climate Change Impacts on Water Resources, Brian Hurd, Paul Kirshen and Mac Callaway, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1834-1839.

The Part of Precipitation in Some Ecological Problems of the Dnister Basin, L. Gueiko, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2447-2448.

Policy and Engineering Decision-making under Global Change: Case of the Upper Rio Grande River Basin, Lu-cien Duckstein, Bijaya P. Shrestha and Marvin Waterstone, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p38-60.

Quantitative Monitoring of Plata River Basin Waters, V. F. de sa e Benevides and R. M. Coimbra, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1719.

The Rhine Flood Events in December 1993/January 1994 and in January 1995, H. Engel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p243-244.

Sources and Circulation of Salt in the San Joaquin River Basin, Leslie F. Grober, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p649-654.

Batana, Ct., Prop. P.
Spatial Spring Runoff Modeling in a River Basin for Purpose of Forecasting, M. Sosedko and V. Manukalo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Study on Fuzzy ANN and its Application in Runoff Forecast, Dunchun Wang and Jiqun Zhang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p456.

Water Balance of the Niger Basin, D. R. Maidment, F. Olivera, Z. Ye, S. M. Reed and D. C. McKinney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3411-3416.

Water-Related Hazards: India's Experiences, K. S. Murty, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Depth-Averaged Equations for Free Surface Flows, Guohong Duan and Guixian Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p213-218.

Design Alternatives for Protection of the Santa Ana River Interceptor Sewer, Thomas Dawes, Chenchayya T. Bathala and Carl Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2378-2383.

Operational Aspects of Warning, D. D. Nurbaev and N. S. Gavrilova. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1552.

Prediction of Bed-Load Transport by Desert Flash Floods, Ian Reid, D. Mark Poweli and Jonathan B. Laronne, HY Mar. 96, p170-173.

30-Inch Gas Pipeline Crossing of the San Juan River: Open Cut Excavation in Quality Water Area, James D. Evanoff and Neil P. Stockholm. (*Pipeline Crossings 1996*, Law-rence F. Catalano, ed., 1996), p186-193.

Design and Construction of Large Diameter High Pressure Gas Transmission River Crossing for San Diego Gas and Electric Using Directional Boring, Jey K. Jeyapalan and Robert Dalby, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p379-386.

Design and Construction of the Santa Ana River Wash Crossing of the Inland Feeder, Burt Yu, Jay Arabshahi, Birger Schmidt and Roy Cook, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1789-1795.

Design Parameters of Pipeline Suspension Bridges, Ralph Alan Dusseau and Irlan Ahmed, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p112-119.

Factors Affecting the Selection of a Crossing Method, David E. Hairston, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p214-221.

Grade Control Structures for Pipeline Crossings in the Arid Southwest, Martin J. Teal, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p830-835.

Site Selection for Pipeline Waterway Crossings, Brian J. Doeing and David T. Williams, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p365-372.

Smithfield Interceptor Force Main River Crossings, Fredrick M. Muncy, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p173-179.

Technological Advances in the Design and Construction of Water Mains for Crossing Under Rivers and Other Barriers, Donald E. Eckmann and William F. Nabak, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996),

p403-408.

To Know or Not to Know: The Site Characterization Process and Its' Role in Horizontal Directionally Drilled Pipeline River Crossings, Charles W. Hair, III, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p56-

Water Pipeline Crossings of the Pitt and Fraser Rivers, Tim R. Jervis and Jim V. Young, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p202-213.

River flow

Advanced Hydrologic Forecasting Products for Flood and Drought Mitigation, John J. Ingram, Edwin Welles and Dean T. Braatz, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p227-228.

Backwater Computation for Transcritical River Flows, C. Beffa, HY Dec. 96, p745-748.

Emulation of DWRDSM using Artificial Neural Networks and Estimation of Sacramento River Flow from Salinity, Nicky Sandhu and Ralph Finch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4335-4340.

Numerical Simulation of Unsteady Flow at Po River Delta, D. Ambrosi, S. Corti, V. Pennati and F. Saleri, HY Dec.

96, p735-743.

A Secondary Flow Correction for Depth-Averaged Flow Calculations, John Finnie, Barbara Donnell, Joe Letter and Robert S. Bernard, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p301-305.

Turbulence in Open-Channel Flows by Iehisa Nezu and Hiroji Nakagawa, Ching-Jen Chen, EM June 96, p590.

Two-Dimensional Modeling of River Dynamics for the Expanional Modeling of River Dynamics for the Ex-pansion of Clover Island, Kennewick, Washington, Thomas S. Wang, David P. Simpson and Raymond Wal-ton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2861-2866.

A Verification System for Probabilistic Hydrograph Fore-casts, Edwin Welles and Momcilo Markus, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p223-224.

Wave Field in the Efflux of River Water, Akira Mano and Subandono Diposaptono, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p185-196.

River regulation

Artificial Recharge Using Inflatable Rubber Dams, Michael R. Markus, Curtis A. Thompson and Matt Ulukaya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Design Guidance - Instream and Bank Restoration Struc-tures, J. Craig Fischenich, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3079-3084.

Environmental Restoration Measures on the Tennessee-Tombigbee Waterway (TENN-TOM), Nathaniel D. McClure, IV and Norman L. Connell, Sr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3326-3331.

From Natural Disaster to Human-Caused Disaster, Antoni Palau and Jorge Alcázar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3497.

Large River Diversion Optimization Considering the Un-certainties Involved, M. H. Afshar, A. Afshar and H. Par-vazian, (North American Water and Environment Con-

gress & Destructive Water, Chenchayya Bathala, ed., 1996), p4347-4352.
Mixing Processes in the Dangava River Estuary. B. Hakansson, E. Zaharchenko and H. B. Wittgren, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3276-3277.

Navigation Lock Improvements, Mary K. Spence, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3129-3134.

Upper Mississippi River System Environmental Manage-ment Program (EMP), Doyle W. McCully, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3320-3325.

River systems

At-A-Station Temporal Variations in Flow Under Drought and Flood Conditions and Associated Sediment Problems, Muhammad Ashiq, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1881-1886.

Design Guidelines for Bioengineered Bank Stabilization, Dale E. Miller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3085-3090.

ett., 1990), polos-3090.

Distributions of Return Flow in Navigable Waterways, Ta Wei Soong, Renjie Xia and Nani Bhowmik, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2855-2860.

Ecological and Biological Considerations in River Restoration Death W. Beiter, (North American Water and Environment Control of the
tion, Dudley W. Reiser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2601-2606.

Interdisciplinary Research of Mountainous Areas: Past, Present, and Future, Robert D. Jarrett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2445.

Modeling Changing Freshwater Delivery to Apalachicola Bay, FL, W. K. Jones and Wenrui Huang, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p116-127.

Project Object, Richard M. Shane, Edith A. Zagona, Dave McIntosh, Terrance J. Fulp and H. Morgan Goranflo, CE

Jan. 96, p61-63.

River Hydraulics, U.S. Army Corps of Engineers, 1996, 0-7844-0159-4, 145pp. River Restoration Considerations Beyond Channel Design,

William T. Fullerton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3091-3096.

Roanoke Valley Flood Hazard Mitigation, Edward G. Beadenkopf, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1976-1977.

1994 Alaska Flood Recovery Project Management of a Dis-aster Recovery by a General Contractor, David S. Westhaver and Alison H. Boyce, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p111-112.

The 1995 Floods of Rhine and Meuse - How Predictable are Water Levels in the Netherlands, Bart Parmet, (North

are water Levels in the Neutrellands, but ranner, vision American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p249-250. Accidental Pollution Simulation System and Pollutant Transboundary Transport Problems for Tura River, N. N. Shagalova, (North American Water and Environment Particles of the Problems of Particles of Par Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p714.

Accidental Situations: Application of Surface-Water Moni-Accidental Situations: Application of surface Water Institution Data, P. Berg and T. Vasiljeva, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1338-1339.

American Rivers Rates Worst Waterways, CE Oct. 96,

Application of GIS Technology to Floodplain & Habitat Analyses, Scott E. Stonestreet, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1393-1398.

Assessment of the Surface-Water Pollution and Measures for Emergency Stations Warning in the Republic of Uz-bekistan, T. Ososkova, V. Talskikh and O. Smolkova, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p2533.
Benefits of the Santa Ana River Mainstem Project, William L. Zaun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2176.
Catastrophic Floods and Their "Risk" in the Rivers of Albania, Miriam Bogdani, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p919.
Chandler Canal Fish Screen Facilities, Arthur Glickman and Bick Christmene (North American Water and Frei.

and Rick Christensen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p887-892.

Combined Flood Hazard Mitigation Techniques for Com-prehensive Planning - the Saugus River Coastal Flood Risk Reduction Plan, Barbara D. Hayes, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2312-2317.
Computing Flood Damage Reduction Accomplishment, Jo

Ann Duman and Donna Lydon, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2318-2323. Cooperative Approaches in Achieving Additional Water Conservation at Prado Dam, James A. Van Haun, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2352-2353.

Design Alternatives for Protection of the Santa Ana River Interceptor Sewer, Thomas Dawes, Chenchayya T. Bathala and Carl Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p2378-2383.

Distributed Parameter Hydrologic Modeling and NEX-RAD for River Forecasting: Scale Issues Facing the Na-tional Weather Service, Michael Smith, Dong Jun Seo, uonai Weatner Service, Michael Sillini, Jong Jun Seo, Bryce Finnerty and Victor Koren, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p140-145. Dynamic vs. Quasi-Static Effluent Limits, Joe Karkoski,

(North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Dynamics of River Ice Jam Release, Hung Tao Shen and Shunan Lu, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p594-605. Early Surveys in the Nation's Capital, Steven M. Penning-

ton, (Civil Engineering History: Engineers Make History ry, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p86-95.

Effects of Rectangular Foundation Geometry on Local Pier Scour, A. C. Parola, S. K. Mahavadi, B. M. Brown and

A. El Khoury, HY Jan. 96, p35-40. Estimate the Hazards of Bank Burst in the Lower Yellow River, Changxing Shi and Qingchao Ye, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p920.

European Progress on river Renaturalisation, Richard D. Hey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p2595-2600.

Extraordinary Flood Disaster in Tai Lake Basin of China in 1991, Ruiju Liang, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p48-

Field Measurement of Boulder Flow Drag, James C. Bath-

urst, Hy Mar. 96, p167-169.
Flood Forecasting Model for an Alpine Drainage Basin River Drau in Austria, D. Gutknecht, W. Kugi and F. Nobilis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p718.

Floodplain analysis of the Lower Santa Margarita River in Camp Pendleton Marine Air Base, California, Ruh-Ming Li, Anna Lantin and Hank Fehlman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1870-1874.

579 RIVERS

Frequency Analyses for Recent Regional Floods in the United States, Nick B. Melcher and Patsy G. Martinez, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p59-61.
Fuzzy Rule-Based Estimation of Flood Probabilities under

Climatic Fluctuations, Istvan Bogardi, Roland Reiter and Peter Nachtnebel, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p61-79.

Grade-Control Structures for Salt River Channelization, Dennis L. Richards and Tim Morrison, (North American Water and Environment Congress & Destructive Water,

Chenchayya Bathala, ed., 1996), p606-611.

HEC-RAS (River Analysis System), Gary W. Brunner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3782-3787.

Hindsight on River Ice Jam Stability, Spyros Beltaos, CR

Sept. 96, p122-133.

Hydrodynamic Flow Modeling at Confluence of Two Streams, K.-H. Wang, T. G. Cleveland, S. Fitzgerald and X. Ren, EM Oct. 96, p994-1002. Hydrodynamic Simulations in Sediment-Carried Contami-

nant Modeling for the Buffalo River, New York, Ruo-chuan Gu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1039-1044.

Hydrological Analysis of High Flows and Floods in the Sava River Near Zagreb (Croatia), Dusan Tminic, Lidija Tadic and Zdenko Tadic, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p918.

Identifying Trends from Streamflow Records--A Case Study, Joseph A. Van Mullem, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1675-1680.

Impact of Anthropogenic Activities in Rivers Upon Accuracy of Hydrological Forecasts and on Development of Forecasting Methodologies— Experiences From the Slovak-Hungarian Reach of Danube, K. Hajtasova and A. Svoboda, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p1718.
Impact of Point and Nonpoint Discharges on the Water
Quality of a Reach of the Red River of the North, Anti-

Quality of a Reach of the Red River of the North, Anil Peggerla and G. Padmanabhan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2504-2509.

The Integrated Flood Control System of the Great Miami Valley, M. Zoghi and K. A. Rinehart, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p384-385.

The Integration of Receiving Water Impacts in the Evalua-

The Integration of Receiving Water Impacts in the Evalua-tion Process of Alternative Designs for CSO Abatement in Providence, RI, J. Craig Swanson, Joseph Grgin and Peter von Zweck, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1537-1542.

The Largest Water Reservoirs of Russia in Flood Control, S. E. Bednarouk, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2538.

Mitigating Losses in Bangladesh's Active Floodplains, Paul Thompson and Ian Tod, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p23-24.

Mobile Bay Scour Analysis for Mobile and Baldwin Counties, Alabama, Bryan Hancock, Charles D. Powell and Conor Shea. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p719-728.

NA River Project Environmental Compliance with the Na-tional Environmental Policy Act (NEPA), Ruth B. Vil-lalobos, (North American Water and Environment Con-

tatooos, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2347-2349.

A New, Low-Cost Ice Control Structure. Part 1: Concept Development, J. H. Lever, G. Gooch and A. Tuthill, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p617-628.

A New, Low-Cost Ice Control Structure. Part 2: Construc-New, Low-Cost ice Control Structure. Part 2: Construction and Performance, J. H. Lever, G. Gooch and C. Clark, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p629-639.

Optimization and Simulation in Design and Operation of Reservoirs, A. Afshar and F. Peyrovian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1956-1961.

Overflow Impacts on River Studied, CE May 96, p8.

Physicostatistical Approach to River Delta Hydrology, V. F. Polonsky, HY June 96, p333-340. Ponding Study of January 1993 Storm Event within Airport Industrial Park, Oceanside, California, George Hsu and Yen-Hsu Chen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2282-2287.

Praise for Ancient Water Works, Wilson V. Binger, Jr., CE Mar. 96, p26.

Prediction of Effects of Woody Debris Removal on Flow Resistance, F. Douglas Shields, Jr. and Christopher J. Gippel. HY Apr. 95, p341-354.

Probability Distributions for Peak Stage on Rivers Affected by Ice Jams, Andrew M. Tuthill, James L. Wuebben, Steven F. Daly and Kathleen D. White, CR Mar. 96, p36-57.

Protecting an American Folklore Legend, Arthur J. Sortet, III and Harry B. Thomas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p274-275.

Risk-Equivalent Seasonal Discharge Programs for Ice-Covered Rivers, Corinne L. Wotton and Barbara J. Lence, WR May/June 95, p275-282. River Meander Zones and Floodplain Reconnection, David

A. Bella, Peter C. Klingeman and Hiram W. Li, (North American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996), p2613-2618. Salt Transport Characteristics of Pak Phanang Estuary, Somboon Pornpinatepong and Malcolm L. Spaulding, (Estuarine and Coastal Modeling, Malcolm L. Spaulding, and Ralph T. Cheng, 1996), p92-105.

Santa Ana River Mainstem Project, Brian M. Moore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2169-2175.

Santa Ana River Salt Marsh Restoration: Orange County, California, U.S.A. Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p536-540. Santa Clara River Fluvial Analysis, Jun Wang, Ruh-Ming

Li and Sree Kumar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p358-363.

Sediment Transport in the Yellow River, Chih Ted Yang, Albert Molinas and Baosheng Wu, HY May 96, p237-244.

Sediment Transport Modeling for the Glen-Colusa Irriga-tion District Fish Screen Modifications, Cassie Klumpp, Mark Sailer, Arthur Glickman and Brent Mefford, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1027-1032. Selection of Sediment Transport Relations: Part I, Review

of Sediment Transport Comparisons, Martin J. Teal and David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2831-2836. Selection of Sediment Transport Relations: Part II, Ranges

of Dimensionless Numbers, David S. Smith and David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2837-2842. Selection of the Form of Calculated Flood Hydrograph in Projecting Water Release Facilities, D. M. Yaroshevskii, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Significance of Lateral Elevation Gradients in Tidally Affected Tributaries, Frederick E. Schuepfer, Guy A. Apicella and Vincent J. DeSantis, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p229-239.

Simulation of Channel Changes Induced by a Reservoir, Howard H. Chang, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2109-2113.

Site and Size Optimization of Contaminant Sources in Sur-face Water Systems, Nikolaos D. Katopodes and Michael

race water Systems, Nikolaos D. Katopodes and Wichael Piasecki, EE Oct. 96, p917-923. The South Bay Ocean Outfall, Frank X. Collins, Gregory W. McBain, Jon Y. Kaneshiro, Luciano Meiorin and Larry Stout, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2044-2049.

1996), p2044-2049.
South Platte River Restoration Through Maintenance, Ben R. Urbonas and Bryan W. Kohlenberg, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p353-33-538.
Specification of Cu, Pb and Cr in Contaminated Sediment Effected by pH, Chin-Yuan Chen, Jih-Gaw Lin and Cheng-Nan Chang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathalas ed. 1996), pa453-1458. la, ed., 1996), p1453-1458.

Ia. ed., 1990, p1435-1436.
Stochastic Modelling of River Geometry, J. Dalsgaard Sørensen and K. Schaarup-Jensen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p898-901.

Suspended Sediment Loads in Dry and Wet Years, Renjie Xia and Misganaw Demissic, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1442-1446.

System of River Floods Warning in Ukraine, V. Manukalo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1340.

Three-Dimensional Simulation of River Ice Jams, Mark A. Hopkins, Steven F. Daly and James H. Lever, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p582-593.

Transferable Discharge Permits as a Function of Fluctuating Stream Conditions, Norman J. Dudley, Michelle Coelli and John J. Pigram, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p272-292. 293

Treatment of Wet Weather Discharges in Columbus, Georgia, Stephen P. Hides, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p582-587.

The Treatment Train Detention Concept, Charles G. Boehm, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2270-2275.

Upper Chehalis River Pollutant Capacity and Load Allocations, Paul J. Pickett, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1045-1050.

Use of Channel Forming Discharge Concepts for Flood Control Channel Design, Brad R. Hall and Richard D. Hey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1507-1512.

Water Quality Modeling of the Rouge River Watershed, Philip N. Brink, Gary Mercer and Richard Wagner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2415-2420.

Water Resources Investigation Along Salt River in Phoenix and Tempe Area, James Chieh, Jody Fischer and Dennis Marfice, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1399-1405.

White River Fish Screen Project - Hydraulic Modeling, Dennis Dorratcague, Wayne Porter and Larry Swenson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p310-315.

White River Fish Screen Project Planning and Design, Morton D. McMillen and Wayne Porter, (North Ameri can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1123-1128.

Wortley's Winter Wanderings: A Narrative, C. Allen Wortley, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p837-854.

Assessment of Remaining Fatigue Life of Existing Railway Riveted Bridges, Luo Weiwen and Jamshid Mohammadi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p42-45.

Cyclic Testing of Existing and Retrofitted Riveted Stiffened Seat Angle Connections, Majid Sarraf and Michel Bruneau, ST July 96, p762-775.

Bruneau, S1 July 96, Pr02-175.
Railway Bridge Loads Under Current Operating Conditions, Daniel H. Tobias, Douglas A. Foutch and John Choros, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p215-222.

Seismic Behavior of Older Steel Structures, Charles W. Roeder, Brett Knechtel, Eric Thomas, Anne Vaneaton, Roberto T. Leon and F. Robert Preece, ST Apr. 96,

Road conditions

Rough Road Ahead, CE Aug. 96, p10.

Road construction

Air Convection Embankments for Roadway Construction in Permafrost Zones, Douglas J. Goering, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), pl-12.

New on the Web, CE June 96, p8.

Road and Airfield Development in the Subarctic and Arctic, Alaska and Northwest Canada, James W. Rooney and Ted S. Vinson, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p1-22.

Roads and Airfields in Cold Regions, Technical Council on Cold Regions Monograph, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996, 0-7844-

Rooney, ed. a 0191-8, 330pp.

Olyana, Supp.

Route Location/Siting: A Review of Practices, Robert L. Schraeder, Charles H. Riddle and Willard H. Slater, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p23-56.

Use of Geosynthetics in Road and Airfield Construction in Cold Regions, Thomas C. Kinney, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p271-288.

Geometric Design of Compound Horizontal Curves, B. K. Roy, TE July/Aug. 94, p674-683.

Road damage

An Expert System as Support in Maintenance of Road Pavement Surface, P. Giannattasio, M. Crispino, V. Nicolosi, G. Ambrosino and M. Boero, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p500-504.

Field Observations on Stabilization of Unpaved Roads with Geosynthetics, R. J. Fannin and O. Sigurdsson, GT July 96, p544-553.

Design of a Floodplain Road Crossing Using Two Dimen-sional Modeling, Nathan R. South, Andrzej J. Kosicki and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4300-4305.

On Concept of Lateral Change of Acceleration, Orhan Bay-

kal, SU Aug. 96, p132-141

Road and Airfield Design for Permafrost Conditions, David C. Esch, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p121-150.

Roads and Airfields in Cold Regions, Technical Council on Cold Regions Monograph, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996, 0-7844-Rooney, ed. at 0191-8, 330pp.

Road surface roughness

Vibration of Thin-Walled Box-Girder Bridges Excited by Vehicles, Dongzhou Huang, Ton-Lo Wang and Mohsen Shahawy, ST Sept. 95, p1330-1337.

Strengthening Railroad Roadbed Bases Constructed on Icy Permafrost Soils, V. G. Kondratjev, (Cold Regions Engineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p688-699.

Analysing Road Traffic Movement Patterns by Image Analysis Using an Array of Transputers, X. Zhang, R. E. Allsop and M. R. B. Forshaw, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p109-113.

Analysis and Simulation of Road Profiles, V. Rouillard, M. A. Sek and T. Perry, TE May/June 96, p241-245

Application of FWD in Analyzing Finite Width Effect of Pavements, Dar-Hao Chen, Michael Murphy and Mohan Yeggoni, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p1018-1021.

Su, 1996), Piotis-1021.
Classifying Vehicles Using Their Auditory Signature Based on an Auditory Model, Denis McKeown, Stephen Hadland, Howard Kirby, Mark Dougherty, Luke Ibbetson, Louis Lopes and Peter Roach, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p711-715.

Coils Could Put ITS on Right Track, ET Apr./May 96, p1,7. Connection of a Steel Cap Girder to a Concrete Pier, Joseph M. Ales, Jr. and Joseph A. Yura, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p475-482.

Cost Benefit Analysis of Video-Based Vehicle Detection, Panos G. Michalopoulos, Craig A. Anderson and Richard D. Jacobson, (Applications of Advanced Technologies in Transportation Engineering, Vorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p176-182.

Data Acquisition and Handling for the Minnesota Road Re-search Project, David E. Newcomb and Joseph A. Cornell, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p510-514.

Estimating Effects of TLC Into Urban Public Road Transport, Luigi Biggiero, Massimo Di Gangi and Bruno Montella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p66-70.

Every Road That Rises Must Converge on GIS, Eric Rasmussen, ET Oct./Nov. 96, p8.

The Financial-Economic Evaluation of ATT Systems in Road Freight Transport, Ferdinand Ballhaus, (Applica-tions of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p465-469.

Frost Action, Dennis E. Pufahl, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p57-86.

Geometric Design of Compound Horizontal Curves, B. K. Roy, TE July/Aug. 94, p674-683.

Grading Design of Side Slopes Fitting Roadside Topogra-phy, George Kanellaidis, TE Jan Feb. 96, p87-90. How High Is That Mountain? Tom Buchanan, CE Oct. 96,

p39.

- Improvement of Road Network Reliability under Different Route Choice Principles, Shinji Nakagawa, Hiroshi Wak-abayashi and Yasunori lida, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p594-598.
- On Concept of Lateral Change of Acceleration, Orhan Bay-kal, SU Aug. 96, p132-141.
- Optimal Structures for Decentralized Provision of Roads, Frannie Humplick and Azadeh Moini-Araghi, IS Sept. 96, p127-138.

Pavement Design Applying Allowable Frost Heave, Seppo Saarelainen, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p890-898.

Pavement Distress Caused by Deep Heave in Anchorage, Alaska, Rupert G. Tart, Jr., Mark R. Musial and Michael E. Krueger, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p923-934.

Pedestrian Flow Estimation in Urban Environment by Image Processing, P. Vannoorenberghe, C. Motamed, J.-M. Blosseville and J.-G. Postaire, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996, p119-123.

1990, p119-163.
The Rapid Simulation of a Signalised Road Network, Gordon Russell, Neil Ferguson, Paul Shaw and John McInnes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p449-454.

Road and Airfield Maintenance, John C. Becker and David C. Esch, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p249-270.

Roadkill Studied, CE Sept. 96, p27.

SCOOT Control of a Simulated Road Network, J. P. Silcock and D. A. Crosta, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p583-587

Shakwak Highway Project—Construction Challenges, Robin Walsh, Donaldson MacLeod and Dennis Cook, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p640-651.

A Shoreline Risk Index for Northeasters, David Kriebel, Robert Dalrymple, Anthony Pratt and Vincent Sakovich, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p251-252.

Signal Processing Study for an FM/CW Collision Avoid-ance System, Pascal Deloof, Atika Menhaj, Jamal Assaad, Nathalie Haese and Christian Bruneel, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p661-665.

Simple and Efficient Traffic Vision Algorithms, T. N. Tan, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p129-133.

Traffic Action Effect Reduction Factors, Simon F. Bailey and Rolf Bez, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p22-25.

Vision-Based Automated Overtaking Control, Massimo Tistarelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p705-710.

Robison, Rita

Rita Robison, An Engineering Writer for CE, Dies at 70, CE Oct. 96, p76,78.

(DM)²: A Modular Mobile Manipulator, Christopher Lee and Yangsheng Xu, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p107-113.

Acquisition of Subsurface Comet Samples, Richard Welch, Donald Sevilla, Don Noon and Albert Delgadillo, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p129-135.

Adaptive Self-Tuning Control of Excavators, A. J. Koivo and Allen D. Nease, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p220-226.

Alternative Scenarios for Military Deployment of Un-manned Ground Vehicles, John G. Blitch and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p36-42.

Autonomous Mapping System for an Interior Finishing Robot, Abraham Warszawski, Yehiel Rosenfeld and Igal Shohet, CP Jan. 96, p67-77.

A Comparison of Alternative Methods for the Mars Sample Return Mission, Robert Zubrin, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p724-733.

Considerations for Realistic Lunar Excavation, Michael J.
Lally, Scott P. Mackey and Laurie R. Gaskins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p896-902.

Construction Automation and Robotics in Civil Engineer-ing Education Programs, Walter W. Boles and Jing

Wang, El Jan. 96, p12-16.

Construction Automation: Demands and Satisfiers in the United States and Japan, John G. Everett and Hiroshi Saito, CO June 96, p147-151.

Control of Construction Robots using Camera-Space Ma-nipulation, Emilio Gonzalez-Galvan, Michael Seelinger, John-David Yoder, Eric Baumgartner and Steven B. Skaar, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p57-63.

Control of Legged Robots, S. T. Venkataraman, (Robotics for Challenging Environments, Laura A. Demsetz, ed.,

1996), p100-106.

1996), p100-106.
Controlled Excavation Along a Prescribed Path, Eugeniusz Budny and Witold Gutkowski, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p227-234.
Demonstration of the Smart Crane Ammunition Transfer System, E. Craig Bradley, Steven M. Killough and John C. Rowe, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p192-198.
Development of a Mobile Instrument Deployment Device (AUDE). Latz Richer Klaus Schilling, Marco C. Beredattion.

cvenopinent of a stoone installing, Marco C. Ber-(MIDD), Lutz Richter, Klaus Schilling, Marco C. Ber-nasconi, Christoph Jungius and César Garcia-Marirrodriga, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p.283-289.

Development of a Robotic Bridge Painting System. Yong Bai and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p185-191

Dynamic Influence of Flexible Payloads on Space Shuttle RMS, Walter L. Peart, AS Apr. 96, p39-44.

Emerging High-Tech Areas of Civil Engineering Attract Women, Wesley Scott and Walter Boles, El Jan. 96, p42-43.

pa2-43.
Evaluation of Road Maintenance Automation, Arif Osmani, Carl Haas and W. Ron Hudson, TE Jan/Feb. 96, p50-58.
An Expert System Application for Robot Assisted Urban Search and Rescue, John G. Blitch, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p199-205.

Fast and Robust Algorithm for General Inequality/Equality Constrained Minimum Time Problems, B. Driessen and N. Sadegh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1215-1224. Faster, Cheaper, Better: Teleoperated Space Robots, Tom Billings, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p150-156.

A. Demsetz, etc., 1970), p130-130.
Finite Actuator VGT Manipulator Shape Control Paradigm, William C. Farrow, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p86-92.
First Mars Outpost Architectural Study, Jun Okushi, (Engi-

neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p928-934.

Graphic-Based Interactive Path Planning for Large-Scale Bridge Maintenance Cranes, Sungwoo Moon and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p79-85.

The Great Technology Transfer, Tim Cassidy, (Engineer-ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1265-1269.

Guideline for Automatic Docking in Space, Samuel E. Moskowitz, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p164-170.

Improvements in Mining Technology, Jacques Nantel, (En-

gineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p806-812.

Incorporating Terrain Uncertainties in Autonomous Vehicle Path Planning, Kevin K. Gifford and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p15-21.

Innovative Technology Development for Safe Excavation, Xiaodong Huang, Daniel Bernd and Leonhard E. Ber-nold, CO Mar. 96, p91-96.

Insect Robots: Case Studies for Teaching Students About Design of Computer-Aided Experimentation, James Moller and Osama Ettouney, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p310-316.

Integration of CAD Drawings and Construction Robot Mo-tion Controllers, Jaeho Son and Miroslaw J. Skibniewski, (Robotics for Challenging Environments, Laura A. Dem-

setz, ed., 1996), p71-78.

Intelligent On-Line Monitoring of Machine Health for Robots in Critical Environments, John P. H. Steele, Michelle Archuleta, Galen D. Brown, Tom Drouillard, Dirk Schlief and Tim D. Seifert, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p262-275.

Interactive Lessons for Instrumentation and Control, E. J. Mastascusa and Maurice F. Aburdene, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p303-309.

An Interactive Operator Interface for Task-Level Direction of a Robot in Uncertain Environments, Eric S. Miles and Robert H. Cannon, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p50-56.

The International Walking Machine Decathlon: A Design Competition to Enhance Undergraduate Engineering Education, Gordon K. Lee, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p296-302.

Investigation of On-Orbit Servicing Robot, T. Matsue and Y. Wakabayashi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p533-

Learning and Shaping in Emergent Hierarchical Control Systems, Bruce L. Digney, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p114-121.

The Limitations of Independent Controller Design for a Multiple-link Flexible Macro-manipulator Carrying a Rigid Mini-manipulator, H. D. Stevens and Jonathan How, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p93-99.

Lunar Base Scenario for Middle School with RC Rover, Louise Fayette, Ruth M. Fruland and Carolyn Evans McDonald, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p317-322.

Lunar Textile Method for the Shield Wall on the Lunar Surface, Mikiya Okumura, Takao Ueno and Yasuhiro Ohashi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p889-895.

Mobile Robots for Security, Anatoly Osipov, Vladimir Kemurdjian and Boris Safonov, (Robotics for Challeng-ing Environments, Laura A. Demsetz, ed., 1996), p290-

Motion Planning of a Robotic Arm on a Wheeled Vehicle on a Rugged Terrain, Yong K. Hwang, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p8-14.

A Neural Network Impedance Learning Control Model for a Robotic Excavator, Xiaodong Huang, Leonhard Ber-nold and Gordon Lee, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p213-219.

On-Line Motion Planning for the Three-Link Revolute Arm in an Unknown Three-Dimensional Environment, Sanjay Tiwari and Brandon Kroupa, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p1-7

Optimized Input Shaping for a Single Flexible Robot Link, David G. Wilson, Dennis Stokes, Gregory Starr and Rush D. Robinett, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1225-1229.

Overview of International Space Station Extra Vehicular Robotics, Amin Rezapour, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p490-496.

Overview of the International Space Station Extra Vehicu-lar Robotics Verification, Corrie Hunt, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p502-508.

Overview of the ISS Large Manipulator Operations, Catherine D. Bole, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p497-

Radiation Hardening of Robotic Control Components Against Terrestrial Radiation, G. U. Youk, J. S. Tulenko, H. Liu and H. Zhou, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p248-254

The Ranger Telerobotic Flight Experiment: Mission, Tech-David L. Akin. (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p136-142.

Laura A. Demsetz, ed., 1996), p136-142.
Real Time Positioning and Equipment Control for Hostile
Environments, Yvan J. Beliveau, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p64-70.
Remotely Controlled Salvage Machines, Vladimir
Kemurdjian, Anatoly Osipov, Boris Safonov and Peter
Astafurov, (Robotics for Challenging Environments,
Laura A. Demsetz, ed., 1996), p206-212.
The Resonance Drives with Adaptive Control Tendor S.

The Resonance Drives with Adaptive Control, Teodor S. Akinfiev, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p947-950.

A Robotic Inspector for Low-Level Radioactive Waste, Joseph S. Byrd and Robert O. Pettus, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p276-282

Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996, 0-7844-0178-0, 248pp.

Safety Analysis Requirements for Robotic Systems in DOE Nuclear Facilities, W. H. McCulloch, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p235-240.

Safety Assessment of a Robotic System Handling Nuclear Material, Christopher B. Atcitty and David G. Robinson,

(Robotics for Challenging Environments, Laura A. Dem-setz, ed., 1996), p255-261. Simulation and Visualization of Martian Rover, William Lincoln, (Robotics for Challenging Environments, Laura

A. Demsetz, ed., 1996), p143-149. A Space Systems Testbed for Situated Agent Observability and Interaction, Sam Siewert and Gary Nutt, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p122-128.

Strategies for Searching an Area with Semi-Autonomous Mobile Robots, Robin R. Murphy and J. Jake Sprouse, (Robotics for Challenging Environments, Laura A. Dem-

setz, ed., 1996), p22-28.

Studies in Guidance, Navigation and Control for an Articu-lated-Body Mars Rover Testbed, Songjae Lee and Gordon K. Lee, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p157-163. System Design for Safe Robotic Handling of Nuclear Mate-

rials, William Drotning, Walter Wapman, Jill Fahrenholtz, Howard Kimberly and Joel Kuhlmann, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p241-247.

Telerobotic Pavement Marker Application, Rami A. Rihani and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p171-177

Telerobotic Servicing with Virtual Reality Calibration and Semi-Automatic Intermittent Model Updates, Won S. Kim and Robert Brown, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p43-49.

Visual Mosaicking of the Ocean Floor and its Relation to Three-Dimensional Occlusions, Sanjay Tiwari, (Robotics for Challenging Environments, Laura A. Demsetz, ed.,

1996), p29-35.

A Wheeled Mobile Robot for Automated Pavement Crack Sealing, K. J. Mueller, D. Hong and S. A. Velinsky, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p178-184.

Rock bolts

Sacramento River Pedestrian Bridge, Charles Redfield and Jiri Strasky, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p153-160.

To Blast or Not to Blast? G. F. Revey, SC Aug. 96, p81-82.

In Situ Measurement of Rockfill Properties, Anne Eckert Clift, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p37-48.

Rock masses

Localization of Inelastic Deformation in Elasto-Plastic Pore Solids Saturated by Liquid, Igor A. Garagash, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p931-934.

Probabilistic Assessment on Variability of Mechanical Properties of Rock Masses, Hang Gao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p934-937.

Rock mechanics

Integrating the Refraction Seismic Method into Stream Crossing Characterization for Scour and Excavation Crossing Characterization for Scour and Excavation Conditions, Michael L. Rucker, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1163-1177

Remote Sensing in Investigation of Engineered Under-ground Structures, William F. Kane, Douglas C. Peters and Robert A. Speirer, GT Aug. 96, p674-681.

Seismic Signatures of Patchy Saturation, Jack Dvorkin and Amos Nur, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p645-648.

Vector Analysis of Keyblock Rotations, Matthew Mauldon and Richard E. Goodman, GT Dec. 96, p976-987.

Rock properties

Addressing Uncertainty in Rock Properties through Geo-statistical Simulation, Sean A. McKenna, Marc V. Cromer, Christopher A. Rautman and William P. Zelinski, (Uncertainty in the Geologic Environment: from Theor to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p297-311.

son, ed. and Mary J. S. Roin, ed., 1999, p.597-511.
Geostatistical Simulation, Parameter Development and Property Scaling for GWTT-95, Sean A. McKenna and Susan J. Altman, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), p181-

In Situ Measurement of Rockfill Properties, Anne Eckert Clift, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p37-48.

Long Term Prediction of Far-Field Heat Conduction, Bahram Nassersharif and Lixing Ma, (High Level Radio-active Waste Management, Technical Program Commit-

active Waste Management, Technical Program Commit-tee, 1996, p438-441.

Minimizing Uncertainties in Geotechnical Investigations, Yakov M. Reznik, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p149-166.

Models for Estimating Core-Cycle Rate of Penetration at Yucca Mountain, Nevada, Lawrence E. Barker and Dale D. Daffern, (High Level Radioactive Waste Management,

Technical Program Committee, 1996), p468-470.
Scour Power, George W. Annandale, Steven P. Smith, Robert Nairns and J. Sterling Jones, CE July 96, p58-60.
Simulation and Observation of ESF Tunnel Effects on Barometric Conditions, Parviz Montazer and Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p92-94.

Equivalent Strength of Porous Fractured Rock, William G. Pariseau, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p216-219.

Performance of Chain Trenchers in Mixed Ground, Ian W. Farmer, CO June 96, p115-118.

Features of a Chevron Weir Rock Ramp, R. J. Wittler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Influence of Axial Stress and Dilatancy on Rock Tunnel Stability, Xiao-Dong Pan and Edwin T. Brown, GT Feb. 96, p139-146.

Is No-Tension Design of Concrete or Rock Structures Always Safe?-Fracture Analysis, Zdeněk P. Bažant, ST Jan. 96, p2-10.

Rock Foundations, U.S. Army Corps of Engineers, 1996, 0-7844-0136-5, 130pp. Sizing Dumped Rock Riprap, David C. Froehlich and Craig A. Benson, HY July 96, p389-396.

Rocket nozzles

Rocket Experiments and Demonstrations for Microwave Power Transmission (MPT), Nobuyuki Kaya, (Engineer ing. Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p280-286.

Appalachian Piedmont Regolith: Relations of Saprolite and Residual Soils to Rock-Type, Milan J. Pavich, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), pl-11.

Brittle-Ductile Transition in Porous Rocks by Cap Model, Vlado A. Lubarda, Sreten Mastilovic and Jaroslaw Knap,

EM July 96, p633-642.

The Effect of the Interfacial Transition Zone on Concrete Properties: The Dilute Limit, E. J. Garboczi and D. P. Bentz, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1228-1237.

Estimation of In Situ Hydraulic Properties of Saprolite, Gordon M. Matheson, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p66-73.

Geophysical Investigation of Karst Collapse Features for a Proposed Waste Rock Stockpile Irian Jaya, Indonesia, Philip H. Duoos and Rowland B. Cromwell, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed. 1006/366 100 ed., 1996), p86-100.

Lunar Excavating Research, Walter W. Boles and John F. Connolly, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p699-705.

Lunar Sample Return: A Near-Term Marketing Opportuni ty? Brad R. Blair, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p194-199

Mechanical Properties of JSC-1 Lunar Regolith Simulant, J. Ledlie Klosky, Stein Sture, Hon-Yim Ko and Frank Barnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p680-688.

Modelling of a Heater Experiment in a Saturated Granite with Thermoporoelastic Source Singularities, Emmanuel Detournay and Ilya Berchenko, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p44-47.

Modelling of Thermal-Hydrological-Mechanical Processes in a Discrete Joint, T. S. Nguyen, A. P. S. Selvadurai and P. Flavelle, (Engineering Mechanics, Y. K. Lin and T. C.

F. Flavette, Capiter in Sections, T. K. Lin and T. C. Su, 1996), p60-63.
A Proposed Poroelastic Model for Hydraulic Fracturing Breakdown Pressure in Porous Rocks, Xiaofeng Huang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996). p208-211.

REGA (Regolith Evolved Gas Analyzer), David S. McKay and Carlton C. Allen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

p673-679

Rock Riprap for Grade Control, Charles E. Rice, Kerry M. Robinson and Kem C. Kadavy, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p588-593.

Scale Effects of Shallow Foundations on Lunar Regolith, Steven W. Perkins and Craig R. Madson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p963-972.

Scour in Erodible Rock I: The Erodibility Index, George W. Annandale and Steven P. Smith, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1342-1348.

Scour in Erodible Rock II: Erosive Power at Bridge Piers, Steven P. Smith and George W. Annandale, (North American Water and Environment Congress & Destruc

tive Water, Chenchayya Bathala, ed., 1996), p1349-1357. Scour Power, George W. Annandale, Steven P. Smith, Robert Nairns and J. Sterling Jones, CE July 96, p58-60. Simulation and Visualization of Martian Rover, William Lincoln, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p143-149.

Surface Cleanliness Effects on Lunar Regolith Shear Strength, Howard A. Perko, John D. Nelson and Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p689-698. Utilizing Geomorphic Analogs for Design of Natural Stream Channels, Scott Gillilan, (North American Water and Environment Congress & Destructive Water, Chenchavya Bathala, ed., 1996), p2799-2804.

Rockslides

Newtonian Fluid Mechanics Treatment of Debris Flows and Avalanches, Bruce Hunt, HY Dec. 94, p1350-1363.

Risk Assessment of Rockfall Hazard at Horse Mesa Dam: sk Assessment or Rockfall nazard at notice Mesa Jaint A Case History, Peter M. Kandaris and Kenneth M. Euge, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1402-

Rocky Mountains

A Paradox at the rocky Mountai Arsenal, Colorado: Benefits of Applied Research, Robert D. Jarrett, Joseph P. Capesius and Mark A. Gonzalez, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1553-1554.

Bicycle-Wheel Spoke Patterns and Spoke Fatigue, Henri P. Gavin, EM Aug. 96, p736-742. Parameter Models for Estimating In-Situ Tensile Force in Tie-Rods, Stefano Sorace, EM Sept. 96, p818-825.

Parameter Study of an Internal Timber Tension Connection, Stephen F. Duff, R. Gary Black, Stephen A. Mahin and Marcial Blondet, ST Apr. 96, p446-452.

Rogers, Jerry (Member, ASCE)

ASCE Members Get Involved at the Local Level as They Seek to Inspire Civil Engineers of the Future, NE Apr.

Roller compacted concrete Engineers Roll Out Concrete for New Dam, CE Oct. 96.

Frost Resistance of Roller-Compacted High-Volume Fly Ash Concrete, Michael Pigeon and V. Mohan Malhotra, MT Nov. 95, p208-211.

Model Study of a Roller Compacted Concrete Stepped Spillway, Charles E. Rice and Kem C. Kadavy, HY June 96, p292-297.

State-of-the-Art of Roller Compacted Concrete Pavement, Kwabena Ofori-Awuah, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1439-1448.

Seismic Risk Analysis for Vrancea Zone, Felicia Olariu and Ioan Olariu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p21-22.

Meter Helps Rescuers Keep Level Heads After Roof Collapse, CE Aug. 96, p78.

Wind-Induced Failures of Steel Roof Decks, Victor Figueroa Díaz, Ali Saffar, Samuel I. Díaz Santiago and Bernardo Deschapelles, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p894-897.

Roofing materials

Validation of the Simplified Audit Process at a Roofing Tar Paper Speciality Product Manufacturer - Part 2, Pierre Sylvestre, Ronald Zaloum, Chantal Goyette and Claude Audet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p93-98.

Aerodynamic Considerations for Rooftop Helideck Design, César Farell and M. Mohamed Sitheeq. (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1245-1251.

Analysis and Design of the Ponce Coliseum in 1969 and 1996, Alex C. Scordelis, Pere Roca and Antonio R. Mari, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p278-286.

An Analysis of Damage from Hurricane Andrew: A Dis-senting View, Leonard J. Morse-Fortier, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p293-294.

Area-average Wind Pressures on a Low-rise Building, Russ D. Leffler and Jack E. Cermak, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1037-1044.

An Automated Design and Review Assistant: SEDAR, Michael C. Fu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p118-125.

Computational Model for Wind-Induced Pressure Under-Computational Model for Wind-Induced Pressure Under-neath Paver Roofing Systems, Yawei Sun, Bogusz Bienkiewicz and Sungsu Lee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1013-1020. Contradictions in Use of Collar Beams, Jonathan Ochshorn,

AE Mar. 96, p20-25.

AE Mar. 96, p20-25.
Cool Roofs and Pavements to Help Hot Smoggy Cities, Arthur H. Rosenfeld, Hashem Akbari, Haider Taha and Melvin Pomerantz, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1-13.
Evaluation of Cracking of the Miami Marine Stadium Hyperbolic Paraboloid Roof Structure, Michael L. Brainerd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1650-1668.

1996), p1659-1668.

Experiments for Ultimate Strength of Reinforced Concrete Cylindrical Panels under Lateral Loading and Compari-son with FEM Analysis, Makoto Takayama, Kazuhiko Mashita, Shiro Kato, Yasuhiko Hangai and Haruo Kunieda, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p310-321.

Failure of a Stiffened Seat Bracket Connection, David I Weaver, Jason S. Yates and Randall W. Poston, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p468-474.

Gabled Hyperbolic Paraboloid Roofs without Edge Beam Tamara Jadik and David P. Billington, ST Feb. 95, p328-335.

An Innovative Plastic Housing System, E. Burnett, A. Arenja and L. Holroyd, (Materials For the New Millenni-um, Ken P. Chong, ed., 1996), p545-554. Investigating and Repairing of Wood Bowstring Trusses, Richard J. Kristie and Arme P. Johnson, SC Feb. 96,

p25-30.

Probabilistic Modeling of Metal Plate Connections, Robert N. Emerson and Kenneth J. Fridley, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed.

Probabilistic Modeling of Roof Sheathing Uplift Capacity, D. V. Rosowsky and S. D. Schiff, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p334-337.

Roof Sheathing Uplift Resistance for Hurricanes, Edward Sutt, Kallem Muralidhar and Timothy Reinhold, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p974-981.

Snow Guards for Metal Roofs, Wayne Tobiasson, James Buska and Alan Greatorex, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p398-409.

System Effects and Uplift Capacity of Roof Sheathing Fas-teners, S. Murphy, S. Schiff, D. Rosowsky and S. Pye, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p765-770.

Thermal Response of Bare Steel Roof Assemblies to Fire Environments in Aerosol Storage Facilities, S. P. Hunt, J. L. Scheffey and R. G. Gewain, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p365-372.

The Tracks of a Contractor's Tiers, CE Nov. 96, p95. Waterproofing An Expanded Convention Center, CE Dec.

Wind-Induced Fatigue Loading and Damage to Hip and Gable Roof Claddings, Y. L. Xu, ST Dec. 96, p1475-1483

Roofs, long span All-Around Arenas (Available only in Structures special issue), Lawrence G. Griffis, P.E., CE Sept. 96, p6A-11A.

Rotating biological contactor

Editor's Note, Thomas L. Theis, EE July 96, p556. Editor's Note, Thomas L. Theis, EE Oct. 96, p888.

Phenol- and Thiocyanate-Based Wastewater Treatment in RBC Reactor, Goutam Banerjee, EE Oct. 96, p941-948.

VOCs in Fixed Film Processes. I: Pilot Studies, Wayne J. Parker, Hugh D. Monteith and Henryk Melcer, EE July 96, p557-563

VOCs in Fixed Film Processes. II: Model Studies, Wayne J. Parker, Hugh D. Monteith and Henryk Melcer, EE July 96, p564-570.

Rotation

A Corotational Total Lagrangian Finite Element Analysis with Application to the Aircraft Tire, James M. Greer, Jr. and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1108-1114.

Design and Construction Balances for Bascule Bridges, Andrew W. Herrmann and Nicholas J. Altebrando, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p9-18.

Modeling for Moment-Rotation Characteristics for End-Plate Connections, Y. J. Shi, S. L. Chan and Y. L. Wong,

ST Nov. 96, p1300-1306

Modeling Rotation of Principal Load Axes in Brittle Solids with Damage, S. Karnawat and S. Yazdani, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p596-599. Rotation of Large Gravity Walls on Rigid Foundations under Seismic Loading, R. S. Steedman and X. Zeng,

(Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p38-56.

Vector Analysis of Keyblock Rotations, Matthew Mauldon and Richard E. Goodman, GT Dec. 96, p976-987.

Boundary Layer Theory and Field Bedload, Leszek M. Kaczmarek, Rafall Ostrowski and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p664-675.

Practure Mechanics Modeling with Fracture Surface Image Data, Anne B. Abell and David A. Lange, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p741-

The Importance of Maintaining Smooth Airport Pavements, Tony Gerardi, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p295-305.

Influence of Seabed Topography and Roughness on Long-shore Wave Processes, Terry M. Hume, Brett Beamsley, Malcolm O, Green, Wilem P. de Lange and D. Murray Hicks, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed., 1996, p975-986.

Motion Planning of a Robotic Arm on a Wheeled Vehicle
on a Rugged Terrain, Yong K. Hwang, (Robotics for
Challenging Environments, Laura A. Demsetz, ed., 1996), p8-14.

Normal-Depth Equations for Irrigation Canals, Prabhata K. Swamee, IR Sept./Oct. 94, p942-948.

Roughness coefficient
The Effects of Water Surface Profiles on Manning's
Roughness Coefficient, P. Michael DePue, II and Ta Wei
Soong, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3639-3644.

Manning's Roughness Coefficient for Coarse-Bed Chan-nels With High In-Bank Flows, David Froehlich and Craig A. Benson, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p436-441.

Minimum Risk Route Model for Hazardous Materials, B. Ashtakala and Lucy A. Eno, TE Sept./Oct. 96, p350-357.

Curbside Collection of Yard Waste: I. Estimating Route Time, Jess W. Everett and Shiv Shahi, EE Feb. 96,

Curbside Collection of Yard Waste: II. Simulation and Application, Jess W. Everett and Shiv Shahi, EE Feb. 96, p115-121.

Intersection of Spiral Curve with Circle, Olcay Öztan and Orhan Baykal, SU Feb. 95, p3-12.

Route Assessment Using Comparative Risk Factors Inte-grated through a GIS, Douglas M. Toth and William J. O'Connell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p363-365.

Advanced Traveller Information Systems: Experience from the PLEIADES and ROMANSE Projects, D. J. Jeffery and R. J. Meckums, (Applications of Advanced Technol-ogies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

An Analysis of Effect of Dynamic Traffic Information Considering Driver's En-Route Route Switches, Yasunori Iida, Nobuhiro Uno and Tetsuro Hasegawa, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p604-608.

California State Route 91 Variable Toll Express Lanes: Op-erational Aspects and Impact Assessment, Edward C. Sullivan and Jerry C. Porter, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p547-551.

Decision Support System for Dynamic Pre-Trip Route Planning, Nagui M. Rouphail, S. Ranji Ranjithan, Wael El Dessouki, Timothy Smith and E. Downey Brill, (Ap-plications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p325-329.

An Enhanced Kalman Filtering Algorithm for Dynamic Freeway OD Matrix Estimation and Prediction, Samer Madanat, James Krogmeier and Shou-Ren Hu, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p423-428.

Enhancing AVM Systems by Operator Support DRS Func-tionalities, G. Ambrosino, M. Boero and P. Sassoli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p413-417.

Incorporating Terrain Uncertainties in Autonomous Vehicle Path Planning, Kevin K. Gifford and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p15-21.

Real-Time Traffic Control for Alternative Route Guidance Systems Based on the Dynamic Assignment Model, Reinhart D. Kühne, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Route Location/Siting: A Review of Practices, Robert L. Schraeder, Charles H. Riddle and Willard H. Slater, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed.,

1996), p23-56.

A Strategy for Urban Transit Route Selection, Stefano Carrese and Stefano Gori, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p144-148.

Surface Bypass-Collector Concepts and Performance, Peter C. Klingeman, Lisa M. Wieland, Kenneth R. Elbert and Thomas K. Lorz, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p673-678.

Transportation of Alaska North Slope Natural Gas to Mar-ket, Donald A. Lannom, David O. Ogbe, Akanni S. Lawal and F. Lawrence Bennett, (Cold Regions Engineering: The Cold Regions Infrastructure-An Intern tional Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p226-237.

Trip Mode Recommendation Using Travel Time Prediction, Michael Cremer, Carsten Holtmann and Stefan Schrieber, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p330-334.

VMS Control in Aalborg, Peder Jensen, Lone Jensen, Mar-kos Papageorgiou, Albert Messmer, Habib Haj-Salem and Said Mammar, (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), 223-232. p373-377

Routing

A Comparison of Sediment Routing Models, A. R. Ghum-man, P. R. Wormleaton, H. N. Hashmi and G. H. Akbari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3794-3799.

Estimation of the Potential Benefits from an ATT System Using a Multiple User Class Stochastic User Equilibrium Assignment Model, M. J. Maher and P. C. Hughes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p700-704.

Improved Path Selection in Congested Networks by Al Techniques, Amaranto Lopes Pereira and Félix Mora-Camino, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p639-643.

Medical Service Routing and Location Analysis for Free-way Emergency Needs, Kevin P. Hwang, (Applications of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p281-285.

Real-Time Traffic Control for Alternative Route Guidance Systems Based on the Dynamic Assignment Model, Reinhart D. Kühne, (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p563-567.

Remote Pipeline Routing with Application to Space Operations, Sandra C. Feldman, Ramona E. Pelletier, Wm. Edward Walser, James C. Smoot and Douglas Ahl, (Engineering, Construction, and Operations in Space, Stewart

W. Johnson, ed., 1996), p231-236.
Stream-Aquifer Interaction Model with Diffusive Wave Routing, Samuel P. Perkins and Antonis D. Koussis, HY

Apr. 96, p210-218.

Traffic Control System for Metropolitan Areas Based on Radio Links between Vehicles and Infrastructure, Andrea Borella and Giovanni Cancellieri, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p398-402.

Two-dimensional Sheetflow Modeling for Wetland Restoration, Robert A. Laura and Ananta K. Nath, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p263-267.

Aging Effects on Temperature Susceptibility of Polymer Modified Asphalts, Shin-Che Huang, Jung-Do Huh, Ray-mond E. Robertson and Mang Tia, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1367-1378.

Artificial Recharge Using Inflatable Rubber Dams, Michael R. Markus, Curtis A. Thompson and Matt Ulukaya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p736-741.

Behavior of Crumb Rubber Modified Hot Mix Asphalt, Anil Misra, H. P. Niu and Yi-Herng Lee, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p144-153.

Compression of Bonded Blocks of Soft Elastic Material: Variational Solution, Katerina-D. Papoulia and James M.

Variational Southern, Raderine D. rapound and Saines Kelly, EM Feb. 96, p163-170.
Dynamic Mechanical Properties of SBR Modified Asphalt, Fariborz Gahvari and Imad L. Al-Qadi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p133-

Evaluation of Crumb Rubber (CRM) as a Smart Additive in Asphalt Concrete Mixes, Gary Gowda, Kevin Hall and Robert Elliott, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p612-621.

Large Strain Finite-Element Analysis of Snow, Günther Meschke, Changhong Liu and Herbert A. Mang, EM July 96, p591-602.

Low Temperature Solidification of CaCO₃ Using Hydrothermal Hot-Pressing, Kazuyuki Hosoi, Toshiyuki Hashi-da, Hideaki Takahashi, Nakamichi Yamasaki and Takashi Korenaga, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p694-700.

A New Kind of Rubber Drive, CE Nov. 96, p94-95.

A Procedure for Evaluating Reflective Cracking, Shakir R. Shatnawi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1429-1438.

Chong ed., "Day, Fridges Using Elastomeric Isolation Systems, Ronald L. Mayes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p33-40.

Slope Stabilization Using Old Rubber Tires and Geotextiles, Paul S. H. Poh and Bengt B. Broms, CF Feb. 95,

Rubber modified asphalt

Viscosity Characteristics of Rubber-Modified Asphalts, T. J. Lougheed and A. T. Papagiannakis, MT Aug. 96,

Rubble-mound breakwaters

Comparison and Evaluation of Different Riprap Stability Formulas Using Field Performance, Mahrez Ben Bel-fadhel, Guy Lefebvre and Karol Rohan, WW Jan/Feb.

Estimating Wave-Induced Kinematics at Sloping Struc-tures, Steven A. Hughes and Jimmy E. Fowler, WW July/Aug. 95, p209-215.

Oblique Reflection Characteristics of Rubble-Mound Structures, Michael Isaacson, David Papps and Etienne Man-sard, WW Jan./Feb. 96, p1-7.

Rule induction tools

Fuzzy Rule-Based Modeling of Reservoir Operation, Bi-jaya P. Shrestha, Lucien Duckstein and Eugene Z. Stakhiv, WR July/Aug. 96, p262-269.

Rule-Based Control Algorithm for Active Tuned Mass Dampers, Masato Abé, EM Aug. 96, p705-713.

1995: Where the Past (Paleoflood Hydrology) Meets the Present, Understanding Maximum Flooding, Robert D. Jarrett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1148.

ANSWERS-2000: Runoff and Sediment Transport Model, Faycal Bouraoui and Theo A. Dillaha, EE June 96,

A California Handbook for Developing an Industrial/ Commercial Storm Water Inspection Program, Jill C. Bicknell, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2625-2630.

A DEM Based Hydrologic and Sediment Transport Model, Menghua Wang and Allen Hjelmfelt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2695-2700.

Developing Parameters for a Quasi-Distributed Runoff Model Using GIS, Thomas A. Evans and John C. Peters, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2707-2712

Dredging in the Southern Sacramento-San Joaquin Delta, Mike Mirmazaheri, (North American Water and Envi-

ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2636-2641. Drought in California: When Does It Begin and When Does it End? Maurice Roos, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1081-1086.

Effect of Climate Change on Hydrologic Regime of Two Climatically Different Watersheds, Athanasios Loukas and Michael C. Quick, HE Apr. 96, p77-87. Effects of Spatial Data Resolution and Subarea Size on a Distributed Runo Y. Kuo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2701-2706.

Erosion and Stability of a Mine Soil, Tien H. Wu, Alan T. Stadler and Chin-wah Low, GT June 96, p445-453.

Estimation of Flash Flood Potential for Large Areas, K. P.

Estimation of Flash Flood Potential for Large Areas, K. P. Georgakakos, A. K. Guetter and J. A. Sperfslage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1147.
Estimation of the Probable Maximum Rainfall and Snowmelt Floods Via Physically Based Model of River Runoff Generation, L. S. Kuchment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1337.
Floodplain Mapping Using Continuous Hydrologic and Hydraulic Simulation Models, A. Allen Bradley, Paula J. Cooper, Kenneth W. Potter and Thomas Price, HE Apr. 96, p63-58.

96, p63-68.
Identification of a General Linear Model for Reservoir Inflows Forecasting, J. Ribeiro, J. Rousselle, J. D. Salas and H. Ta Trung, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2354-2359.

Impact of Sedimentation Caused by Runoff, Dilip Khatri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Investigation of Some Heavy Flood Hazards in Small Alpine Catchments in Austria, A. Watzinger, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p715

Loss of Contaminants from Soil During Runoff Events, A Parr, S. Zou and B. McEnroe, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p70-81.

Managing Border Irrigation for Near-Zero Discharge, T. S. Strelkoff and A. J. Clemmens, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1711-1715.

Optimal Estimation of Storage-Release Alternatives for Storm-Water Detention Systems, Rafael Segarra-García and Mohammad El Basha-Rivera, WR Nov./Dec. 96, p428-436.

p426-430. Performance of a Virtual Runoff Hydrograph System, Pa-trick Carriere, Shahab Mohaghegh and Razi Gaskari, WR Nov./Dec. 96, p421-427. The Rhine Flood Events in December 1993/January 1994

and in January 1995, H. Engel, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p243-244.

Runoff Curve Number: Has It Reached Maturity? Victor

M. Ponce and Richard H. Hawkins, HE Jan. 96, p11-19. SCS Runoff Equation Revisited for Variable-Source Runoff

Areas, Tammo S. Steenhuis, Michael Winchell, Jane Rossing, James A. Zollweg and Michael F. Walter, IR May/June 95, p234-238.

Search for Physically Based Runoff Model—A Hydrologic El Dorado, David A. Woolhiser, HY Mar. 96, p122-129. Sediment Removal from Stormwater Runoff, Ashok Pandit and Ganesh Gopalakrishnan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2439-2444.

Selection of the Form of Calculated Flood Hydrograph in Water Bathala, ed., 1996, p2439-2444.

Projecting Water Release Facilities, D. M. Yaroshevskii, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p2446. p244b.
The Standley Lake Protection Project, Joseph Green-Heffern and David J. Kaunisto, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2820-2825.
Statistical Distributions and Natural Hydrograph, Nazeer Ahmed, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1005), p302-307.

1996), p292-297.

Stormwater Management for San Joaquin Hills Transporta-tion Corridor, Orange County, California, Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2826-2830.

Subcatchment Parameterization for Runoff Modeling Using Digital Elevation Models, Jurgen Garbrecht, Lawrence W. Martz and David C. Goodrich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2689-2694.

The Three Gorges Project: Relocation of Reservoir Popula-

Two-dimensional Sheetflow Modeling for Wetland Restowo-dimensional Sheethow Modeling for Wedand Resto-ration, Robert A. Laura and Ananta K. Nath, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p263-267.

Water Quality Modeling of the Rouge River Watershed, Philip N. Brink, Gary Mercer and Richard Wagner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Runoff coefficient

Calibration Procedures for Rational and USSCS Design Flood Methods, G. W. Titmarsh, I. Cordery and D. H. Pilgrim, HY Jan. 95, p61-70.

Estimation of Annual Storm Runoff Coefficients by Continuous Simulation, Ashok Pandit and Ganesh Gopalakrishnan, IR July/Aug. 96, p211-220.

Runoff forecasting

Annual Delivery Decisions in the Simulation of the California State Water Project and Federal Central Valley Project using DWRSIM, Robert T. Leaf and Sushil K. Arora, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p812-817.

Automatized System of Runoff Forecasting for the Amu-darya River Basin, L. N. Borovikova, U. G. Konovalov and S. U. Myagkov, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p454.

Runoff Forecasting Using a Local Approximation Method, A. W. Jayawardena, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p2535. SCS Runoff Equation Revisited for Variable-Source Runoff Areas, Tammo S. Steenhuis, Michael Winchell, Jane Rossing, James A. Zollweg and Michael F. Walter, IR May/June 95, p234-238.

Spatial Spring Runoff Modeling in a River Basin for Pur-pose of Forecasting, M. Sosedko and V. Manukalo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Study on Fuzzy ANN and its Application in Runoff Fore-cast, Dunchun Wang and Jiqun Zhang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p456.

Alfalfa Power, CE Nov. 96, p8.

Design of Branched-Water-Supply Network on Uneven Terrain, Brian Young, EE July/Aug. 94, p974-980. Impacts of Improved Water Supply and Sanitation on the Rural Population of India, Padmavathy Bogabathini, (North American Water and Environment Congress & Destroy Water Only 1984-1984). Destructive Water, Chenchayya Bathala, ed., 1996), p781.

p781. Life Cycle Cost Analysis of a Storburn Propane Combustion Toilet, Paul Ritz and Herbert P. Schroeder, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p816-827. Nonurbanized Public Transportation Needs Assessment, M. Moussavi, M. Al-Turk and J. Albeck, TE Nov./Dec. 96, e447-458.

p447-453.

Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996, 0-7844-0180-2, 510pp.

Resettlement of the Three Gorges Project in China, Wen-zheng Ma and Zonglou Guo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3847-3851.

Response to Floods and Mitigation Measures in Bangla-desh, Paul Thompson and Mustafa Alam, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p103-104.

Chung, ed., 1997), p.103-104.
Solid Waste Management in Rural Alaska, Henriette Molberg Hansen and Howard P. Thomas, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p769-779.

System for Bridge Management in a Rural Environment, Matthew S. Gralund and Jay A. Puckett, CP Apr. 96. p97-105.

tion, Chien-kuo Lo, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3841-3846. Big Tunnel Talk, CE Jan. 96, p8.

588

Driven Pile Capacities in Warm Permafrost in Komi Republic, Russia, Steven R. Thompson and Rupert G. Tart, Jr., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p254–265. Expert System for Assessing Main Pipeline Reliability and Residual Lifetime, Sviatoslav A. Timashev and Inessa L.

Yablonskikh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p322-325.

The Largest Water Reservoirs of Russia in Flood Control, S. E. Bednarouk, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2538. Lessons of the Recent Earthquakes in Sakhalin Region,

Russia, Mark Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p5-6.

Ordinary Operating Conditions of Large Channels of Moscow's Sewerage Network, Yuri A. Ermolin, IR May/ June 96, p145-148.

Overview of the ISS Large Manipulator Operations, Catherine D. Bole, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p497-501

Pathfinder: Commercial Payload Service on the Russian Mir Space Station, Brent Sherwood and Thomas J. Walmsley, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p170-176.

Perspectives of Rebuilding Inner City Airports in the Emerging Post-Soviet Environment, V. L. Khazanet, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p34-44.

Remote Pipeline Routing with Application to Space Operations, Sandra C. Feldman, Ramona E. Pelletier, Wm. Edward Walser, James C. Smoot and Douglas Ahl, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p231-236.

Satellite Setup Links Russian, U.S. GPS, CE July 96, p8. Tornadoes and Severe Storms in Russia, Nikolay A. Popov,

(Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p133-134.
Two Recent Russian Far East Destructive Earthquakes. Case Studies and Post-Disaste Analysis, J. M. Eisenberg and A. M. Melentyev, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p235-236.

The Use of Monitoring of Russian Water Objects for the Decrease of Disaster Consequences, G. M. Barenboim and G. M. Ostrovski, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1341.

Acoustic Monitoring to Enhance Pipeline Safety at Crossings, Will Worthington and William J. DiMarco, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p1-13.

Amtrak Breaks Ground on High-Speed Rail, CE Aug. 96, p16

Building Seismic Safety Council Project '97, James E. Beavers and R. Joe Hunt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p335-336.

Challenges of an Advance Utility Contract for a Major Highway Widening Project in Norfolk, Virginia, Gary M. Hart, Peter S. Fortin and Gary L. Heisler, (*Pipeline* Crossings 1996, Lawrence F. Catalano, ed., 1996),

CISC-Computer Integrated Spatial Control for Autonomous Trenching and Pipe-Laying, Xiaodong Huang and Leonhard E. Bernold, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p502-509.

Construction for Tomorrow and the Day After, William R.

Nash, SC May 96, p67.

Construction Safety: A Vision for the Future, Stewart Young, ME July/Aug. 96, p33-36.

Critical Groups for Geological Disposal Performance As-sessments, Graham M. Smith and John Kessler, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p234-236.

The CSG 2000 Programme: Modernising Europe's Space-port for the Next 20 Years, Juan de Dalmau, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p413-418.

Jonnson, ed., 1990, pp.13-410.
Design Decision Making for Infrastructures under the Restriction of the Energy Consumption, Minoru Matsuo, Yusuke Honjo and Ikuo Sugiyama, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed.

chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p376-379. Development of Caltrans Guidelines for Natural Gas Pipelines on Highway Bridges, Anthony Gugino, Chih-Hung Lee, Richard Gailing, Philip Constantine and David Reistetter, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p245-253. Development of Design Factors for Redundant Concrete Bridges, Michel Ghosn, Youhong Hang and Fred Moses, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p716-719.

Editor's Note, David Darwin, ST Jan. 96, p1. The Effects of Natural Hazards on Pipeline Safety, Betty Bonn, Myles Powers, Andy Chernoff, Alan Gregory, Dan Phillips and Donna Roy, (*Natural Disaster Reduc-*tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p68-69.

Efficient Monte Carlo Technique for Locating Critical Slip Surface, Venanzio R. Greco, GT July 96, p517-525.

Evaluating the Potential of ATT Technologies in Hazardous Materials Transportation Risk Management, Konstan-tinos G. Zografos and George M. Vasilakis, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p480-484.

Evaluation of Cracking of the Miami Marine Stadium Hy-perbolic Paraboloid Roof Structure, Michael L. Brainerd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1659-1668.

Expedition Applications to Long Duration Space Missions, Gloria R. Leon and Victor S. Koscheyev, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p997-1001

Fatigue Failures of Hexa'lliptical Steel Davit Arms Induced by Aeolian Vibrations at Resonant Conditions, Markus Ostendorp, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p874-877.

Future Changes/Improvements in Construction Safety, Enno "Ed" Koehn and Mahendar R. Surabhi, (Civil Engi-neers Influencing Public Policy, Maureen K. Cotton, ed.,

1996), p121-128.

Identifying OSHA Paragraphs of Particular Interest, Jimmie Hinze and Katherine Bren, CO Mar. 96, p98-100. If I Had Not Seen It, I Would Not Have Believed It! John E. Meeks, P.E., SC Nov. 96, p119-121.

E. Mecks, P.E., 20. Nov. 90, p119-121.
Innovative Technology Development for Safe Excavation, Xiaodong Huang, Daniel Bernd and Leonhard E. Bernold, CO Mar. 96, p91-96.
A Knowledge Based System for the Evaluation of Earth-

A Knowledge Based System for the Evaluation of Earth-quake Damaged Structures, John A. Kuprenas and John Manios, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p742-749. Lightning Safety: A Risk Management Approach, Richard Kithil, (Natural Disaster Reduction, George W. Housner,

ed. and Rijey M. Chung, ed., 1997), p17-18.

Meter Helps Rescuers Keep Level Heads After Roof Collapse, CE Aug. 96, p78.

Mitigation of Windstorm Disasters, Kishor C. Mehta and

Ernst W. Kiesling, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p205-206

Numerical Simulation of Hydraulic Transients in Hydro-power Plant Using Safety Membranes, Fusheng Ni, Peicheng Hu and Qiaohong Wang, HY June 96, p298-

Penstock Safety: Proactive or Reactive, EY Apr. 96, p2-9.

Physical Distribution System Models for Assessing the Imnystical Distribution System Models for Assessing the Impact of Water Quality on Regrowth and Corrosion, Anne K. Camper, Warren L. Jones and Calvin Abernathy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Practical Probabilistic Approach Using Spreadsheet, B. K. Low, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1284-

Practitioners' Forum, Georges Jacquemart, P.E., TE Nov./

Dec. 96, p411-413.

Probability Based Design Requirements for Ship Structures, Alaa E. Mansour, Paul H. Wirsching, Bilal M. Ayyub and Gregory J. White, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p98-101.

Probability-Based Design Requirements for Longitudinally Stiffened Panels in Ship Structures, G. J. White, B. M. Ayyub, A. E. Mansour and P. H. Wirsching, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p110-113.

Probability-Based Design Requirements with Respect to Fatigue in Ship Structures, P. H. Wirsching, A. E. Man-sour, B. M. Ayyub and G. J. White, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p114-117

Public Policy and Building Safety, Marjorie Greene and Chris D. Poland, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p155-

Reasonable Care Must Be Taken, CE Dec. 96, p24. Reliability Concept and Application in Bridge Management

System, Zongwei Tao and Brian J. Stearman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p442-445.

Reliability Evaluation Using SFEM, Achintya Haldar and Liwei Gao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p166-169.

Reliability Methods for Stability of Existing Slopes, John T. Christian, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996),

Reliability of Post-Tensioned Concrete Slab Bridges, Sami W. Tabsh, (*Probabilistic Mechanics & Structural Relia-bility*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p712-715.

ed., 1990), p112-113.
Reliability-Based Exit Gradient Design of Water Retaining Structures, D. V. Griffiths, Gordon A. Fenton and G. M. Paice, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p518-

The Role of Petri Nets Modelling in the Safety Assessment Process for Guided Transport Systems, G. Cosulich, P. Firpo, S. Savio and G. Sciutto, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p558-562.

Site Selection for Pipeline Waterway Crossings, Brian J. Doeing and David T. Williams, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996), p365-372.

Stormwater Management for San Joaquin Hills Transporta tion Corridor, Orange County, California, Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2826-2830.

Subcontractor's Employee Not Contractor's Problem, CE Apr. 96, p28.

System Design for Safe Robotic Handling of Nuclear Mate-rials, William Drotning, Walter Wapman, Jill Fahrenholtz, Howard Kimberly and Joel Kuhlmann, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p241-247. To Blast or Not to Blast? G. F. Revey, SC Aug. 96, p81-82.

Traffic Load Effects on Highway Bridges, Sang Hyo Kim and Sang Ho Lee. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu. ed., 1996), p38-41.

Transition from Partial Factors Method to Simu Based Reliability Assessment in Structural Design, Pavel Marek and Milan Guštar, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p558-561.

Uncertainty in Back Analysis of Slopes, Robert B. Gilbert, Stephen G. Wright and Eric Liedtke, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J.

S. Roth, ed., 1996), p494-517. Whose Fault Was It? Alice C. Dillard, (Engineering, Con struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1274-1277.

Safety analysis

Analysis of Fatalities and Injuries Due to Powerline Contacts, Jimmie Hinze and David Bren, CO June 96, p177-

Blast Wall Bravura, Pieter J. van der Weijde and Paul H. L.

Groenenboom, CE Dec. 96, p62-65.

Bounding Axial Profile Analysis for the Topical Report Database, Chien-Hsiang Chen and Theodore A. Parish, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p336-339.

The Construction Safety Record Since 1971, Jimmie Hinze, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p113-120.

Cotton, ed., 1990), p113-120.
The FEMA Program of Seismic Safety of Buildings, Ugo Morelli, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p159-160.
Impacts of SNF Burmup Credit on the Shipment Capability of the GA-4 Cask, Amir S. Mobasheran, William Lake and John Richardson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p330-332.
The NFA International FEP Database, Outcome of the

The NEA International FEP Database: Outcome of the Working Group, Trevor J. Sumerling, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p317-319.

Safety Analysis Requirements for Robotic Systems in DOE Nuclear Facilities, W. H. McCulloch, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p.235-240.

Safety Assessment of a Robotic System Handling Nuclear Material, Christopher B. Atcitty and David G. Robinson, (Robotics for Challenging Environments, Laura A. Dem-setz, ed., 1996), p255-261.

Safety Evaluation of Current Concrete Slab Formwork Practices, Saeed Karshenas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p656-659.

Strategies for Achieving Excellence in Construction Safety Performance, Edward J. Jaselskis, Stuart D. Anderson and Jeffrey S. Russell, CO Mar. 96, p61-70.

Larew, Richard E. Ashraf S. Barsoum and Fabian C. Hadipriono, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p906-912.

Using Virtual Reality to Avoid Construction Falls, Diah R. Soedarmono, Fabian C. Hadipriono and Richard E. Larew, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p899-905.

Safety engineering
Hydrodynamic Modeling for Assessing Engineering Alternatives for Elevating the Kennedy Causeway, Corpus
Christi, Texas, Cheryl A. Brown, Nicholas C. Kraus and
Adele Militello. (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p681-

Safety factors

Costs of Accidents and Injuries to the Construction Industry, John G. Everett and Peter B. Frank, Jr., CO June 96,

Dense Organic Liquids Reduce GA-4 Reactivity Margin, B. Snyder, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p333-335.

Development of Worker Safety in the Environmental Field in the Past 25 Years, David R. Smith, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p42-54.

A Follow-Up Study to: Job Performance Aids to Criticality Safety, Michael A. Rodriguez, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p348-350.

Hard Cases Make Bad Law, Carol J. Patterson, ME May/ June 96, p25-28.

How Crane Safety on Construction Sites Has Changed in 25 Years, Harlan W. Fair, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p84-92. Operation of Airport Security Checkpoints Under Increased

Threat Conditions, Christopher A. Chung and Hidayat Nyakman, TE July/Aug. 96, p264-269. Reliability Applied to Slope Stability Analysis, John T. Christian, Charles C. Ladd and Gregory B. Baecher, GT

Dec. 94, p2180-2207. Safety Analysis of Suspension-Bridge Cables: Williams-burg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

Stabilization of a Creeping Slope Using Soil Nails, Peter R. Cali, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin,

ed., 1996), p109-121. Strategies for Achieving Excellence in Construction Safety Performance, Edward J. Jaselskis, Stuart D. Anderson and Jeffrey S. Russell, CO Mar. 96, p61-70. Surficial Stability of Compacted Clay: Case Study, Robert W. Day, CT Nov. 94, p1980-1990.

WIPP TRU Waste Transportation— A Circle of Safety, J.
J. Winkel and O. R. Spooner, (High Level Radioactive
Waste Management, Technical Program Committee, 1996), p360-362.

Safety program

Changes in OSHA in the Last 25 Years, Satish Mohan, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p93-112. Construction Forum, SC Nov. 96, p99-103.

Future Changes/Improvements in Construction Safety, Enno "Ed" Koehn and Mahendar R. Surabhi, (Civil Engi-neers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p121-128.

High-Octane Safety on a Low-Octane Budget, Paul J. Rich, ME Sept./Oct. 96, p9-10.

Safety research

Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996, 0-7844-0178-0, 248pp.

ASCE's Biannual Salary Index, CE Aug. 96, p64,66,67. Bonuses Up Sharply, ME Nov./Dec. 96, p12.

Feds De-Engineering Government, Bhagwan Goklani, CE Oct. 96, p37.

A Heyday for Engineers' Salaries, CE Oct. 96, p28. Latest ASCE Salary Index is Released, CE Mar. 96, p69-

Not on Our Salary, Kimball L. Ohsiek, P.E., CE Dec. 96,

Overtime Overhaul Overdue, ME May/June 96, p11-12. Salary Growth Slows for Civils; Location a Major Factor,

Says New ASCE Survey, NE May 96, p1,5. Working Hard, But Happily, ME July/Aug. 96, p12.

Saline water

Turbulence Measurements in Saline Gravity Current Fronts, Jeffrey D. Parsons and Marcelo H. García, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), p914-917.

Salinity

Accuracy of a 3D Hydrodynamic Model Verification due to ccuracy of a 3D hydrodynamic Model verification due to the Relative Magnitude of Forcing Functions, Bernard B. Hsieh, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3452-3457.

Application of Artificial Neural Networks to the Sacramen-to-San Joaquin Delta, Nicky Sandhu and Ralph Finch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p490-504.

Comparison of Static and Dynamic Test Results for Driven Steel Pipe Piles in Highly Saline Permafrost, Kelly S. Merrill and Richard E. Riker, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p238-253.

Emerging Concepts for Management of Salinity and Drainage in Irrigated Regions, M. E. Grismer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2126-2129.

Emulation of DWRDSM using Artificial Neural Networks and Estimation of Sacramento River Flow from Salinity, Nicky Sandhu and Ralph Finch, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4335-4340.

Groundwater Flow Modelling at the Olkiluoto Site, Finland, Jari Löfman, (High Level Radioactive Waste Man agement, Technical Program Committee, 1996), p141-

Long-term Consequences of Recycling Drainage Water for Irrigation, S. R. Grattan and J. D. Rhoades, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1942-1947.

Long-Term Pile Load Testing System Performance in Sa-line and Ice-Rich Permafrost, K. W. Biggar, D. C. Sego and R. P. Stahl, CR Sept. 96, p149-162.

Modeling Changing Freshwater Delivery to Apalachicola Bay, FL, W. K. Jones and Wenrui Huang, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p116-127.

Modeling Combined Stresses on Aquatic Ecosystems, Jam-ie D. Anderson, Ian P. King and Gerald T. Orlob. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3998-4003.

Modeling Horizontal Diffusion with Sigma Coordinate Sys-tem, Wenrui Huang and Malcolm Spaulding, HY June 96, p349-352

Modeling Pumping of Saline Water from Two-Layer Aqui-fer, Andrzej Sawicki, HY June 96, p341-347.

Modeling the Impact of Sea Level Rise in Delaware Bay, K. W. Kim and B. H. Johnson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2737-2742.

Modeling the Impact of Uncertainty in Spatial Variability of Estuarine Boundary Conditions, B. H. Johnson and K. W. Kim, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2731-2736.

Optimal Dispersed Ground-Water Contaminant Manage-ment: MODCON Method, R. C. Peralta, J. Solaimanian and G. R. Musharrafieh, WR Nov./Dec. 95, p490-498.

Optimum On-Farm Irrigation Efficiency for Sustainable Agriculture, B. Davidoff, E. Craddock, M. Roos and F. gress & Destructive Water, Chenchayya Bathala, ed., 1996), p189-194.

Salinity and Hydraulic Issues at a Constructed Wetlands, W. G. Hines, J. E. Burkstaller and A. F. Gove, (North American Water and Environment Congress & Destructive Water, Chenchaya Bathala, ed., 1996), p1178-1183.

Salinity Management for the Upper Gila River, G. T. Orlob and E. W. Wessman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4257-4262.

Salt Transport Characteristics of Pak Phanang Estuary, Somboon Pornpinatepong and Malcolm L. Spaulding, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p92-105.

Third Party Impacts of Proposed Water Banking in the Colorado River Basin, James F. Booker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4042-4045.

Agroforestry as a Method of Salt and Selenium Manag ment on Irrigated Land in the San Joaquin Valley, Re-becca F. Muñoz and Vashek Cervinka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p400-405. Salt Transport Characteristics of Pak Phanang Estuary, Somboon Pormpinatepong and Malcolm L. Spaulding, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p92-105.

Sall-Saturated Concrete Strength and Permeability, T. W. Pfeifle, F. D. Hansen and M. K. Knowles, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p173-

182.

Sources and Circulation of Salt in the San Joaquin River Basin, Leslie F. Grober, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p649-654.

Control of Stacking Loads in Final Waste Disposal According to the Borehole Technique, Walter Feuser, Eike Bar-nert and Hendrik Vijgen, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Geoenvironmental Evaluation of Geological Formations of Lithuania for Radioactive Waste Disposal, Valentinas Kadūnas and Jurgis Valūnas, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p83-85.

Salt removal

Agroforestry as a Method of Salt and Selenium Mana ment on Irrigated Land in the San Joaquin Valley, Re-becca F. Muñoz and Vashek Cervinka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p400-405.

Berkeley Fights Fire with Salt Water, CE Dec. 96, p18.

Demonstrating Brine Water Wells and Toilets for Deering, Alaska, Robert H. Lundell, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p558-569.

Eastern San Joaquin County Groundwater Management, Monique B. Magolske and Miguel A. Marino, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2781-2786.

Florida DOT Applies Gravity Sealer to Seaway Bridges, CE Sept. 96, p96.

Flushing Criteria in Estuarine and Laboratory Experiments, Walter Debler and Jorg Imberger, HY Dec. 96, p728-

Groundwater Dynamics in Beaches and Coastal Barriers, Peter Nielsen and Hong-Yoon Kang, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p521-532. Isotopic Systematics of Saline Waters at Aspö and Laxe-mar, Sweden, Bill Wallin and Zell Peterman, (High Level Radioactive Waste Management, Technical Program

Committee, 1996), p41-42

Santa Ana River Salt Marsh Restoration: Orange County, California, U.S.A. Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p536-540.

Scour Monitoring at Johns Pass and Nassau Sound, Florida, J. D. Schall, G. A. Fisher and G. R. Price, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1990-1998.

Simulations of the Maine Coastal Current, Monica J. Holboke and Daniel R. Lynch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p156-167.

Southern San Joaquin Drainage Water Management, Doug-las E. Davis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p382-387.

Salt water intrusion

Application of a Three-Dimensional Model to Assess Seawater Intrusion in the South San Diego Embayment, David Huntley, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p4072-4077.

Control of Seawater Intrusion through Injection-Extraction Well System, A. Mahesha, IR Sept./Oct. 96, p314-317.

Economic Impact of Managing Sea Water Intrusion, Doug-las D. Parker and Tracy Hart, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4317-4322.

Evaluating Strategies to Manage Seawater Intrusion, Tracy Nishikawa and Eric G. Reichard, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4323-4328.

Optimal Management of a Coastal Aquifer in Southern Turkey, Khosrow Hallaji and Hasan Yazicigil, WR July/ Aug. 96, p233-244.

Seawater Intrusion Solutions for the Salinas Valley, How-ard Lauran L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4312-4316.

Steady-State Effect of Freshwater Injection on Seawater In-trusion, A. Mahesha, IR May/June 96, p149-154.

Strategies for Operation of Orange County Water District Talbert Seawater Intrusion Barrier, California, Kevin McGillicuddy and Timothy Sovich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4078-4083.

This Is Not Good News, Percival A. Miller, CE May 96, p29.

Transient Effect of Battery of Injection Wells on Seawater Intrusion, A. Mahesha, HY May 96, p266-271.

Use of δ¹⁶O and δD to Define Seawater Intrusion, John A. Izbicki, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4306-4311.

Watershed Management for a Limited Coastal Aquifer Sys-tem, James P. Rhodes, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1087-1092.

Salt water-freshwater interfaces

Control of Seawater Intrusion through Injection-Extraction Well System, A. Mahesha, IR Sept./Oct. 96, p314-317.

Steady-State Effect of Freshwater Injection on Seawater Intrusion, A. Mahesha, IR May/June 96, p149-154.

Bed-Load Transport. ed-Load Transport. I: Mechanical Characteristics, Chunhong Hu and Yujia Hui, HY May 96, p245-254.

ed-Load Transport. II: Stochastic Characteristics, Chunhong Hu and Yujia Hui, HY May 96, p255-261.

Particle Spinning Motion during Saltating Process, Hong-Yuan Lee and In-Song Hsu, HY Oct. 96, p587-590.

California's Visions of Groundwater: a Water Source and a Salt Sink, J. D. Oster, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1936-1941.

Effect of Temperature and Salt Contamination on Carbonation of Cements, Mohammed Maslehuddin, C. L. Page and Rasheeduzzafar, MT May 96, p63-69.

Modified Oedometer for Arid, Saline Soils, Omar Saced Baghabra Al-Amoudi and Sahel N. Abduljauwad, GT Oct. 94, p1892-1897.

New Alloy Prevents Corrosion, ET Oct./Nov. 96, p1,9.

Probabilistic Creep Analysis of Underground Structure in Salt, A. F. Fossum and D. E. Munson, EM Mar. 96, p209-217.

Shallow and Surfacing Ground Water in an Arid Urban Environment, D. L. Smith and J. C. Guitjens, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1495-1500.

Salts effects

In-Situ Corrosion Testing of Selected HLW Container Materials, E. Smailos, (High Level Radioactive Waste Man agement, Technical Program Committee, 1996), p462-

Particulate Sampler to be Carried on a High Altitude Bal-loon, Christopher Benning and Jared Whitaker, (Engi-neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1334-1338.

Samples
Acquisition of Subsurface Comet Samples, Richard Welch,
Donald Sevilla, Don Noon and Albert Delgadillo, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p129-135.

A Comparison of Alternative Methods for the Mars Sample Return Mission, Robert Zubrin, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p724-733.

Lunar Sample Return: A Near-Term Marketing Opportunity? Brad R. Blair, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p194-

Mars Sample Return Using In-Situ Propellant Production, David I. Kaplan, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p717-

Sample Returns to Enable Asteroid Mining, Alan J. Willoughby, Alan L. Friedlander, Darla J. German, Mark K. Jacobs, Jeffrey A. George and Kurt J. Hack, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p840-846.

Changes of Sand Grain Distribution in the Surf Zone, Kazumasa Katoh and Shin-ichi Yanagishima, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p639-650.

Culvert Composite Sampler: A Cost-Effective Storm-Water Monitoring Device, Stephen J. Dowling and Brian W. Mar, WR July/Aug. 96, p280-286.

Discharge Measurements and Predictions in Wetlands, Vassilios A. Tsihrintzis, David A. Sikkema, Marcia Levinson and Jose L. Oliveros, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p274-279.

Implementation of Variance Reduction Techniques Using Monte Carlo Stratified Sampling in the COMPROMIS Code Version 2, Emmanuel Ardillon, Patrice Pitner and Bernard Lapeyre, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p692-695.

Measurement of Indoor Bioaerosol Levels by a Direct Counting Method, Demetrios J. Moschandreas, Daniel

K. Cha and Jon Qian, EE May 96, p374-378.

Municipal Solid Waste Characterization in a Cold Remote Region, Abigail A. Ogbe and Christina Behr-Andres, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p780-791.

Nopal I Uranium Deposit: A Study of Radionuclide Migration, Virgina Wong, Elizabeth Anthony and Philip Goodell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p43-45.

Physical Sampling for Site and Waste Characterization, Ted L. Bonnough, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p217-

Specification of Cu, Pb and Cr in Contaminated Sediment Effected by pH, Chin-Yuan Chen, Jih-Gaw Lin and Cheng-Nan Chang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1453-1458.

Statistical Implications of Methods of Finding Characteristic Strengths, Richard D. Hunt and Anthony H. Bryant, ST Feb. 96, p202-209.

Time-Dependent Reliability Analysis of Redundant Brittle Systems, Animesh Dey and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), 200 200 200

VOC Inventory at New York City Wastewater Treatment Plants, Richard Pope, Bert Aubrey and Demetrios Moschandreas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p75-80.

Sampling designs
Statewide Traffic Volume Studies and Precision of AADT Estimates, Satish C. Sharma, Brij M. Gulati and Samantha N. Rizak, TE Nov./Dec. 96, p430-439.

San Francisco

A Decade of Experience in Developing Pavement Management Systems for Local Agencies, Chi Amy Chow (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p992-998.

Decision Process for Mitigating Seismically Vulnerable Water Facilities, Walter J. Bishop and Ernesto A. Avila, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p209-210.

Modeling the Periodic Stratification and Gravitational Circulation in San Francisco Bay, California, Ralph T. Cheng and Vincenzo Casulli, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p240-254.

San Francisco Bay's Jeweled Necklace (Available only in Focus on Structures Special Edition), Charles Seim, CE

Jan. 96, p14A-16A.

San Francisco International Airport Light Rail System, William Leder and Gene Bordegaray, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p106-114.

Seismic Analysis of Concrete Towers of the San Diego-Coronado Bridge and Evaluation of a High Performance Concrete Retrofit, Robert A. Dameron and Daniel R. Parket, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p530-541.

Shear-wall Retrofit, Mark Jokerst, CE Feb. 96, p36-39. Suspended-Solids Flux at a Shallow-Water Site in South San Francisco Bay, California, Jessica R. Lacy, David H. Schoellhamer and Jon R. Burau, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3357-3362.

Turnback Project Moves Ahead, David A. Sutter, James P. Connolly and Ching Wu, CE Jan. 96, p36-39.

Utilizing Communications Strategies to Educate the Public on a Major Program, David L. Pratt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p99-100.

Advective-Diffusive Contaminant Migration in Unsaturated Sand and Gravel, R. Kerry Rowe and K. Badv, GT Dec.

96, p965-975.

20, proc.2712.
Air Sparging Experiments on a Two Dimensional Sand Box with DNAPLs: Multiphase Investigation with Electrical Impedance Tomography, Jong Soo Cho, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1006(5):266, 200 1996), p369-380.

Analysis of Behavior of Sand Surrounding Pile Tips, P.

Simonini, GT Nov. 96, p897-905.

Behavior of a Sand in Frozen and Unfrozen States, Christopher W. Swan, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p483-493. Collapse of Saturated Soil Due to Reduction in Confinement, Scott A. Anderson and Michael F. Riemer,

GT Feb. 95, p216-220.

Concrete and Sand Confined with Composite Tubes, Srinivasa L. Iyer, A. Kortikere and A. Khubchnadani, (Materials for the New Millennium, Ken P. Chong, ed., 1996), pl 308-1319.

Cone Penetration in Very Weakly Cemented Sand, Anand J. Puppala, Yalcin B. Acar and Mehmet T. Tumay, GT Aug. 95, p589-600.

Determination of Drained Friction Angle of Sands from CPT, J. W. Chen and C. H. Juang, GT May 96, p374-

Determination of Post-Liquefaction Strength: Steady State vs Residual Strength, S. Thevanayagam, C. C. Wang and K. Ravishankar, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1210-1224.

Determining Relative Density of Sands from CPT Using Fuzzy Sets, C. H. Juang, X. H. Huang, R. D. Holtz and J. W. Chen, GT Jan. 96, p1-6.

Development of Localization in Undrained Deformation, J. W. Rudnicki, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p939-942.

Drained Sand Behavior in Axisymmetric Tests at High Pressures, Jerry A. Yamamuro and Poul V. Lade, GT Feb. 96, p109-119.

Editor's Note, Thomas L. Theis, EE Oct. 96, p888.

The Effect of the Interfacial Transition Zone on Concrete Properties: The Dilute Limit, E. J. Garboczi and D. P. Bentz, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1228-1237.

Elasto-Plasticity of Sand Deformation, Eqramul Hogue and

Fumio Tatsuoka, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p547-550.

Estimating Settlement of Sand Caused by Construction Vi-bration, S. Drabkin, H. Lacy and D. S. Kim, GT Nov. 96, p920-928

Evaluation of Soil Liquefaction by Energy Principles, J. Ludwig Figueroa, Adel S. Saada, Liqun Liang and Nitin M. Dahisaria, GT Sept. 94, p1554-1569.

M. Dahisaria, GT Sept. 94, p1554-1569.
Experimental Study of One-Dimensional Immiscible Fluid Drainage in Layered Sands, Calvin D. Miller and Deanna S. Durnford. (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p628-638.
Formation of Shear Zones in Reinforced Sand, Scott E.

Shewbridge and Nicholas Sitar, GT Nov. 96, p873-885. Geotechnical Properties of Oil-Contaminated Kuwaiti Sand, Hasan A. Al-Sanad, Walid K. Eid and Nabil F. Is-

Sand, Hasan A. Al-Sanad, Walld K. Eid and Nabil F. Ismael, GT May 95, pd07-412.
Influence of Seabed Topography and Roughness on Longshore Wave Processes, Terry M. Hume, Brett Beamsley, Malcolm O. Green, Willem P. de Lange and D. Murray Hicks, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p975-986.

Influence of Short and Long Waves Coupling on Sand Suspending, Sergey Yu. Kuznetsov and Nikolay V. Pykhov, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p720-727.

Influence of Sorption Mechanisms on the Bioavailability of Aromatic Hydrocarbons in Soil, William D. Burgos and John T. Novak, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p670-680.

Interdependence of Beach Fill Volumes and Repetition In-

tervals, Hans-H. Dette, Alfred Fuehrboeter and Arved J.

Raudkivi, WW Nov /Dec. 94, p580-593.

Investigation of Interwell Tracer Tests Used with Cosolvent Investigation of Interwell Tracer Tests Used with Cosolvent Flooding, Charles Wright, Cindy M. Lee, John T. Coates and Ronald W. Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p151-162. Irrigation of Grain Sorghum on the Delmarva Peninsula, W. F. Ritter and R. W. Scarborough, (North American Water and Environment Congress & Destructive Water, Chen-house Barbals and 1905), n3004, 3000

chayya Bathala, ed., 1996), p3904-3909.

chayya Bathata, ed., 1990), p3904-3909.
A Large-Scale Experiment on Breaching in Sand-Dikes, Paul J. Visser, Arie W. Kraak, Wim T. Bakker, Marion J. Smit, D. Wino Snip, Henk J. Steetzel and Jan van de Graaff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p583-594.

Liquefaction and Postliquefaction Behavior of Sand, Y. P. Vaid and J. Thomas, GT Feb. 95, p163-173.

Liquefaction Behavior of Sand-Gravel Composites, Mark Liquetaction Beravior of Sandu-Gravet Composites, Marc D. Evans and Shengping Zhou, GT Mar. 95, p287-298.
Model of Shear Wave Speed as a Function of Depth in Water-Saturated Sand, Nicholas P. Chotiros and Adrienne M. Mautner, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p804-807.

Modeling of Sinkholes in Weakly Cemented Sand, Waleed A. Abdulla and Deborah J. Goodings, GT Dec. 96,

p998-1005.

Neural-Network Modeling of CPT Seismic Liquefaction Data, Anthony T. C. Goh, GT Jan. 96, p70-73. Nonlinear Lateral Pile Deflection Prediction in Sands, Shamsher Prakash and Sanjeev Kumar, GT Feb. 96, p130-138.

pl30-138. Numerical Model of Flow Ice-Covered Channel, J. Y. Yoon, V. C. Patel and R. Ettema, HY Jan. 96, pl9-26. Numerical Model of Turbulent Flow over Sand Dune, J. Y. Yoon and V. C. Patel, HY Jan. 96, pl0-18. Numerical Morphodynamic Modelling of Keta Lagoon, Tim J. Chesher, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p927-938.

One-Dimensional Compression of Sands at High Pressures, Jerry A. Yamamuro, Paul A. Bopp and Poul V. Lade, GT Feb. 96, p147-154.

Plane Waves and Pore Pressure in a Saturated Sand, R. Staroszczyk and L. W. Morland, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p943-946.

Plate Anchor Groups Pulled Vertically in Sand, James D. Geddes and Edward J. Murray, GT July 96, p509-516.

Reconsideration of Initiation of Liquefaction in Sandy Soils, Catherine E. Fear and Edward C. McRoberts, GT Mar. 95, p249-261.

Relating the Wettability of Contaminated Sands to NAPL Composition, William H. Anckner, Jr. and Susan E. Powers, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed. 1996), p502-512.

Sand Variability from Ground Penetrating Radar Data. Charles T. Young and Jon P. Doucette, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed. 1996, p368-382.

Settling and Erosion Characteristics of Mud/Sand Mixtures, Hilde Torfs, Helen Williamson and Heidi Huysentruyt, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p749-758.

Setup and Relaxation in Glacial Sand, Donald L. York, Walter G. Brusey, Frank M. Clemente and Stephen K. Law, GT Sept. 94, p1498-1513.

Shrinkage Control in Acrylamide Grouts and Grouted Sands, V. Jasti, C. Vipulanandan, David Magill and Don Mack, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p840-850.

Small-Strain Response of Random Arrays of Spheres Using Discrete Element Method, Tang-Tat Ng and Emmanuel Petrakis, EM Mar. 96, p239-244.

Statistical Model for Sand Compaction Under Cyclic Shear Strain, R. Ghanem and M. El-Mestkawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p722.

Strain Localization and Undrained Steady State of Sand, Richard J. Finno, Wendell W. Harris, Michael A. Mooney and Gioacchino Viggiani, GT June 96, p462-473.

Strength Properties of Polyester Mortar Using PET and Fly Ash Wastes, Karim S. Rebeiz, Julia W. Rosett and Andrew P. Craft, EY Apr. 96, p10-20.

Stress-Strain Modeling of Sands Using Artificial Neural Networks, G. W. Ellis, C. Yao, R. Zhao and D. Penumadu, GT May 95, p429-435.

Transport of Fine Sands by Currents and Waves. II, Leo C. Van Rijn and Fred J. Havinga, WW Mar./Apr. 95, p123-133.

Undrained Sand Behavior in Axisymmetric Tests at High Pressures, Poul V. Lade and Jerry A. Yamamuro, GT Feb. 96, p120-129.

Vertical Migration of Diesel into Silty Sand Subject to Cyclic Freeze-Thaw, K. W. Biggar and J. C. R. Neufeld, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p116-127.

Wettability of NAPL-Contaminated Sands, Susan E. Powers, William H. Anckner and Thomas F. Seacord, EE Oct. 96, p889-896.

Sand filtration

Recreational Impoundments Retrofit of Existing and Design of New Facilities, Dream L. Atallah and Michael P. Rudinica, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2945-2950.

Sand transport

Changes of Sand Grain Distribution in the Surf Zone, Kazumasa Katoh and Shin-ichi Yanagishima, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p639-650.

Employment of Electronic Sand Level Gauges for Measurement of Beach Slope Deformation on Norderney Island, Kos'yan R., H. Kunz and I. Podymov, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p651-663.

An Energetics Approach to Sand Transport on Beaches, Paul Russell, Yolanda Foote and David Huntley, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p829-840.

Sediment Transport Mechanism Over Rippled Sand Beds, S. G. Saijadi, J. N. Aldridge and D. J. Nicholas, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p669-680.

Sand waves

Geometry of Sand Ripples due to Combined Wave-Current Flows, Hitoshi Tanaka and Van To Dang, WW Nov./ Dec. 96, p298-300.

Initiation of Bed Forms on a Flat Sand Bed, Stephen E. Coleman and Bruce W. Melville, HY June 96, p301-310.

Reproducibility of Beach Profiles and Sand Ripples Generated by Huge Waves, Masahiro Ito, Hiroshi Murakami and Takeshi Ito, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), 6698-708.

Sandbars

Dynamics of Sand Bars in Coastal Zones, B. Boczar-Karakiewicz, J. L. Bona, A. Naguszewski and W. Romańczyk, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p862-867.

Sand

Sanda Posttesting Correction Procedure for Membrane Compliance Effects on Pore Pressure, Atilla M. Ansal and Ayfer Erken, GT Jan. 96, p27-38.

A Unified Description of Soil Behavior, Juan M. Pestana, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p281-284.

Sandstone

Construction Through Crude Oil, Kyle R. Ott, Richard J. Switalski and Dale J. Sadowski, CE Feb. 96, p56-59.

Sandwich panels

An Experimental Investigation of Sandwich Flat Panels Under Low Velocity Impact, Anthony N. Palazotto, Eric J. Herup and Timberlyn Harrington, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p402-407.

Localized Load Effects in High-Order Bending of Sandwich Panels with Flexible Core, Y. Frostig and M. Baruch, EM Nov. 96, p1069-1076.

Shear Stiffness D_Q, for C-Core Sandwich Panels, T. C. Fung, K. H. Tan and T. S. Lok, ST Aug. 96, p958-966.

Sandwich structures

Developments in Sandwich Beam Theory and Practice, James C. LaBelle, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1017-1026.

Dynamics of Highly Deformable Sandwich Frame Structures, H. Deng and L. Vu-Quoc, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1147-1150.

Sanitary engineering

Cold Regions Utilities Monograph, 3rd edition, Daniel W. Smith, ed., 1996, 0-7844-0192-6, 780pp.

Environmental Engineering Forum, Dee Ann Sanders, EE Nov. 96, p957.

From Cholera to Cancer to Cryptosporidiosis, Daniel A. Okun, EE June 96, p453-458.

Life Cycle Cost Analysis of a Storburn Propane Combustion Toilet, Paul Ritz and Herbert P. Schroeder, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p816-827.

Sanitary Engineers in American Cities: Changing Roles from the Age of Miasmas to the Age of Ecology, Martin V. Melosi, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p108-122.

Students Aid Bolivian Village, CE Sept. 96, p14,19.

Sanitary landfills

Ground Water Variability at Sanitary Landfills—Causes and Solutions, John Oneacre and Debbie Figueras, Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996, p965-986.

A GIS Sewer Database for a University Campus, D. J. Schuller, D. I. Pusey and A. R. Rao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1765-1770.

Medium Span Gravity Sewer Aerial Crossings, Curtis W. Swanson and Glenn E. Hermanson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p457-468.

Modeling SSO's Resulting from Peak Conditions, Marc P. Walch, Kathleen S. Leo, Stephanie L. Ross and William M. Brant, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1777-1782.

Retention-Tank Systems: A Unique Operating Practice for Managing Complex Waste Streams at Research and De-velopment Facilities, Shari Brigdon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1771-1776.

Sanitary District Brings in the Sleeves to Enlarge Sewer,

CE Aug. 96, p78.

Sanitary Sewer System Modeling Model Comparison Ra-cine, Wisconsin, Robert W. Carr and Thomas J. Bunker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1760-1764

Volunteer Organizations Use of Appropriate Technology in Developing Countries, Jim Horner and Tsegaye Hailu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2754-2759.

Satellite communications

Field Evaluation of a Wireless Global Bridge Evaluation and Monitoring System (WGBEMS), Kenneth Maser, Robert Egri, Abba Lichtenstein and Steven Chase, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p955-958.

A Satellite in Your Future?, ME Mar./Apr. 96, p9-10.

Satellite mapping
Central Pacific Hurricanes-What Do We Know? Thomas A.
Schroeder, (Natural Disaster Reduction, George W.

No. 1007, pp. Housner, ed. and Riley M. Chung, ed., 1997), p291-292.

Conceptual Design of a Crater Lunar Base, Alice Eichold, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p920-927.

The Educational Ozone Researcher: A University Satellite, Linden H. McClure and Ellen L. Riddle, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1327-1333.

Remote Pipeline Routing with Application to Space Opera-tions, Sandra C. Feldman, Ramona E. Pelletier, Wm. Ed-ward Walser, James C. Smoot and Douglas Ahl, (Engi-

ward waiser, James C. Smoot and Douglas Ani, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p231-236.
Studying the Ozone Layer from Space, Emilia K. Arguello, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1259-1261.

Satellite photography
Operational Satellite Remote Sensing for Mineral Exploration, Charles Sabine, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p237-244.

Satellites

21st Century Earth Observing Systems: Emerging Role for Spaceports, Stanley A. Morain, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p245-253.

An Al Agent Construct for Space and Planetary Science Applications, Lee Plansky and Nancy Linarez-Royce, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p341-348.

Stewart W. Johnson, ed., 1996), p341-348.
Air Force Planetary Defense System: Initial Field Test Results, Grant Stokes, Robert Weber, Frank Shelly, David Beatty, Herbert Viggh, Eugene Rork and Byron Hays, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p46-53.
Air Force Planetary Defense Technology, J. Darrah, S. Worden and G. H. Stokes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p32-45.

Artificial Gravity, Zachary Zutavern, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1315-1318.

The Danger to Satellites from Meteor Storms—A Case Study of the Leonids, P. Brown, J. Jones and M. Beech, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p13-19.

The Economics of Space Solar Power, Carissa Bryce Chris-tensen, Douglas A. Comstock and John C. Mankins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p260-268.

The Great Technology Transfer, Tim Cassidy, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1265-1269.

Impact-Generated Atmospheric Plumes: The Threat to Sat-ellites in Low-Earth Orbit, M. B. Boslough and D. A. Crawford, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p88-94.

Interferometric Imaging for Deep Space Asset Monitoring, Gary C. Loos, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p214-223

Investigation of On-Orbit Servicing Robot, T. Matsue and Y. Wakabayashi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p533-539.

Launch Vibration Isolation System, Eugene R. Fosness, Rory R. Ninneman, Paul S. Wilke and Conor D. Johnson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p228-231.

Nanotechnology and Orbital Debris, Hans-Joachim Blome and Thomas L. Wilson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p328-333.

ORDER: A Preliminary Concept for ORbital Debris Removal, Brian A. Phail, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p334-340.

Passive Isolation Systems for Launch Vehicles, Eugene R. Fosness, Paul S. Wilke and Conor D. Johnson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1176-1182.

The Production of Photovoltaic Devices in Space, A. Ignatiev and A. Freundlich, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p287-292.

Recent Progress in Thermally Induced Vibrations Research, John D. Johnston, Richard S. Foster, David L. Eby and Earl A. Thornton, (Engineering, Construction, and Open ations in Space, Stewart W. Johnson, ed., 1996), p1134-

REGA (Regolith Evolved Gas Analyzer), David S. McKay and Carlton C. Allen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p673-679.

Review of the Solar Power Satellite, James McSpadden and Kai Chang, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p254-259. Satellite Setup Links Russian, U.S. GPS, CE July 96, p8

Sea Launch: Commercial Launch Competitiveness, Derek E. Lang, Darrel L. Choate and Marcus L. Nance, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p419-425.

Shape Memory Release Device Experiment, Bernie F. Carpenter, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p76-79.

Sizes and Masses of Satellite Observed Meteoroids, Z. Ceplecha, R. E. Spalding, C. Jacobs and E. Tagliaferri, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p95-101.

Solar Power Satellites, Rebecca Kluck, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1281-1284.

Solar Power Satellites as an Alternative Energy Source, Wendy Shefelbine, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Space Debris Hazard to Defense Systems, Gregory H. Canavan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p20-25. Space Debris: A Growing Threat, Michelle Mancuso, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1290-1294.

Utilization of 3-D CADD in Analysis, Design and Con-struction of Mobile Service Tower for Atlas Launch Vehicles, Norm Bobczynski, Matthew Wrona, David Hansen and Harold Howell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl 197-1204.

SPS 2000" and its Internationalisation, Patrick Collins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p269-279.

Analytical Study and Verification of a Coupled Theory of Mixtures for Application in Cone Penetration and Tunnel Boring in Soils, George Z. Voyiadjis, Murad Y. Abu-Farsakh and Mehmet T. Tumay, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p543-546.

Development of Localization in Undrained Deformation, J. W. Rudnicki, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p939-942.

The Effect of Saturation on the Mechanical Properties of Tuff at Yucca Mountain, Moses Karakouzian and Nick Hudyma, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p407-408.

Hydraulic Conductivity of Frozen Granular Soils, Orlando B. Andersland, David C. Wiggert and Simon H. Davies,

EE Mar. 96, p212-216.

Inelastic Strains of Porous Saturated Media, Victor N. Ni-kolaevskiy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p927-930.

Localization of Inelastic Deformation in Elasto-Plastic Pore Solids Saturated by Liquid, Igor A. Garagash, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p931-934.

Model of Shear Wave Speed as a Function of Depth in Water-Saturated Sand, Nicholas P. Chotiros and Adrienne M. Mautner, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p804-807.

Modulated Waves in Porous Media Saturated by Liquid and Gas, Inna Edelman, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p653-656.

On Calibration of the UZ Site-Scale Model of Yucca Mountain, Y. S. Wu, T. M. Bandurraga, C. F. Ahlers, S. Finsterle, G. Chen, C. Haukwa, G. S. Bodvarsson, E. Kwicklis, J. Rousseau and L. Flint, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p73-75.

Plane Waves and Pore Pressure in a Saturated Sand, R. Staroszczyk and L. W. Morland, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p943-946.

Probabilistic Solutions to Geotechnical Problems, Nagarat-nam Sivakugan and Ali Al-Harthy, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p938-941.

Relative Humidity in the Near-Field Environment, Wunan Lin, Jeffery J. Roberts and David Ruddle, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p128-129.

Seismic Signatures of Patchy Saturation, Jack Dvorkin and Amos Nur, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p645-648.

Assessment of Work Performance of Maintenance Contractors in Saudi Arabia, Abdul-Mohsen Al-Hammad and Sadi Assaf, ME Mar./Apr. 96, p44-49.

Contractor Prequalification in Saudi Arabia, Abdulaziz A. Bubshait and Kamal H. Al-Gobali, ME Mar/Apr. 96, p50-54.

Evaluation of Logit and Probit Models in Mode-Choice Sit-uation, Ahmed Hamdy Ghareib, TE July/Aug. 96, p282-

Occupational Hazards Scheme of Social Insurance in Saudi Arabia: Overview, M. Osama Jannadi, ME Mar/Apr. 96, p55-57.

Value Engineering in the Assessment of Exterior Building Wall Systems, Abdulmohsen Al-Hammad and Moham-mad A. Hassanain, AE Sept. 96, p115-119.

Scaffolds

Larew, Richard E. Ashraf S. Barsoum and Fabian C. Hadipriono, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p906-912.

Vanegas, ed. and Fail Chinowsky, ed., 1990, 1900-912.
A Monitoring System for High-Clearance Scaffold Systems during Construction, Y. L. Huang, T. Yen and W. F. Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p719-726.

Scale effect

Statistical Aspects of Toughness in Brittle Fracture, A. alistical Aspects of Toughtess in Brittle Practice, A. Chudnovsky and M. Gorelic, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p346-349.

Scale models

A Combined Physical and Mathematical Modeling Scheme for Kapichira Hydropower Project, Malawi, K. Sivakumaran and E. Cole, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3806-3811.

Comprehensive Modal Tests of a Space Truss Model for Damage Assessment, Cesar J. Carrasco, Roberto A. Osegueda, Carlos M. Ferregut, Brian Harms, David Meza and Mike Grygier, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1141-1147.

Compression Bending of Scale-Model Reinforced-Concrete Walls, James K. Gran and Paul E. Senseny, EM July 96,

Dam Foundation Erosion Study: Pit 4 Scale Model Simula-tion, R. J. Wittler, S. R. Abt, T. L. Lewis, J. F. Ruff and K. Adhya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3829-3834.

ed., 1996), p.8629-3634.

Dam Foundation Erosion Study: the Design of a Sidewall Orifice for Simulation of a Free Trajectory Overtopping Jet, R. J. Wittler, S. R. Abt, T. L. Lewis, J. F. Ruff and K. Adhya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p340-345.

Damage Evaluation in Steel Box Columns by Pseudody-namic Tests, Tsutomu Usami and Satish Kumar, ST June

96, p635-642.

A Dynamic Submerged Breakwater, A. N. Williams and W. G. McDougal, WW Nov/Dec. 96, p288-296.

Filling and Emptying System Model Study for the Innova-tive Lock Design, Richard L. Stockstill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3141-3146.

Hydraulic Model Study of the Prado Dam Spillway, Chris D. Bahner, (North American Water and Environ Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3800-3805.

On Calibration of the UZ Site-Scale Model of Yucca Mountain, Y. S. Wu, T. M. Bandurraga, C. F. Ahlers, S. Finsterle, G. Chen, C. Haukwa, G. S. Bodvarsson, E. Kwicklis, J. Rousseau and L. Flint, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p73-75.

Physical Modeling to Determine Head Loss at Selected Surcharged Sewer Manholes, K. H. Wang, T. G. Cleve-land, C. Towsley and D. Umrigar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3835-3840. Plate Anchor Groups Pulled Vertically in Sand, James D.

Geddes and Edward J. Murray, GT July 96, p509-516.

Predicted and Observed Cyclic Performance of Piles in Calcareous Sand, Riadh H. Al-Douri and Harry G. Poulos, GT Jan. 95, p1-16.

Wave Induced Reaction Forces and Tension in TLP Ten-dons, John M. Niedzwecki, Dadi S. Soemantri and Oriol R. Rijken, (Probablisiei Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p586-587. Wind Loads for Low-Rise Buildings on Escarpments, Brad Means, Timothy A. Reinhold and Dale C. Perry, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p1045-1052.

Scanning electron microscopes Interfacial Shrinkage in Mortars, K. Sujata, Yunping Xi and Hamlin M. Jennings, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1669-1676.

Scheduling

Automated Constructibility Analysis of Work-Zone Traffic-Control Planning, Deborah J. Fisher and Naveen Rajan, CO Mar. 96, p36-43.

Constraint Logic Programming Contribution for Fleet Man-agement System in Freight Transport, Etienne Gaudin and Gérard Scémama, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p470-474.

Construction for Tomorrow and the Day After, William R. Nash, SC May 96, p67.

Construction Representative: Scheduling and Cost Management, Allan F. Samuels and Michael J. Bruder, CO Sept. 96, p281-290.

Construction Resource Scheduling with Genetic Alog-rithms, Weng-Tat Chan, David K. H. Chua and Govin-dan Kannan, CO June 96, p125-132. Customer Oriented Train Scheduling in Underground Rail-way Systems, Riccardo Minciardi, Massimo Paolucci and Pofficial Desemit (Ambliografia, Massimo Paolucci of Pofficial Desemit (Ambliografia, Massimo Paolucci and Raffaele Pesenti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p149-153.

Dynamic Programming Approach to Scheduling of Non-serial Linear Project, Ahmed B. Senouci and Neil N. El-din, CP Apr. 96, p106-114.

Dynamic Vehicle Allocation Under Real Time Information: Operational Considerations and Potential Efficiencies, Amelia C. Regan, Hani S. Mahmassani and Patrick Jaillet, (Applications of Advanced Technologies in Transpor-tation Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p690-694.

Electrical Construction Foreman Task Scheduling, Bolivar A. Senior, CO Dec. 96, p363-369.

Fast-Track Concrete Paving—Overview of Key Components, Lawrence W. Cole and Gerald F. Voigt, (Materials for the New Millennium, Ken P. Chong, ed., 1996), 2466-455. p446-455.

p446-432. Flexible Dynamic Scheduling: A Major Improvement for Public Transport, Antonio Marqués, Manuel Torregrosa, Arturo Camarena, K. Darby-Dowman, Shirley Moody and James Little, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p134-138.

Golden Rule of Contractor-Subcontractor Relations, Joseph R. Proctor, Jr., SC Feb. 96, p12-14.

In Defense of Design Engineers, Burton A. Lewis, CE Sept.

96, p32.

Information Technology for Better Management of Change, Cost and Schedule in Construction Projects, Feniosky Peña-Mora and Hong Chen, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p613-619.

Innovative Building Construction Technique: Modified Up/Down Method, Joon H. Paek and Jong H. Ock, CO

June 96, p141-146. Innovative N.Y. Bridges Add Highway Clearance, CE July 96, p19-20.

International Space Station (ISS) Assembly Sequence Planning, R. E. Gates, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p435-442

Methodologies for the Analytic Definition of Uniform Travelling Time-Shifts of an Urban Public Transporta-tion Service, Severo Pace and Graziana Ghio, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p139-143.

pi, ed., 1996), pi.39-143.
Modeling Reliability of Train Arrival Times, L. Ferreira and A. Higgins, TE Nov./Dec. 96, p414-420.
Models for Estimating Core-Cycle Rate of Penetration at Yucca Mountain, Nevada, Lawrence E. Barker and Dale D. Daffern, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p468-470.

National High-Level Waste Systems Analysis, Thomas P. O'Holleran and Keith Kristofferson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p315-316.

New Approach for Optimization of Overall Construction Schedule, Shirong Li, CO Mar. 96, p7-13.

Assignment Models, Fabien Leurent, (Applications of Advanced Technologies in Transportation Engineering, 1996), p633-638.

Project-Network Analysis Using Fuzzy Sets Theory, Pasit Lorterapong and Osama Moselhi, CO Dec. 96, p308-318.

Requirements for Industry Applicability of Knowledge-Based Schedulers, Florian Aalami and Martin A. Fischer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p774-780.

Scheduling with Computer-Interpretable Construction Method Models, Martin A. Fischer and Florian Aalami, CO Dec. 96, p337-347.

Tappan Zee Set for Inverset (Available only in Structures special issue), Harry Goldstein, CE Sept. 96, p12A-13A. Thinking Ahead with Forward Pricing, Brian E. Kasen and

Victor C. Oblas, ME Mar./Apr. 96, p12-16.

Using CPM-Chart Animation to Illustrate the Evolution of Schedules, Julio C. Martinez and John R. Knoke, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p627-633.

Visual-Based Scheduling: 4D Modeling on the San Mateo County Health Center, Eric Collier and Martin Fischer, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p800-805.

Scholarships

Alabama-Huntsville Students Again Crowned as Concrete Canoe Champs, NE Aug. 96, p1,6.

Buffalo Section Works with Cub Scouts to "Build a Better Future", CE Nov. 96, p74.

Mississippi State Students Take Top Chapter Title Again, NE Oct. 96, p2.

A New Kind of Rubber Drive, CE Nov. 96, p94-95.

Analysis of Bank Stabilization in Steep Complex Streams Using A Two-Dimensional Model, Raymond Walton, Wilfredo A. Moneda and Jeffrey B. Bradley, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p352-357.

Applicability of Scour Equations in Tidal Areas, J. R. Richardson, E. V. Richardson and B. L. Edge, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1980-1989.

Application of Regime Theory in Practice: A Case Study, James A. Turpin and Martin J. Teal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1663-1668.

Arizona Local Government Bridge Scour Evaluation Study, Bart S. Bergendahl and Raymond C. Jordan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p479-488.

Assessment and Implications of Local Channel Instability on the Prediction of Bridge Scour, Thomas M. Heil and Peggy A. Johnson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3286-3293.

Bank Protection Toe-Downs and Local Pier Scour, Dennis L. Richards and Christopher J. Pauley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4172-4177.

Bridge Abutment Scour in Floodplain with Backwater, Terry W. Sturm and Aftab Sadiq. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p921-930.

Bridge Hydraulic and Scour Analysis Using FESWMS-2DH, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1555-1564.

Channel Restoration Project Along Toby Creek, Dennis N. Jermeland, Daniel Billman and William R. Tingle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3521-3526.

Channel Scour Protection at Roadway Crossings, Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3278-3285.

Contraction Scour at Bridges Founded on Clay Soils, W. R. Ivarson, F. Qadir and M. Phelps, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1358-1366.

Contraction Scour at Bridges: Analytic Model for Coarse-Bed Channels, David C. Froehlich, (North American

Bed Channels, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3706-3715.
The Cost of Highway Bridge Scour in the State of Minnesota, W. Robert Ivarson, Mark Gieseke and Dave Halvorson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3500-3508.

Design of Class-I Sedimentation Tanks, Prabhata K. Swamee and Aditya Tyagi, EE Jan. 96, p71-73. Design of Guide Banks for Bridge Abutment Protection, P. F. Lagasse, E. V. Richardson and L. W. Zevenbergen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Designing Concrete Culverts to Resist Scour Damage, John Kurdziel, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p3942-3949.

Detailed Measurements of Scour at Bridges, David S. Mueller, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2541-2549.

Determination of Bridge Scour Velocity in an Estuary, Billy L. Edge, Stephan N. Vignet and John S. Fisher, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Economic Risk Analysis as a Research Directing Paradigm, Ken Young, Stuart Stein, David Pearson and Roy Trent, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Effects of Foundation Geometry on Bridge Pier Scour, Bruce W. Melville and Arved J. Raudkivi, HY Apr. 96,

Effects of Rectangular Foundation Geometry on Local Pier Scour, A. C. Parola, S. K. Mahavadi, B. M. Brown and

A. El Khoury, HY Jan. 96, p35-40.
Evaluation of Selected Instruments for Monitoring Scour at Bridges in New York, Gerard K. Butch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4164-4171. Field Measurements of Streambed Scour at Bridge Piers in

Ohio, K. Scott Jackson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3033-3042.

Grade Control Structures for Pipeline Crossings in the Arid Southwest, Martin J. Teal, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p830-835. Grade-Control Structures for Salt River Channelization, Dennis L. Richards and Tim Morrison, (North American

Definits L. Richards and I in Hontison, Victor American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p606-611. Historical Development of Bridge Scour Evaluations, E. V. Richardson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, 4, 1906-5, 2, 27 ed., 1996), p3-27.

Hydraulic Effects of Habitat Structures in Flood Control Channels, Rebecca Seal, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1519-1524.

Instrumentation for Field Measurement of Abutment Scour, J. D. Schall, G. R. Price and G. A. Fisher, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p931-939.

Integrating the Refraction Seismic Method into Stream Crossing Characterization for Scour and Excavation Conditions, Michael L. Rucker, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1163-1177.

Jet Scour around Vertical Pile, C. O. Chin, Y. M. Chie Y. Lim and F. H. Lim, WW Mar./Apr. 96, p59-67.

Laboratory Evaluation of a Conductivity Probe for Scour Monitoring, David S. Mueller and Mark N. Landers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Local Scour Downstream of Hydraulic Structures, Gijs J. C. M. Hoffmans and Krystian W. Pilarczyk, HY Apr. 95,

Local Scour: By A Deeply Submerged Horizontal Circular Jet, Yee-Meng Chiew and Siow-Yong Lim, HY Sept. 96, p529-532.

The Maryland Bridge Scour Program, Stanley R. Davis and David D. Dee, Jr., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p469-478.

Maryland SHA's Procedure for Assessing Existing Bridges for Scour Vulnerability and for Rating Unknown Foun-dations, Leonard N. Podell, Stanley R. Davis and Dan Sajedi, (North American Water and Environment Coness & Destructive Water, Chenchayya Bathala, ed., 1996), p2766-2774.

Measurements of Bridge-Scour Depths in Mississippi, K. Van Wilson, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3023-3032.

A Method to Study Suspended Sediment Induced Flow Characteristics Changes, D. Zhou and C. Mendoza, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Mobile Bay Scour Analysis for Mobile and Baldwin Counties, Alabama, Bryan Hancock, Charles D. Powell and Conor Shea, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p719-728.

A Model of the Juncture Vortex, Elie Monnier and M. R. Dhanak, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1126.

Modeling Uncertainty in Prediction of Pier Scour, Peggy A Johnson and Bilal M. Ayyub, HY Feb. 96, p66-72.

Monitoring Scour at Bridge Piers in Snohomish Co., WA, Anthony P. Nahajski, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1156-1161.

New Modeling Method Aims to Better Scout Scour, ET Mar./Apr. 96, p6.

Numerical Simulation of Bridge Abutment Scour Development, Xibing Dou, Yafei Jia and Sam S. Y. Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3716-3721.

Pier Scour at Wide Piers, Peggy A. Johnson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2193-2201.

Pier Width and Local-Scour Depth, Robert Etterna, Bruce W. Melville and Brian Barkdoll, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p251-256.

Potential-Scour Assessments at 130 Bridges in Iowa, Edward E. Fischer, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1149-1155.

Propeller Wash Induced Erosion at Quay Walls, H. N. Hashmi, G. A. Hamill, H. T. Johnston and A. R. Ghumman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Riprap and Concrete Armor to Prevent Pier Scour, Lisa M. Fotherby and James F. Ruff, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4178-4187.

Scour Around Circular Piers, Prabhata K. Swamee and Chandra Shekhar P. Ojha, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2550-2555. Scour Around Exposed Pile Foundations, Mohammad Salim and J. Sterling Jones, (North American Water and

Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2202-2211. The Scour at Bridges Management Program in Rhode Island, Edward J. Kent, Jeffrey S. Glenn and Joseph T. Boardman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p489-498.

Scour at Culvert Outlets: Considerations Present and Future, Steven R. Abt and Phillip L. Thompson, (North American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996), p3927-3931. Scour in Erodible Rock I: The Erodibility Index, George W. Annandale and Steven P. Smith, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1342-1348. Scour in Erodible Rock II: Erosive Power at Bridge Piers, Scour in Erdudies rock II. Elosse Power a Bridge Fred, Steven P. Smith and George W. Annandale, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1349-1357. Scour Monitoring at Johns Pass and Nassau Sound, Florida,

J. D. Schall, G. A. Fisher and G. R. Price, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1990-1998.

Scour Power, George W. Annandale, Steven P. Smith, Robert Nairns and J. Sterling Jones, CE July 96, p58-60. Scour Processes Observed in Field Data, Mark N. Landers and David S. Mueller, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3052-3061. Scour Protection in Bottomless Culverts, D. V. Halvorson and F. J. Laumann, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3932-3941.

Scour Study for Bridge Design on Temecula Creek, Howard H. Chang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1162-1166.

Scour-hole Dimensions at Selected Bridge Piers in New York, Gerard K. Butch, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3043-3051.

Site Selection for Pipeline Waterway Crossings, Brian J.

Doeing and David T. Williams, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p365-372.

South Carolina Department of Transportation's Statewide Program of Bridge Scour Evaluation, Randall D. Williamson, Dean D. Hatfield and Michael A. Ports, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p729-735. State of Delaware - Scour Evaluation Program, Thomas M.

Heil, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p459-468.

Temporal Development of Local Scour at Bridge Piers, Yee-Meng Chiew and Bruce W. Melville, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2556-2564.

Toe-Scour Estimation in Stabilized Bendways, Stephen T.

Maynord, HY Aug. 96, p460-464.

Training for Bridge Inspectors in Stream Stability and Scour, P. F. Lagasse and E. V. Richardson, (North American Water and Environment Congress & Destructive
Water, Chenchayya Bathala, ed., 1996), p499-505.
Two Dimensional Modeling of the Mobile River Delta and

the Mobile Bay System, Conor C. Shea, Charles D. Powell and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3662-3667. Update on Scour Prediction, Robert B. Nairn, P.E., CE

Sept. 96, p36.

Use of Geomorphic Data for Assessing Stream Stability at Bridge Structures, Jonathan Fuller and Steven R. Walker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3294-3299.

Using HEC-RAS to Compute Scour at Bridges, Gary W. Brunner, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1565-1574.

599

Aspects of River House Cleaning During Floods, Parviz Monadjemi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2192.

Scoville, John A. (Member, ASCE)

John Scoville, Killed in Croatia Plane Crash, Headed Harza Engineering in Chicago, NE May 96, p15.

Screening

Database Preparation for Pavement Modeling—Virginia's Experience, Adel W. Sadek, Thomas E. Freeman and Michael J. Demetsky, TE Nov./Dec. 96, p454-461.

Aerobic Fluidized Bed Reactor with Internal Media Cleaning, Steven I. Safferman and Paul L. Bishop, EE Apr. 96, p284-291.

Copper and Copper-Nickel Alloys as Zebra Mussel Anti-foulants, Jane M. Dormon, Catherine M. Cottrell, D. Grant Allen, Joseph D. Ackerman and Jan K. Spelt, EE Apr. 96, p276-283.

Flow through Vertical Barrier Screens - A Numerical Model, M. E. Allen, M. P. Cherian and L. J. Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Scrubbers

Comparison of Commonly Used Odor Control Technologies, Kartik Vaith, Mike Cannon, Darrell Milligan and James Heydorn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p64-74.

Engineering Model for Fixed-Film Bioscrubbers, Hanneke F. Ockeloen, Thomas J. Overcamp and C. P. L. Grady,

Jr., EE Mar. 96, p191-197.

Effects of Southern California Kelp Beds on Waves, M. Hany S. Elwany, William C. O'Reilly, Robert T. Guza and Reinhard E. Flick, WW Mar./Apr. 95, p143-150.

Influence of Seabed Topography and Roughness on Long-shore Wave Processes, Terry M. Hume, Brett Beamsley, Malcolm O. Green, Willem P. de Lange and D. Murray Hicks, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p975-986.

Morphological Impact Assessment of Artificial Islands for the Øresund Link Between Denmark and Sweden, Kar-sten Mangor, Andrew M. Driscoll, Ida Brøker and Ann Skou, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p939-950.

Reliability Analysis of Pipeline on Elastic Seafloor, H. Y. Yeh and Hengyun Li, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p752-755.

Shear Stresses and Hydrodynamics of Combined Waves and Currents, R. D. MacIver, R. R. Simons and A. J. Grass, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed., 1996), p676-685. Statistical Analyses of Acoustical Wave Velocity in Porous Seafloor, M. Badiey, A. H-D. Cheng and Y. Mu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p800-803.

Stochastics of Sediment Transport, Shore Evolution and Their Input, Rafall Ostrowski, Zbigniew Pruszak, Grzegorz Różyński and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p963-974.

The Caspian Sea Transgression (Environmental Medical Aspect), L. I. Elpiner, (North American Water and Envinent Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3498.

Impacts of Sea Level Rise on Coastal Water Resources Management, Chin Y. Kuo, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1822-1827.

Managing the Impacts of Storm Surges on Victoria Island, Lagos, Nigeria, Peter Chigozie Nwilo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3496.

Modeling the Impact of Sea Level Rise in Delaware Bay, K. W. Kim and B. H. Johnson, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2737-2742.

Reader Questions Sea Level Prediction, Leland B. Jones, CE Sept. 96, p32,35.

Sea-Level Rise Predicted, CE Jan. 96, p8.

This Is Not Good News, Percival A. Miller, CE May 96, p29

Verification of the Bruun Rule for the Estimation of Shoreline Retreat Caused by Sea-Level Rise, Nobuo Mimura and Hisamichi Nobuoka, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p607-616.

Neptune--An Integrated Approach to Determining NW European Coastal Extremes, Jerzy Graff and Witold Cieślikiewicz, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1035-1046.

Currents Stop Seawall Corrosion, CE May 96, p10-11.

K. A. Rakha and J. W. Kamphuis, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p879-890.

Wave Overtopping and Pressure Dependent on Crest Eleva-tion, Tsutomu Sakakiyama, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p209-220.

Advanced Seawater Desalination Plant, David W. Dean and Earl B. Lindquist, Jr., (North American Water and Environment Congress & Destructive Water, Chenchavva Bathala, ed., 1996), p685-690.

Application of a Three-Dimensional Model to Assess Sea-water Intrusion in the South San Diego Embayment, David Huntley, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4072-4077.

Composite Holds Back Seawater at 13 Fathoms, CE June 96, p87.

An Evaluation of Tidal Predictions in the Yellow and East China Seas, Cheryl Ann Blain, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p429-441.

Long-Term Leaching of Metals from Concrete Products, Matthew T. Webster and Raymond C. Loehr, EE Aug. 96, p714-721.

Optimal Fitting of a Model to Observations of Sediment Concentration in the Irish Sea, J. N. Aldridge, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p416-428.

Simulation of Three-Dimensional, Non-Hydrostatic Free-Surface Flows for Estuaries and Coastal Seas, Vincenzo Casulli and Stelling Guus S., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p1-12.

Steady-State Effect of Freshwater Injection on Seawater Intrusion, A. Mahesha, IR May/June 96, p149-154.

Transient Effect of Battery of Injection Wells on Seawater Intrusion, A. Mahesha, HY May 96, p266-271.

Sea water corresion

Mathematical Modeling of Electrochemical Steel Corrosion in Concrete, G. Balabanić, N. Bićanić and A. Dureković, EM Dec. 96, p1113-1122.

The Effect of the Lunar Surface Environment upon Ma-chinery, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p639-645.

Florida DOT Applies Gravity Sealer to Seaway Bridges, CE Sept. 96, p96.

Practical Experiences with Sealing Technology in the Czech Republic, Michal Vanccek, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p415-416.

Sealing Leaks in Geomembrane Liners Using Electrophore-sis, Glenn T. Darilek, M. Yavuz Corapcioglu and Albert T. Yeung, EE June 96, p540-544.

A Wheeled Mobile Robot for Automated Pavement Crack Sealing, K. J. Mueller, D. Hong and S. A. Velinsky, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p178-184.

Analysis of Changes in Airport Ground Access Mode Use, Geoffrey D. Gosling, (Meeting the Challenge: Rebuild-ing Inner City Airports, Prianka Seneviratne, ed., 1996), p63-77.

Comparison of Load Restriction Timings Determined Using FHWA Guidelines and Frost Tubes, Nazli Yesill-er, Craig H. Benson and Peter J. Bosscher, CR Mar. 96,

Editor's Note, Thomas L. Theis, EE Dec. 96, p1049.

Lake Number: A Long-Term Lake Water Quality Predictor, Midhat Hondzo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3176-3187.

Performance Evaluation of Overland Flow Wastewater Treatment System under Winter and Summer Condi-tions, R. Y. Surampalli, P.E., S. C. Chou and S. K. Ban-erji, P.E., CR Dec. 96, p163-177.

Risk-Equivalent Seasonal Discharge Programs for Ice-Covered Rivers, Corinne L. Wotton and Barbara J. Lence, WR May/June 95, p275-282.

Seasonal Effects on Generation of Particle-Associated Bacteria During Distribution, Blaise J. Brazos and John T. O'Connor, EE Dec. 96, p1050-1057.

Strategies for Operation of Orange County Water District Talbert Sewater Intrusion Barrier, California, Kevin McGillicuddy and Timothy Sovich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4078-4083.

Secondary flow

A Secondary Flow Correction for Depth-Averaged Flow Calculations, John Finnie, Barbara Donnell, Joe Letter and Robert S. Bernard, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p301-305.

Velocity Distribution in Compound Channel Flows by Numerical Modeling, Giuseppe Pezzinga, HY Oct. 94, p1176-1198.

Secondary systems

Comparison of Methods for Sizing Secondary Treatment Filters for Wastewater, Paily P. Paily, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p565-570.

Exact Solutions to A Class of Structure-Equipment Sys-tems, Genda Chen and T. T. Soong, EM Nov. 96,

p1093-1100.

Fluidized Bed Denitrification of Secondary Effluent During Wastewater Reclamation in Southern California, Roger w. Babcock, Jr., Kapal Madireddi and Michael K. Stenstrom, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p788-793.

Analysis of Rules and Regulations for Metal Coil Truck Transport, W. Bradford Cross, Richard Romick-Allen, Nader Panahshahi and Steven J. Hanna, TE Nov./Dec. 96, p475-480.

Mobile Robots for Security, Anatoly Osipov, Vladimir Kemurdjian and Boris Safonov, (Robotics for Challeng-ing Environments, Laura A. Demsetz, ed., 1996), p290-

A New Approach to Airport Security, Sal DePasquale, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p53-62.

Operation of Airport Security Checkpoints Under Increased Threat Conditions, Christopher A. Chung and Hidayat Nyakman, TE July/Aug. 96, p264-269.

Structural Design for Vehicular Bombs, Task Committee on Structural Design for Physical Security, (Paul F. Mlakar, FASCE, Chair, chmn.), (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1269-1276.

Desilting Basin System of the Dul Hasti Hydroelectric Project, Daniel Develay, Jean Binquet, E. Divatia and C. R. Venkatesha, HY Oct. 96, p565-572.

Diffusive Transport of Organic Colloids from Sediment Beds, K. T. Valsaraj, S. Verma, I. Sojitra, D. D. Reible and L. J. Thibodeaux, EE Aug. 96, p722-729.

Dynamic Effects of Sediment and Foundation on Dam Hydrodynamic Pressure Under Vertical Ground Accelera-tions, Kuo-Chyang Chang, Tin-Kan Hung, David A. Margo and Jeen-Shang Lin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p511-514.

Dynamics of Turbidity Current with Reversing Buoyancy, B. E. Hürzeler, J. Imberger and G. N. Ivey, HY May 96,

From Sediment to Solid, James R. Donnelly and William C.

Webster, CE May 96, p41-43

In Situ Characterization of the Microbiota in Yucca Moun-San Characterization of the Microbiola II fuce a Moun-tain Sediments, David B. Ringelberg, Julia O. Stair, David C. White and Larry H. Hersman, (High Level Ra-dioactive Waste Management, Technical Program Committee, 1996), p33-35.

Initiation of Bed Forms on a Flat Sand Bed, Stephen E. Coleman and Bruce W. Melville, HY June 96, p301-310. Measurements of Erosion of Undisturbed Bottom Sedi-ments with Depth, Joe McNeil, Catherine Taylor and Wilbert Lick, HY June 96, p316-324.

Wholet Lick, IT Julie 90, p310-324.

A Note on the Incipient Motion of Sediment Particles, A. Papanicolaou, P. Diplas, M. Balakrishnan and C. Dancey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p657-660.

Specification of Cu, Pb and Cr in Contaminated Sediment Effected by pH, Chin-Yuan Chen, Jih-Gaw Lin and Cheng-Nan Chang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1453-1458.

Under Way: Decontamination Pilots for Dredged Material, CE Nov. 96, p10,12.

Sediment concentration

Acoustic Sediment Flux Measurements from DUCK '94, Karen M. Kohanowich, Timothy P. Stanton and Edward B. Thornton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p739-748. Application of Circulation and Sediment Transport Model-

ing within San Diego Bay, Thomas L. Johnson and Clau dio Fassardi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p596-607. Coordination of Empirical and Rational Alluvial Canal For-

mulas, Shrikrishna V. Chitale, HY June 96, p357-359.

Estimation of Bed Material Transport Capacity, Henry M. Fehlman and Ruh-Ming Li, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1033-1038.

Influence of Short and Long Waves Coupling on Sand Suspending, Sergey Yu. Kuznetsov and Nikolay V. Pykhov, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p720-727.

Optimal Fitting of a Model to Observations of Sediment Concentration in the Irish Sea, J. N. Aldridge, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph

T. Cheng, 1996), p416-428.

Sediment Removal from Stormwater Runoff, Ashok Pandit and Ganesh Gopalakrishnan, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2439-2444.

Sediment Transport Fluxes as Determined from Wave Breaker Induced Suspended Sediment and Flow Fields, G. Smith, G. Mocke and L. Engelbrecht, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p783-794.

Sediment Transport Mechanism Over Rippled Sand Beds, S. G. Sajjadi, J. N. Aldridge and D. J. Nicholas, (Estua-rine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p669-680.

Suspended-Solids Flux at a Shallow-Water Site in South San Francisco Bay, California, Jessica R. Lacy, David H. Schoellhamer and Jon R. Burau, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3357-3362.

Towards Predicting Sediment Transport in Combined Wave-Current Flow, Zhihong Li and Alan G. Davies,

WW July/Aug. 96, p157-164.

Transforms for Runoff and Sediment Transport, Pierre Y. Julien, HE July 96, p114-122.

Sediment control

Are Erosion Control Programs Reducing Sedimentation? D. P. Roseboom, R. Sinclair, Gary Eicken and Pat Woods, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2879-2884.

A Comparison of Sediment Routing Models, A. R. Ghum-man, P. R. Wormleaton, H. N. Hashmi and G. H. Akbari, (North American Water and Environment Congress & Destructive Water, Chenchavva Bathala, ed., 1996).

Debris Basin Design Procedures, J. J. DeVries and T. V. Hromadka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1657-1662.

Industry Standards for Erosion Control Products - Future Tools for Civil Engineers, David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3349-3354.

Managing Sediments in Reservoirs at FERC, Shou-shan Fan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2084-2090.

Numerical Modeling for Sediment-Pass-Through Reservoirs, Howard H. Chang, Larry L. Harrison, Wing Lee and Scott Tu, HY July 96, p381-388.

Optimal Reliability-Based Design of Check Dam Structure, Satoshi Katsuki, Nobutaka Ishikawa and Kazuo Itoh, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p91-98.

Professional Associations Offer Design Resources for Civil Engineers, Ben Northcutt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3343-3348.

Reduction of Sediment Loads in DEC Streams, Chester C. Watson, Tom Pokrefke and Daniel Gessler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2885-2890.

Reservoir Sediment Management Practices of the Los Angeles County Department of Public Works, Sree Kumar and Martin Moreno, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1651-1656.

Santa Clara River Fluvial Analysis, Jun Wang, Ruh-Ming Li and Sree Kumar, (North American Water and Envi ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p358-363.

The Sawmill Creek Watershed Restoration Project, Larry Lubbers, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2873-2878.

Sediment Control at Water Intakes, Yalin Wang, A. Jacob Odgaard, Bruce W. Melville and Subhash C. Jain, HY June 96, p353-356.

Sediment Deposition in the Navigation Approach Channel of Three Gorges Project, Yitian Li and Jianheng Xie, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3852-3855.

Sediment Removal from Stormwater Runoff, Ashok Pandit and Ganesh Gopalakrishnan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2439-2444.

Water Quality Impacts of Dredging and Disposal Operations in Boston Harbor, J. Craig Swanson and Daniel Mendelsohn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2642-2647.

Sediment deposits

Application of Regime Theory in Practice: A Case Study, James A. Turpin and Martin J. Teal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1663-1668.

A Comparison of Sediment Routing Models, A. R. Ghum-man, P. R. Wormleaton, H. N. Hashmi and G. H. Akbari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3794-3799

e Costs and Benefits of Dam Removal on the Elwha

The Costs and Benefits of Dam Removal on the Elwha River, Paula M. Engel, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4288-4293.
Design Modification of Water Supply Intakes in Mountain-ous Regions, Adnan Alsaffar, Yifan Zheng and Karim Khalifa, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p4466-4051. 1996), p4046-4051.

Earthquake Response of Gravity Dams Including Effects of Porous Sediments, José Domínguez and Rafael Gallego, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p649-652.

Eddy Pump Dredging Demonstration at Cresta Reservoir, Larry L. Harrison and Harry P. Weinrib, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2091-2096.

Estimating Sediment Conveyance Capacity and Deposition Potential in Culverts, Dennis L. Richards and Michael E. Zeller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3920-3926.

Impacts of Reservoir Sedimentation on Decommissioning of Dams, George W. Annandale, (North American Water of Dams, George W. Annandate, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2114-2119. Modeling Contaminated Sediments, Robert K. Simons and

Daryl B. Simons, CE Sept. 96, p73-75.

Reservoir Sediment Management Practices of the Los Angeles County Department of Public Works, Sree Kumar and Martin Moreno, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1651-1656.

Sediment Deposition in the Navigation Approach Channel of Three Gorges Project, Yitian Li and Jianheng Xie, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p3852-3855.

p.802-3803.
Sediment Erosion Rate in the Baltimore Harbor, Jerome P.-Y. Maa, Larry Sanford and Jeffrey P. Halka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.438-3438.
Sediment Impacts on Yield from a Two-Reservoir System in Dustry Pipe Circust I. Marcia (North American)

in Puerto Rico, Gregory L. Morris, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2103-2108.

Settling and Erosion Characteristics of Mud/Sand Mixtures,

Hilde Torfs, Helen Williamson and Heidi Huysentruyt, (Coastal Dynamics '95, William R. Dally, ed. and

(Coastal Dynamics '93, William R. Daily, ed. and Ryszard B. Zeidler, ed., 1996), p749-758. Simulation of Channel Changes Induced by a Reservoir, Howard H. Chang, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2109-2113.

Statistical Analyses of Acoustical Wave Velocity in Porous Seafloor, M. Badiey, A. H-D. Cheng and Y. Mu, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

Venice, Italy: an Integrated Approach to Solve the Environenice, Italy: an Integrated Approach to Soive the Edwiron-mental Problems of Its Unique Collection System, Feder-ico G. A. Vagliasindi, Vincenzo Belgiorno, Rodolfo M. A. Napoli and Giorgio Conti, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1801-1806.

At-A-Station Temporal Variations in Flow Under Drought and Flood Conditions and Associated Sediment Problems, Muhammad Ashiq, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1881-1886.

Lift Off and Entrainment of Sediments, J. M. Redondo, M. A. Sánchez and R. Castilla, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p709-719.

Modeling Natural Hydrodynamic Systems with a Differential-Turbulence Column, Brett Brunk, Monroe Weber-Shirk, Anna Jensen, Gerhard Jirka and Leonard

W. Lion, HY July 96, p373-380.

Modeling Sediment in Gravel-Bedded Streams Using HEC-6, Robert N. Havis, Carlos V. Alonso and John G. King, HY Oct. 96, p559-564.

Suspended Sediment Loads in Dry and Wet Years, Renjie Xia and Misganaw Demissie, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1442-1446.

Coastal Evolution Downdrift of St. Joseph Harbor on Lake Michigan, R. B. Nairn and L. E. Parson, (Coastal Dy-namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p903-914.

Estimating Sediment Conveyance Capacity and Deposition Potential in Culverts, Dennis L. Richards and Michael E. Zeller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3920-3926.

Impact of Sedimentation Caused by Runoff, Dilip Khatri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p708-713.

Sediment transport

The 'Dynamics of Beaches' Project, P. Prinos, A. S. Arcilla, N. Christiansen, J. van de Graaf, M. Hogedal, A. Lewis, B. O'Connor, F. Rivero and J. de Rouck, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582.

3D Numerical Modeling of Cohesive Sediments, Scott A. Yost and Nikolaos D. Katopodes, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p478-489.

Acoustic Sediment Flux Measurements from DUCK '94, Karen M. Kohanowich, Timothy P. Stanton and Edward B. Thornton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p739-748.

ANSWERS-2000: Runoff and Sediment Transport Model, Faycal Bouraoui and Theo A. Dillaha, EE June 96,

Application of a Coupled 3-D Hydrodynamics-Sediment-Water Quality Model, Xinjian Chen and Y. Peter Sheng, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p322-339.

Application of Circulation and Sediment Transport Modeling within San Diego Bay, Thomas L. Johnson and Clau-dio Fassardi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p596-607.

At-A-Station Temporal Variations in Flow Under Drought and Flood Conditions and Associated Sediment Problems, Muhammad Ashiq, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1881-1886.

Beach and Nearshore Profile Evolution at Different Temporal Scales: The Case of Duck, North Carolina, U.S.A. Michele Capobianco, Rina Basana and Riccardo Pesaresi, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p629-638.

Beach Nourishment: Planform Considerations, Robert G. Dean, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p533-546.

Boundary Layer Theory and Field Bedload, Leszek M. Kaczmarek, Rafall Ostrowski and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p664-675.

A Boussinesq Model for Inshore Zone Sediment Transport Using an Energetics Approach, Theofanis V. Karambas, Howard N. Southgate and Christopher Koutitas, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p841-849.

Calibration of Sediment Transport Model for the Upper End of Elephant Butte Reservoir, Mohammed A. Samad, Drew C. Baird and Frank P. Montoya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2288-2293.

Coast, T. M. Peck, R. J. M. Sweet, H. N. Southgate, S. Boxall, A. Matthews, R. Nash, J. Aiken, H. Bottrell and R. Wilson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1024-1034.

Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996, 0-7844-0154-3, 1065pp.

Coastal Evolution Downdrift of St. Joseph Harbor on Lake Michigan, R. B. Nairn and L. E. Parson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p903-914.

A Comparison of Sediment Routing Models, A. R. Ghumman, P. R. Wormleaton, H. N. Hashmi and G. H. Akbari, man, P. R. Wormleaton, H. N. Hashmi and G. H. Akbari,

man, P. R. Wormleaton, H. N. Hashmi and G. H. Akbari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p3794-3799.
Contraction Scour at Bridges: Analytic Model for Coarse-Bed Channels, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3706-3715.

A DEM Based Hydrologic and Sediment Transport Model, Menghua Wang and Allen Hjelmfelt, (North American

Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2695-2700.

Design of a Laboratory Facility for Longshore Sediment Transport Research, Julie D. Rosati, David G. Hamilton, Jimmy E. Fowler and Jane M. Smith, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p771-782.

Design of Sediment-Transporting Pipeline, Prabhata K. Swamee, HY Jan. 95, p72-76.

Swamee, HY Jan. 95, p72-76.

Detailed Measurements of Socur at Bridges, David S. Mueller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2541-2549.

Distribution of Reynolds Stress above a Packed Bed in Open Channel Flow, Mahesh Balakrishnan, Clinton Dancey, Thanais Papanicolaou and Panos Diplas, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p665-668.

Employment of Electronic Sand Level Gauges for Measurement of Beach Slope Deformation on Norderney Island, Kos'yan R., H. Kunz and I. Podymov, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p651-663.

nanics '93, William R. Dany, Co. Land Y. Zeidler, ed., 1996), p651-663.

Estimating Sediment Conveyance Capacity and Deposition Potential in Culverts, Dennis L. Richards and Michael E. Zeller, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3920-3926.

1990), p3920-3920. Experiments on Resuspension of Fluid Mud Using an Oscillating-Grid Tank, Panagiotis D. Scarlatos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p808-811. Field Measurements of Erosion across a Shallow Water Estuarine Mudflat, M. C. Christie, K. R. Dyer, M. J. Fennessy and D. A. Huntley, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), e759, 770. p759-770.

Field Validation and Application of a Coastal Profile Model, J. A. Roelvink, Th. J. G. P. Meijer, K. Houwman, R. Bakker and R. Spanhoff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

p818-828.

Floodplain analysis of the Lower Santa Margarita River in

Floodplain analysis of the Lower Santa Margarita River in Camp Pendleton Marine Air Base, California, Ruh-Ming Li, Anna Lantin and Hank Fehlman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl870–1874. Flora Wang, Noted Hydrologist, Was Louisiana State Professor, NE Oct. 96, p6. Flow Over Vortex Ripples: Models and Experiments, Lewis A. W., E. Hitching, G. Perrier, E. Asp Hansen, H. Earnshaw, K. Eidsvik, C. Greated, M. Sumer and A. Temperville, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p686-697. Geometry of Sand Ripples due to Combined Wave-Current Flows, Hitoshi Tanaka and Van To Dang, WW Nov./ Dec. 96, p298-300.

How to Manage Floodwaves in the Dutch Meuse: Future Measures to Reduce the Inconvenience of Inundations, J. H. Gerretsen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3271-3272.

Hydraulic and Sediment Models for Design of Restoration of Former Tidal Marshland, Guang-dou Hu, M. L. Johnson and R. B. Krone, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

p215-228

Hydrodynamic Simulations in Sediment-Carried Contaminant Modeling for the Buffalo River, New York, Ruo-chuan Gu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1039-1044.

Influence of Flooding Events on Suspended Matter Quality of the Meuse River (The Netherlands), J. J. G. Zwolsman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p3273-3274

Jet Scour around Vertical Pile, C. O. Chin, Y. M. Chiew, S. Y. Lim and F. H. Lim, WW Mar./Apr. 96, p59-67.

A Large-Scale Experiment on Breaching in Sand-Dikes, Paul J. Visser, Arie W. Kraak, Wim T. Bakker, Marion J. Smit, D. Wino Snip, Henk J. Steetzel and Jan van de Graaff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p583-594.

Lift Off and Entrainment of Sediments, J. M. Redondo, M. A. Sánchez and R. Castilla, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

p709-719

Mathematical Modelling of Coastal Morphodynamics Near a Tidal Inlet System, Jan S. Ribberink, Eelco H. Negen and Gerrit Hartsuiker, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p915-

Modeling Contaminated Sediments, Robert K. Simons and Daryl B. Simons, CE Sept. 96, p73-75.

Modeling Non-Uniform-Sediment Fluvial Process by Characteristics Method, Keh-Chia Yeh, Shian-Jang Li and Wen-Lin Chen, HY Feb. 95, p159-170.

Modeling Sediment in Gravel-Bedded Streams Using HEC-6, Robert N. Havis, Carlos V. Alonso and John G. King, HY Oct. 96, p559-564.

Monitoring Results of a Nearshore Disposal Berm, Emre N. Otay, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p547-558

Morphological Impact Assessment of Artificial Islands for the Øresund Link Between Denmark and Sweden, Karsten Mangor, Andrew M. Driscoll, Ida Brøker and Ann Skou, (Coastal Dynamics '95, William R. Dally, ed. and

Skou, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p939-950.
Multi Dimensional Modeling of Water Quality Using the Finite Element Method, Ian P. King and John F. De-George, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p340-354.
Numerical Model for On-Offshore Sediment Transport with

Moving Boundaries, Cheol-Eung Lee, Moo-Hyun Kim and Billy L. Edge, WW Mar/Apr. 96, p84-92.

and Brily L. Edge, W W mar/Apr. 90, po4-92. Numerical Modeling for Sediment-Pass-Through Reservoirs, Howard H. Chang, Larry L. Harrison, Wing Lee and Scott Tu, HY July 96, p381-388.

On the Relationship between Net-Momentum Fluxes and Wall-Normal Velocity Fluctuations, Fabián López and Marcelo García, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p661-664.

A One-Dimensional Cross-Shore Transport Model, J. Ni-cholson and B. A. O'Connor, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p795-805.

Particle Dynamics in the Sound Between Denmark and Sweden, Jens R. Valeur, Morten Pejrup and Anders Jen-sen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p951-962.

Permeable Pile Groins, Arved J. Raudkivi, WW Nov./Dec. 96, p267-272.

50, p201-212.
Formula Flow Instability Theory and Bed Forms, Stephen E. Coleman and John D. Fenton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p442-447.

Prediction of Bed-Load Transport by Desert Flash Floods, Ian Reid, D. Mark Powell and Jonathan B. Laronne, HY

Mar. 96, p170-173.

Mar. 96, pl 70-173.

Prediction of Storm Induced Flows in Great Lakes Estuarine Inlets, James H. Riley and William L. Wood, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p883-595.

Relative Celerities of Mobile Bed Flows with Finite Solids.

Concentrations, Peter H. Morris and David J. Williams,

HY June 96, p311-315.

HY June 90, p311-315.
Reliability of the Navigation Channel of the Upper Mississippi River, Vijay Tulsiani, James H. Lambert, Yacov Y. Haimes and S. K. Nanda, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p142-162. 153

133.
The Role of Macroflocs in Estuarine Sediment Dynamics and its Numerical Modeling, A. Malcherek and W. Zielke, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p695-706.
Scaling-Up of Small-Scale Granular Sediment Transport Laws, J. Raghuraman and P. K. Haff, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p262-264.
Scaur Study for Bridge Design on Temegula Creek How-

Scour Study for Bridge Design on Temecula Creek, Howard H. Chang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1162-1166.

Screening-Level Approach for Estimating Contaminant Export from Tributaries, Mark Velleux, Joseph Gailani and Doug Endicott, EE June 96, p503-514.

Doug Endicott, E.E. June 96, pous-514. Sediment and Contaminant Transport in Green Bay, Zenitha Chroneer, Mary Cardenas, James Lick and Wilbedt Lick. (Extuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p313-324. Sediment Control at Water Intakes, Yalin Wang, A. Jacob Odgaard, Bruce W. Melville and Subhash C. Jain, HY

June 96, p353-356.

Sediment Erosion Rate in the Baltimore Harbor, Jerome P.-Y. Maa, Larry Sanford and Jeffrey P. Haika, (North

American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4383-4388. Sediment Transport Fluxes as Determined from Wave Breaker Induced Suspended Sediment and Flow Fields, G. Smith, G. Mocke and L. Engelbrecht, (Coastal Dy-namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p783-794. Sediment Transport in a Thermally Stratified Bay Kai-Ping Sediment Transport in a Thermally Stratified Rys Kai-Ping

Zeidler, ed., 1999), p783-794.
Sediment Transport in a Thermally Stratified Bay, Kai-Ping Wang, Zenitha Chroneer and Wilbert Lick, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p466-477.
Sediment Transport in the Yellow River, Chih Ted Yang, Albert Molinas and Baosheng Wu, HY May 96, p237-

Sediment Transport Mechanism Over Rippled Sand Beds, S. G. Sajjadi, J. N. Aldridge and D. J. Nicholas, (Estua-rine and Coastal Modeling, Malcolm L. Spaulding and

Ralph T. Cheng, 1996), p669-680.

Sediment Transport Modeling for the Glen-Colusa Irrigation District Fish Screen Modifications, Cassie Klumpp, Mark Sailer, Arthur Glickman and Brent Mefford, (North American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996), p1027-1032. Sedimentation Dynamics of Tidal Inlets, Clifford R. Merz and Panagiotis D. Scarlatos, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p4377-4382.

Selection of Sediment Transport Relations Part III: Numerical Ranking of Sediment Transport Relations, David T. Williams and Pierre Y. Julien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2843-2848.

Selection of Sediment Transport Relations: Part I, Review of Sediment Transport Comparisons, Martin J. Teal and David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2831-2836.

Selection of Sediment Transport Relations: Part II, Ranges of Dimensionless Numbers, David S. Smith and David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2837-2842.

Shear Dispersion in the Benthic Boundary Layer, C. G. Hannah, J. W. Loder and Y. Shen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p454-465.

Simulation of Dune and Nourished Berm Erosion During Storm Surges, Jürgen Newe and Hans-H. Dette, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p850-861.

South Carolina Coastal Erosion Study: Inlet Morpho-dynamics and Sediment Transport, P. A. Work, W. E. dynamics and Sediment Transport, P. A. Work, W. E. Rogers and E. J. Hayter, (*Coastal Dynamics* '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1047-1058

Stochastics of Sediment Transport, Shore Evolution and Their Input, Rafall Ostrowski, Zbigniew Pruszak, Grzegorz Rożyński and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p963-974.

Streambed Armoring, C. O. Chin, B. W. Melville and A. J. Raudkivi, HY Aug. 94, p899-918.

Systematic Analysis of Long-Term Fate of Disposed Dredged Material, Norman W. Scheffner, WW May/June 96, p127-133.

Towards Predicting Sediment Transport in Combined Wave-Current Flow, Zhihong Li and Alan G. Davies, WW July/Aug. 96, p157-164.

Transforms for Runoff and Sediment Transport, Pierre Y. Julien, HE July 96, p114-122.

Tributary No. 9 Restoration, Maryland State Highway Administration, James W. Gracie, Robert Shreeve and Linda Kelbaugh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3539-3544.

Turbulence in Open-Channel Flows by Iehisa Nezu and Hiroji Nakagawa, Ching-Jen Chen, EM June 96, p590.

Use of Channel Forming Discharge Concepts for Flood Control Channel Design, Brad R. Hall and Richard D. Hey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1507-1512.

Validation of a Model for Cross-Shore Sediment Transport, Irene Katopodi and Nikos Kitou, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p806-817.

Velocity and Concentration Profiles in Sheet-Flow Layer of Movable Bed, B. M. Sumer, A. Kozakiewicz, J. Fredsøe and R. Deigaard, HY Oct. 96, p549-558.

Sediment yield

Los Angeles River as a Water Source for a Freshwater Reservoir, Philip O. Lowe and Novin Rashedi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3987-3992.

Modeling of Rattlesnake Creek Watershed Using "Swat" Model, S. R. Ramireddygari, J. K. Koelliker and R. S. Govindaraju, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3241-3246.

Temporal Variation of Sediment Yield, U. C. Kothyari, A. K. Tiwari and Ranvir Singh, HE Oct. 96, p169-176.

Watershed Characteristics and Hydrological Parameters vs. Sediment Yield - Northern Regions of Pakistan, Muhammad Ashiq, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1669-1674.

Are Erosion Control Programs Reducing Sedimentation? D. P. Roseboom, R. Sinclair, Gary Eicken and Pat Woods, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2879-2884.

Channel Restoration Project Along Toby Creek, Dennis N. Jermeland, Daniel Billman and William R. Tingle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3521-3526.

Design of Flocculating Baffled Channel, Prabhata K. Swamee, EE Nov. 96, p1046-1048.

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Impact of Sedimentation Caused by Runoff, Dilip Khatri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p708-713.

Managing Sediments in Reservoirs at FERC, Shou-shan Fan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Restoration of Abandoned Meanders on the Middle Fork Forked Deer River, Tennessee, B. J. Doeing, R. A. Gaines and W. A. Thomas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3375-3380. Sedimentation Dynamics of Tidal Inlets, Clifford R. Merz

and Panagiotis D. Scarlatos, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p4377-4382.

Sedimentation tanks

Design of Class-I Sedimentation Tanks, Prabhata K. Swamee and Aditya Tyagi, EE Jan. 96, p71-73.

Interdisciplinary Research of Mountainous Areas: Past, Present, and Future, Robert D. Jarrett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2445.

Seepage
Analytical Solutions of Seepage Into Ditches From Ponded
Fields, Gautam Barua and K. N. Tiwari, IR Nov/Dec. 95, p396-404.

Consolidation Characteristics of Phosphatic Clays, A. Naser Abu-Hejleh, Dobroslav Znidarcic and Bobby L.

Barnes, GT Apr. 96, p295-301. itch Drainage Theories for Homogeneous Anisotropic Ditch Drainage Soil, Gautam Barua and K. N. Tiwari, IR Sept./Oct. 96,

Dredging in the Southern Sacramento-San Joaquin Delta, Mike Mirmazaheri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2636-2641.

Earth Slide on Geomembrane, A. C. Stamatopoulos and P. C. Kotzias, GT May 96, p408-411.

Embankment Dams in the Piedmont/Blue Ridge Province, Chuck Wilson and Ray Martin, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p27-36.

Optimal Design of Sloping Weir, Prabhata K. Swamee, Govinda C. Mishra and Adel A. S. Salem, IR July/Aug.

96, p248-255.
Pile Wall Cuts Off Seepage (Available only in Geo/ Environmental Special Issue), Donald A. Bruce and Giovanni Dugnani, CE July 96, p8A-11A.

Polyethylene Piping Eases Drought, CE Nov. 96, p94. Reliability Applied to Levee Seepage Analysis, Douglas A. Crum, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p946-949.

Seepage from Surface Canals by Boundary Element Meth-od, Alexander C. Demetracopoulos and Christos Had-jithcodorou, IR Jan./Feb. 96, p40-48. Slope Instability from Ground-Water Seepage, Muniram

Slope Instability from Ground-Water Seepage, Muniram Budhu and Roger Gobin, HY July 96, p415-417.
"Seepage Assessments and Control Associated with Flori-da's Phosphate Industry", Wayne A. Ericson, (Uncer-tainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p866-880.

Seepage control
Pile Wall Cuts Off Seepage (Available only in Geo/
Environmental Special Issue), Donald A. Bruce and
Giovanni Dugnani, CE July 96, p8A-11A.

egmented elements

Ultimate Analysis of Monolithic and Segmental Externally Prestressed Concrete Bridges, Gonzalo Ramos and Angel C. Aparicio, BE Feb. 96, p10-17.

Collapse Analysis of Steel Frame Structures Under Earthquake Loading, Scott C. Martin and Roberto Villaverde, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p370-373.

Computer Model Aids Seismic Improvements, CE Mar. 96, p12.

DSHA Versus PSHA for Critical Structures, Ellis L. Krinitzsky, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p241-242.

Earthquake Resistance Assessment of Some Selected Existing Buildings, M. Nazih Eilouch and Taleb Omran, (Nat-ural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p145-146.

Energy Dissipation Devices in Bridges using Hydraulic Dampers, E. A. Delis, R. B. Malla, M. Madani and K. J. Thompson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

Mohammadi, ed., 1996), p1188-1196.

Ground Motion Estimation and Nonlinear Seismic Analysis, David B. McCallen and Lawrence J. Hutchings, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p416-427.

Incorporation of Fuzzy Damage States in Seismic Fragility Analysis, Jun-Rong Huo and Howard H. M. Hwang, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p318-321.

Neural-Network Modeling of CPT Seismic Liquefaction Data, Anthony T. C. Goh, GT Jan. 96, p70-73.

Probabilistic Seismic Analysis Including Soil-Structure In-teraction, Dan M. Ghiocel, Paul R. Wilson and Gary G. Thomas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p620-623.

Procedure for Time-Domain Seismic Analyses of Concrete Dams, R. Yang, C. S. Tsai and G. C. Lee, EM Feb. 96,

p116-122.

Quantitative Approach to Rapid Seismic Evaluation of Slab-on-Girder Steel Highway Bridges, Murat Dicleli and Michel Bruneau, ST Oct. 96, p1160-1168.

Response of Building Systems with Rocking Piers and Flexible Diaphragms, Andrew C. Costley and Daniel P. Abrams, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p135-140.

Seattle's Kingdome Receives Rigorous Seismic Study, CE Apr. 96, p12.

Seismic Analysis and Model Studies of Bridge Abutments, K. L. Fishman and R. Richards, Jr., (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p77-99.

Seismic Analysis and Retrofit Design of the Anheuser Busch Bevo Building in St. Louis, Missouri, Nathan C. Gould and Christopher I. Deneff, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p381-388.

Seismic Analysis of Concrete Towers of the San Diego-Coronado Bridge and Evaluation of a High Performance Concrete Retrofit, Robert A. Dameron and Daniel R. Parket, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p530-541.

Seismic Analysis, Design and Evaluation of Hospitals— Vulnerability Studies by Energy Methods, Omar D. Car-dona and Jorge E. Hurtado, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p319-320.

Seismic Base Isolation Study for a Kentucky Building, John P. Miller and Nathan C. Gould, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p389-

Seismic Evaluation and Retrofitting of U.S. Long-Span Suspension Bridges--Issues and Solutions, Subcommittee Suspension Bridges—issues and Solutions, Succommunity on Scismic Performance of Bridges, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p56-90.

Seismic Isolation of Bridges in the Midwest, Mark R. Capron, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p48-55.

Seismic Liquefaction Potential Assessed by Neural Net-works, Anthony T. C. Goh, GT Sept. 94, p1467-1480.

Seismic Rehabilitation of a Non-Ductile Concrete Frame Building Using Shearwalls, Paul A. Murray and James H. Parker, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p373-380.

Simplified Response-Spectrum Seismic Analysis of Nonlin-ear Structures, Roberto Villaverde, EM Mar. 96, p282-

Two Recent Russian Far East Destructive Earthquakes. Case Studies and Post-Disaster Analysis, J. M. Eisenberg and A. M. Melentyev, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

"New" Method for Seismic Analysis is the Norm, Brian Grant, P.E., CE Sept. 96, p35-36.

mic design

Analysis and Design of Retaining Structures Against Earthquakes, Geotechnical Special Publication No. 60, Shamsher Prakash, ed., 1996, 0-7844-0206-X, 144pp.

Analysis Requirements for Performance-Based Design of Beam-Column Joints, John F. Bonacci, (Worldwide Advances in Structural Concrete and Masonry, Schultz, ed. and S. L. McCabe, ed., 1996), p257-265

Approach Philosophy and Risk Considerations for Seismic Design and Evaluation of Railroad Bridges, Kenneth L. Wammel, James R. Beran and Zolan Prucz, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p167-

ASTM A913/A913M: The Perfect Steel for Seismic Design, J. C. Gérardy, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p558-565.

Author Clarifies His Convictions, Oscar De Pineres, P.E., CE July 96, p31.

Basic Concepts and Applications of Structural Control, T. T. Soong, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p16-29.

Behavior of High-Strength Concrete Beam-Column Joints, Michael E. Kreger and Elias I. Saqan, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p420-430.

Behavior of Reinforced Concrete Buildings: Deformations & Deformation Compatibility, John W. Wallace, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p245-256.

Canal Crossing of High-Pressure Pipelines, Hiroya Kishi-no, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p434-440.

Capacity and Stiffness of Bridge Abutments During Earth-quakes, Rakesh K. Goel, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p239-240.

A Comparison of Seismic Design Using ASD and LRFD, Jeffrey R. Soulages, Jon A. Heintz and James O. Malley, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed.,

1996), p542-549.

A Comprehensive Relational Database of Structural Damp-ing Data, Sandeep Khare and Nicholas P. Jones, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1236-1243

Conceptual Seismic Design Methods for Railroad Bridges, Zolan Prucz, Kenneth E. Bruestle and Vinaya Sharma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p191-198.

Considering Uncertainty in Earthquake Response Spectra, Sara Wadia-Fascetti and Burcu Vuran Gunes, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p211-212.

Cost-Performance Criteria for Seismic Retrofitting, Alberto L. Guzmán, Ali Saffar and Leandro Rodríguez Agrait, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p902-905

A Critical Evaluation of Current Approaches to Earthquake Resistant Design, Christopher Rojahn and Andrew Whit-taker, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p331-332.

Design and Implementation of Nonlinear Control Strate-gies, T. T. Soong and Z. Wu, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1147-1154.

Design of Seismic Resistant Concrete Columns for Confinement, Murat Saatcioglu, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p233-244.

Earthquake Destructiveness Potential Factor and Permanent Displacements of Gravity Retaining Walls, Teresa Crespellani, Claudia Madiai and Giovanni Vannucchi, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p124-133.

Economic Evaluation of Design Codes—Case of Seismic Design, A. Warszawski, J. Gluck and D. Segal, ST Dec.

96, p1400-1408.

Editor's Note, David Darwin, ST May 96, p469. Editor's Note, David Darwin, ST Dec. 96, p1393.

An Electropheological Damper with Annular Duct, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1197-1204.

An Emerging Technology: Damping Design for Wind and Seismic Events, Robert J. McNamara. (Building an In-ternational Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1252-1260.

Experimental Results for Seismic Resistant Steel Moment Frame Connections, Charles W. Roeder and Douglas A.

Foutch, ST June 96, p581-588.

Fault Crossing Design and Seismic Considerations for the South Bay Ocean Outfall, Jon Y. Kaneshiro, Gregory E. Korbin and James D. Hart, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p477-486.

Ground Motion Estimation and Nonlinear Seismic Analysis, David B. McCallen and Lawrence J. Hutchings, (Analysis and Computation, Franklin Y. Cheng, ed.,

1996), p416-427.

Guidelines and Commentary for the Seismic Rehabilitation of Buildings (ATC - 33), L. D. Reaveley, D. Shapiro, J. Moehle, T. Atkinson, C. Rojahn and W. Holmes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1123-1130.

In-Situ Dynamic Response of Cantilever Walls, Sreenivas Alampalli and Ahmed-W. Elgamal, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p57-76.

Inelastic Behavior of Asymmetric Multistory Buildings, Juan C. De la Llera and Anil K. Chopra, ST June 96, p597-606.

Joint Effort by ASCE and FEMA to Develop Flood Hazard Mitigation Standards, Clifford E. Oliver and Harry B. Thomas, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p337-338.

Largest Seismic Base-Isolated Hospital Tops Out, CE June

Major New Seismic Provisions Proposed for the 1997 UBC, Robert Bachman, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p333-334.

Mexico Earthquake Causes Casualties and Damage, CE Jan. 96, p24.

NEHRP Provisions for 1994 for Nonstructural Components, Richard M. Drake and Robert E. Bachman, AE Mar. 96, p26-31.

New Hybrid Seismic System Set for Seattle, CE Oct. 96, p20,22

Nonlinear Response of Bridges under Multisupport Excita-tion, Giorgio Monti, Camillo Nuti and Paolo E. Pinto, ST Oct. 96, pl 147-1159.

On Target: The Arrowhead East and West Tunnels, Jim Gallanes, Tobin Tellers and Victor Romero, CE Dec. 96, p50-53.

Optimum Reliability-Based Design Earthquake Load, Jun Kanda and Khaled A. Ahmed, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p194-197.

Passive Structural Control with Sequential Coupling, Paul

Weidlinger, ST Sept. 96, p1072-1080.

Performance Evaluation of Dual-Level Versus Current Design Using 1994 Northridge Earthquake Records, K. J. Elwood and Y. K. Wen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p796-799

Performance of Bridges during the Hanshin-Awaji Earth-quake, Eiichi Watanabe and Kunitomo Sugiura, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p926-933.

Performance-Based Seismic Design of Building Structures, Kevin R. Collins, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p792-795.

Probabilistic Diagnosis of Seismic Design Load—To Har-monize Seismic Design Codes of Various Engineering Structures, Tsuyoshi Takada, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p190-193.

PsD Test on Four-Story R/C Building Designed According to Eurocodes, P. Negro, A. V. Pinto, G. Verzeletti and G. E. Magonette, ST Dec. 96, p1409-1417.

Quake Proofing a Palace, John Casey, CE Aug. 96, p32-35. Quality Control in Seismic Design and Construction, G. G.

Schierle, CF Aug. 96, p90-95.

Rehabilitation of Masonry Buildings per the ATC-33 Guidelines, Daniel P. Abrams, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1131-1138.

Retrofitting a Nuclear Lab, CE Dec. 96, p12,13.

A Review (and Comparison) of DSHA and PSHA, Russell
A. Green and William J. Hall, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p125-126.

Right Questions, Wrong Answers, Eugene H. Harlow, CE June 96, p26-27.

Seismic Analysis, Design and Evaluation of Hospitals Vulnerability Studies by Energy Methods, Omar D. Cardona and Jorge E. Hurtado, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p319-320. Seismic Assessment for Offshore Pipelines, R. Bruschi, O. T. Gudmestad, F. Blaker and F. Nadim, IS Sept. 96,

Seismic Design Criteria for Navy Wharves, J. M. Ferritto and C. S. Putcha, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p353-354

Seismic Design Doubles Lateral Resistance (Available only in Structures special issue), James O. Malley, CE Sept.

96, p14A-16A.

Seismic Design Issues of Water Pipelines at the Hayward Fault Crossing, Luke Cheng and Lota D. Nuguid, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996),

Seismic Education Needs of the Building Trades and Code Enforcement Personnel, Cynthia Hoover, Marjorie Greene and James Russell, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p101-102.

Seismic Hazard Assessment in Southeastern U.S. Paul C. Rizzo and Vaidya E. Bazan, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p127-128.

Seismic Isolation of Industrial Tanks, Victor A. Zayas and Stanley S. Low, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1205-1212.

Seismic Performance of Confined Sill Plate Connections, Joseph M. Bracci, Rebecca F. Stromatt and David G. Pollock, ST Nov. 96, p1357-1363.

Seismic Rehabilitation of a Non-Ductile Concrete Frame Seismic Rehabilitation of a Non-Ductile Concrete Frame Building Using Shearwalls, Paul A. Murray and James H. Parker, (Building an International Community of Structural Engineers, S. K. Chosh, ed. and Jamshid Mohammadi, ed., 1996), p373-380. Seismic Solutions for Steel Frame Buildings, Virginia Fair-

seasmic Strengthening of Low Rise Buildings, Virginia Pair-weather, CE Mar. 96, p40-43.

Seismic Strengthening of Low Rise Buildings, Theodore A. Pruess and John C. Theiss, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p397-404.

Seismic Torsional Provisions: Influence on Element Energy Dissipation, Adrian M. Chandler, Joseph C. Correnza and Graham L. Hutchinson, ST May 96, p494-500.

Sensitivity Analysis of the Seismic Capacity for a RC Silo Due to Variance of Its Material Properties, Takeshi Ki-tahara and Hitoshi Seya, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p530-533.

Spotlight on Steel Moment Frames, W. F. Chen and E. Yamaguchi, CE Mar. 96, p44-46.

Structural Control with Electrorheological Dampers: Viscoplastic Behavior and Anticipation, Scott A. Burton and Nicos Makris, (Building on International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1261-1268.

Tall Buildings Triumph, CE June 96, p21-22

Ultimate Behavior of Tie Plates at High-Speed Tension, Makoto Obata, Yoshiaki Goto, Sei Matsuura and Hideyuki Fujiwara, ST Apr. 96, p416-422.

Update of Building Code Requirements for Masonry, 1992 to 1995 Editions, J. Gregg Borchelt, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p334-344. Variability in Site-Specific Seismic Ground-Motion Design Predictions, C. J. Roblee, W. J. Silva, G. R. Toro and N.

Abrahamson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1113-1133.

Vibration Control of Structures Utilizing Architectural Walls, H. Allison Smith, Luciana R. Barroso and Vicki L. Vance, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p495-498. Visualizing Global-Force Distributions in Finite-Element

Models, Kirk Martini, AE June 96, p71-77.

Yield Acceleration of Lined Landfills, Scott E. Shewbridge, GT Feb. 96, p156-158.

Seismic effects

Beware of Flying Cranes - and Disconnected Codes, M. Russell Nester and Allan R. Porush, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p219-220.

Changes in Water Table Elevation at Yucca Mountain in Response to Seismic Events, Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p102-104.

Common and Variable Characteristics in Spatially Recorded Seismic Ground Motions, Ouqi Zhang and Aspasia Zerva, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p628-631.

Comparison of LQR and H., Algorithms for Vibration Con-trol of Structures in Seismic Zones, H. Allison Smith and troi of Structures in Seismic Zones, H. Allison Smith and J. Geoffrey Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1164-1171.

Computer Analysis, Vincent Thomas Bridge, Raymond W. Wolfe and Hany J. Farran, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p311-312.

Earthouake-Induced Ground Settlements of Bridge Abut-

Earthquake-Induced Ground Settlements of Bridge Abut-ment Fills, Raj V. Siddharthan and Mahmoud El-Gamal, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p100-123. Editor's Note, David Darwin, ST Oct. 96, p1127.

Effects of Earthquakes on Highway Bridge Abutments, M. Zoghi, J. M. Hastings and D. W. Fenza, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p193-194.

Effects of Pier and Foundation Stiffness for Bridges Sub jected to Nonstationary Seismic Input, Gongkang Fu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p708-711.

Energy-Based Linear Damage Model for High-Intensity Seismic Loading, Y. H. Chai, K. M. Romstad and S. M. Bird, ST May 95, p857-864.

Experimental Evaluation of Masonry-Infilled RC Frames Armin B. Mehrabi, P. Benson Shing, Michael P. Schuller and James L. Noland, ST Mar. 96, p228-237.

Gain-Scheduled Adaptive Control of a Hybrid Structure, Moises A. Abraham, James R. Morgan and Alexander G. Parlos, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p260-261.

Hysteretic MDOF Model to Quantify Damage for RC Shear Frames Subject to Earthquakes, H. Ugur Köylüoğlu, Søren R. K. Nielsen and Ahmet Ş. Çakmak, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Improving the Effectiveness of Post Earthquake Investiga-tions, Susan K. Tubbesing, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p327-328.

Influence of Spatial Variability of Soil Properties on Seismically Induced Soil Liquefaction, Radu Popescu, Jean H. Prevost and George Deodatis, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1098-1112.

Magnitude Scaling Factors for Soil Liquefaction Evalua-tions, Ignacio Arango, GT Nov. 96, p929-936.

Method for Probabilistic Evaluation of Seismic Structural Damage, Ajay Singhal and Anne S. Kiremidjian, ST Dec. 96, p1459-1467.

Numerical Analyses of Reinforced Underground Openings Subjected to Seismic Loadings, Fei Duan and Saeed Bonabian, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p412-414.

On Seismic Displacements of Rigid Retaining Walls, Yingwei Wu and Shamsher Prakash, (Analysis and Design of Retaining Structures Against Earthquakes,

Shamsher Prakash, ed., 1996), p21-37.

Performance of Single Family House Foundations During Northridge Earthquake, Robert W. Day, SC May 96,

Preparing for the Big One - Risk Assessment and Mitiga-tion of a Major Earthquake, David L. Pratt. (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p207-208.

Rotation of Large Gravity Walls on Rigid Foundations under Seismic Loading, R. S. Steedman and X. Zeng, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p38-56.

Seismic Bearing Capacity of Foundation on Cohesionless Soil, L. Dormieux and A. Pecker, GT Mar. 95, p300-303.

Seismic Education Needs of the Building Trades and Code Enforcement Personnel, Cynthia Hoover, Marjorie Greene and James Russell, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p101-102.

Seismic Isolation of Bridges in New York City, Jagtar S. Khinda and Feng-Bao Lin, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p24-32.

Seismic Isolation of Bridges Using Elastomeric Isolation eismic Isolation of Bridges Using Education Isolation Systems, Ronald L. Mayes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p33-40.

Seismic Isolation of Bridges Using Sliding Isolation Sys-tems, Paul F. Bradford and Ronald J. Watson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p41-47.

Seismic Isolation Retrofit of Large Historic Building, Anoop S. Mokha, Navinchandra Amin, Michael C. Con-stantinou and Victor Zayas, ST Mar. 96, p298-308.

Seismic Microzonation and Development of an Earthquake Damage Scenario for Istanbul, Turkey, Mustafa Erdik and Jennifer N. Swift-Avci, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p341-342.

Seismic Performance of Cladding: Responsibility Revisit-ed, Julie Mark Cohen, CF Nov. 95, p254-270.

Seismic Pressures Against Rigid Walls, Guoxi Wu and W.
D. Liam Finn, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p1-18.

Seismic Retrofitting of Bridge Pier Columns, William L. Gamble and Neil M. Hawkins, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p16-23.

simic Risk Assessment for Environmentally Sensitive Facilities in Northern Maine, Elizabeth A. Champeon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1052-1067.

Seismic Vulnerability and Repair Cost of the University of Memphis Buildings, Howard H. M. Hwang, Min Xu and Jun-Rong Huo, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p143-144. Shear-wall Retrofit, Mark Jokerst, CE Feb. 96, p36-39.

Simulation of Multi-Dimensional, Multi-Variate, Non-Gaussian, Homogeneous Stochastic Fields with Applications to Soil Liquefaction, Radu Popescu, George Deo-datis and Jean H. Prevost, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p808-811.

A Simulator to Study the Effects of Earthquakes on Seg-mental Paving, John Clifford, Rob Avenall and Don Brown, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p1-2

Synthesis of Correlated and Vector-Valued Time Series Based on Random Vibration for Nuclear Piping, Yong Zhao and D. A. Gasparini, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p748-751.

Threshold Accelerations for Rotation or Sliding of Bridge Abutments, Rowland Richards, Jr., Kenneth L. Fishman and Randall C. Divito, GT Sept. 96, p752-759.

Variability in Site-Specific Seismic Ground-Motion Design Predictions, C. J. Roblee, W. J. Silva, G. R. Toro and N. Abrahamson, Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1113-1133.

Vertical Seismic Forces on Elevated Concrete Slabs, M. N. Palaskas, Limin He and Michael Chegini, SC Aug. 96,

p88-90.

Applications of Space Technology to Aid in Identification of Seismic Hazards, Ronald Blom, Robert Crippen, Andrea Donnellan, Gilles Peltzer and Paul Rosen, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p305-306.

Approach Philosophy and Risk Considerations for Seismic Design and Evaluation of Railroad Bridges, Kenneth L. Wammel, James R. Beran and Zolan Prucz, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p167-

174

Assessing the Local Geologic Component of the Earth-quake Hazard in the Portland Metropolitan Area, Mat-thew A. Mabey and Ian P. Madin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p177-178.

Cooperative Efforts for Earthquake Risk Management in Developing Countries, Geoffrey Hoefer, Brian Tucker, Jeannette Fernández, Hugo Yepes, Jean-Luc Chatelain, Fumio Kaneko and Stephanie A. King, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p283-284.

Decision Process for Mitigating Seismically Vulnerable Water Facilities, Walter J. Bishop and Ernesto A. Avila, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p209-210.

Development of a Multivariate Vulnerability Indicator, Wilbert O. Thomas, Jr., Betty Bonn and Albert V. Romano, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p303-304. Development of Caltrans Guidelines for Natural Gas Pipe-

lines on Highway Bridges, Anthony Gugino, Chih-Hung Lee, Richard Gailing, Philip Constantine and David Reistetter, (Pipeline Crossings 1996, Lawrence F. Ca-talano, ed., 1996), p245-253. Development of the Deterministic Caltrans Seismic Hazard

Map of California, Lalliana Mualchin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p297-298.

Earthquake Hazard Assessment of Iran, Behrooz Tavakoli and Mohsen Ghafory Ashtiany, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p301-302.

Earthquake Hazard Assessment Through Geographic Information Systems, Stephanie A. King, Anne S. Kiremidjian and Kincho H. Law, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p123-124.

Earthquake Hazard Mitigation in Iran (Its Progress and Prospect), Mohsen Ghafory-Ashtiany, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p27-28.

Effects of Earthquakes on Highway Bridge Abutments, M. Zoghi, J. M. Hastings and D. W. Fenza, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p193-194.

Experimental Investigation of Cumulative Seismic Damage in Concrete Bridge Piers, Sashi K. Kunnath, Ashraf El-Bahy, William C. Stone and Andrew W. Taylor, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p381-382.

The Federal Government's Existing Building Inventory, Ann Bieniawski, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p161-

Furthering Local Knowledge of Earthquake Related Disasters, Experiences Learned from the Kobe Earthquake of January 17, 1995, David B. Swanson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p90-91.

Fuzziness of the Modified Mercalli Intensity as a Measure of Damage, Nozar G. Kishi and Timothy H-J. Yao, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p247-248.

Hazard Assessment of Extreme Earthquakes and Floods Using the Theory of Outstanding Values, Reza Noubary, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p66-67.

Lessons of the Recent Earthquakes in Sakhalin Region, Russia, Mark Klyachko, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p5-6.

Magnitude-Distance Contours for Probabilistic Seismic Hazard Analysis, P. Bazzurro, S. R. Winterstein, T. C. Ude and C. A. Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p202-205.

The New Madrid Earthquake: Preparing Nurses, Stephanie K. VanArsdale and Roy B. VanArsdale, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p97-98.

New USGS Seismic Hazard Maps for the United States, A. Frankel, C. Mueller, D. Perkins, T. Barnhard, E. Leyendecker, E. Safak, S. Hanson, N. Dickman and M. Hop-

decker, E. Safak, S. Hanson, N. Dickman and M. Hopper, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p173-174.
Probabilistic Diagnosis of Seismic Design Load—To Harmonize Seismic Design Codes of Various Engineering Structures, Tsuyoshi Takada, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p190-193.
Probabilistic Seismic Analysis Including Soil-Structure In.

Probabilistic Seismic Analysis Including Soil-Structure Interaction, Dan M. Ghiocel, Paul R. Wilson and Gary G. Thomas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p620-623.

Probabilistic Seismic Hazard and Sensitivity Analysis: A Case Study from Southern California, Mehrdad Mahdyiar, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p299-300.

A Program for the Reduction of Seismic Hazards Posed by Welded Steel Moment Frame Structures, Stephen A. Mahin, Ronald O. Hamburger and James O. Malley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p157-158.

A Review (and Comparison) of DSHA and PSHA, Russell A. Green and William J. Hall, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p125-126.

Screening Hospitals and Fire Stations for Seismic Potentials in City of Tehran, F. Nateghi-A, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p349-350.

Seismic Assessment for Offshore Pipelines, R. Bruschi, O. T. Gudmestad, F. Blaker and F. Nadim, IS Sept. 96, p145-151.

Seismic Evaluation and Retrofitting of U.S. Long-Span Suspension Bridges--Issues and Solutions, Subcommittee on Seismic Performance of Bridges, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p56-90.

Seismic Hazard Analysis Without the Gutenberg-Richter Relationship, David Speidel, Peter Mattson and Bon Sy, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p129-130.

Seismic Hazard Assessment in Southeastern U.S. Paul C. Rizzo and Vaidya E. Bazan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p127-128.

Seismic Hazard Assessment of the NPPS in the ČR, Dana Procházková, (Natural Disaster Reduction, George Housner, ed. and Riley M. Chung, ed., 1997), p179-180.

Seismic Reflection Evidence Against a Shallow Detachment Beneath Yucca Mountain, Nevada, Thomas M. Brocher and W. Clay Hunter, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p148-150.

Seismic Rehabilitation of Earth Dams, W. F. Marcuson, III, P. F. Hadala and R. H. Ledbetter, GT Jan. 96, p7-20.

Seismic Risk Analysis for Vrancea Zone, Felicia Olariu and Ioan Olariu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p21-22.

Seismic Risk Assessment for Environmentally Sensitive Facilities in Northern Maine, Elizabeth A. Champeon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1052-1067

Seismic Sleuths: A Grades 7-12 Materials Development and Teacher Enhancement Project, M. Frank Watt Ireton, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p33-34.

Seismic Vulnerability and Repair Cost of the University of Memphis Buildings, Howard H. M. Hwang, Min Xu and Jun-Rong Huo, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p143-144.

Seismotectonic and Seismic Hazard in Southern Bulgaria. Tosho Stoyanov, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p175-

Urban Disaster Vulnerability Assessment & Lessening Is a Key for Safe Development, Mark Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p11-12.

Vulnerability Assessment within BMS, Edgar P. Small and Steven B. Chase, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p446-449.

Vulnerability of Pacific Northwest Port-Related Lifeline Structures Based on Observations from the Kobe Earth-quake of January 17, 1995, David B. Swanson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p9-10.

Seismic investigations

Seismic investigations Effects of Soil Nonhomogeneity on SASW Testing, Nenad Gucunski, Vahid Ganji and M. H. Maher, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1083-1097.

Giant, Man-Made Eel Inspects City's Sewers, CE Apr. 96.

Seismic Signatures of Patchy Saturation, Jack Dvorkin and Amos Nur, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p645-648.

System Identification Study of a 1:10 Scale Steel Model using Earthquake Simulator, Satish Nagarajaiah and Xiaojiang Ma, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p764-767.

Seismic properties

Influence of Support Stiffness for Cantilever Beams Sub-jected to Modulated Filtered White Noise, Gongkang Fu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p689-692

celerations and Time Histories for Earthquakes Affecting Kentucky's Bridges, I. E. Harik, R. Street, Z. Wang and D. L. Allen, (Analysis and Computation, Accelerations

Franklin Y. Cheng, ed., 1996), p464-471.

Analysis of the Nonlinear Hysteretic Response of an RC Building, Sarwidi and Apostolos S. Papageorgiou, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1099-1106.

Analytical Approaches for the Design of Base-Isolated Structures, Vahid Sattary and Mason T. Walters, (Analysis and Computation, Franklin Y. Cheng, ed., 1996),

p224-235.

Approach Philosophy and Risk Considerations for Seismic Design and Evaluation of Railroad Bridges, Kenneth L. Wammel, James R. Beran and Zolan Prucz, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p167-

An Approximate Method for Assessment of Seismic Damage on Buildings, Mario Paz and Jeffrey S. Janover, (Analysis and Computation, Franklin Y. Cheng, ed.,

1996), p428-434.

Behavior of Beam-Column Connections Under Axial Col-umn Tension, El Mostafa M. Higazy, Amr S. Elnashai and Mihran S. Agbabian, ST May 96, p501-511.

Composite Materials Reinforcement of Existing Masonry Walls, J. Bradley Christensen, Jeremy Gilstrap and Charles W. Dolan, AE June 96, p63-70.

Damage Evaluation in Steel Box Columns by Pseudodyic Tests, Tsutomu Usami and Satish Kumar, ST June 96, p635-642.

Dynamic Modeling and Response of Soil-Wall Systems, Anestis S. Veletsos and Adel H. Younan, GT Dec. 94, p2155-2179.

Dynamic Response of Flexible Retaining Walls, A. H. Younan and A. S. Veletsos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p310-313.

Earthquake Response of Gravity Dams Including Effects of Porous Sediments, José Domínguez and Rafael Gallego, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Earthquake Response of Structure-Elevator System, F. Se-gal, A. Rutenberg and R. Levy, ST June 96, p607-616.

Earthquake Response of Structures by Structural Mixture Theory, Mohammed S. Al-Ansari, O. M. Kirkely and Gregory Gillette, ST Oct. 96, p1198-1207. Editor's Note, David Darwin, ST June 96, p579-580.

An Electrorheological Damper with Annular Duct, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1197-1204.

An Emerging Technology: Damping Design for Wind and Seismic Events, Robert J. McNamara, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1252-1260.

Establishing R, and C_d Factors for Confined Masonry Buildings, María O. Moroni, Maximiliano Astroza, Juan Gómez and Rafael Guzmán, ST Oct. 96, p1208-1215. Evaluation and Upgrade of Major Transmission Lines Crossing Active Faults, Robert W. Lau, David D. Lee, David L. Pratt and Marilyn L. Miller, (Pipeline Cross-ings 1906 Lawrence F. Catalano ed. 1906; ed. 425 ings 1996, Lawrence F. Catalano, ed., 1996), p418-425.

Experimental Study of Seismic Response of Structures with Semi-Active Damping Control Systems, M. D. Symans and M. C. Constantinou, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p350-360.

Forced Vibration of Full-Scale Wall-Backfill System, Ahmed-W. Elgamal, Sreenivas Alampalli and Paul Van

med-W. Elgamal, Sreenivas Alampalli and Paul Van Laak, GT Oct. 96, p849-858. Forces in Pile Foundations under Seismic Loading, Amir M. Kaynia and Saeed Mahzooni, EM Jan. 96, p46-53. Generation of Ground Motion Time Histories as Non-Stationary Vector Processes: Response Spectrum Com-patible Seismograms, George Deodatis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, et and Micea D. Grigoriu ed. 1996), p616-619.

ed. and Mircea D. Grigoriu, ed., 1996), p616-619. Guidelines and Benchmarks for Analysis of Isolated Build-

ings, Harry W. Shenton, III and Andrew W. Taylor, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p236-245.

H. Active Seismic Response Control Using Static Output Feedback, I. E. Köse, W. E. Schmitendorf, F. Jabbari and J. N. Yang, EM July 96, p651-659.
Human Biomechanics Inform Seismic Protection, ET

Apr./May 96, p10-11.

Hybrid Control of Seismic Response Using Nonlinear Output Feedback, A. K. Agrawal and J. N. Yang, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p339-

Hyogo-Ken Nanbu Earthquake of January 17, 1995: A Post-Earthquake Reconnaissance of Port Facilities, Stephen E. Dickenson, Vice-Chairman, Committee on Ports and Harbors Lifelines of the Technical Council on Lifeline Earthquake Engineering of ASCE, (Stuart D. Werner, chmn.), 1996, 0-7844-0161-6, 111pp.

Inelastic Behavior of Steel Frames with Added Viscoelastic

Dampers, K. C. Chang, S. J. Chen and M. L. Lai, ST

Oct. 96, p1178-1186.

ference of Dynamic Shear Modulus from Lotung Downhole Data, C.-Y. Chang, Chin Man Mok and H.-T. Tang, GT Aug. 96, p657-665. Inference

Inverse Damping Perturbation for Stiffness Design of Shear Buildings, Tsuneyoshi Nakamura and Masaaki Tsuji, ST June 96, p617-625. A Knowledge Based System for the Evaluation of Earth-

quake Damaged Structures, John A. Kuprenas and John Manios, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p742-749.

Liquefaction of Reclaimed Island in Kobe, Japan, Ahmed-W. Elgamal, Mourad Zeghal and Ender Parra, GT Jan. 96, p39-49.

p39-49.
 A New Semi-Active Control Device for Seismic Response Reduction, S. J. Dyke, B. F. Spencer, Jr., M. K. Sain and J. D. Carlson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p886-889.
 Nonlinear Pounding of Bridges in Earthquakes, Xian Ma and Chris P. Pantelides, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1180-1187.
 Optimal Polynomial Control of Seismically Excited Linear Structures, Anil K. Agrawal and Jann N. Yang, EM Aug. 96, p753-761.

96, p753-761.

Parameters in Bridge Restrainer Design for Seismic Re-trofit, M. Saiidi, E. Maragakis and S. Feng, ST Jan. 96,

Permanent Deformation on Preexisting Sliding Surfaces in Dams, George Gazetas and Nasim Uddin, GT Nov. 94.

Prediction of Observed Response of Base-Isolated Struc-ture, Nicos Makris and Himanshu S. Deoskar, ST May

Railroad Bridge Behavior during Past Earthquakes, William G. Byers, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p175-182.

Reduced-Order Sand Model for Ground Response Analysis, X. S. Li, EM Sept. 96, p872-881.

Research on Semiactive Dampers Makes Headway, Monica Maldonado, ET Aug./Sept. 96, p6-7. Response of Base Isolated USC Hospital Building in the 1994 Northridge Earthquake, Satish Nagarajatah and Xiaohong Sun, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p212-223.

Response of Pile Embedded in Stochastic Ground Media. Makoto Suzuki and Tsuyoshi Takada, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed.

and Mircea D. Grigoriu, ed., 1996), p612-615.
Seismic Behavior of Masonry Walls: Experimental Simulation, Miha Tomaževič, Marjana Lutman and Ljubo Pet-

ković, ST Sept. 96, p1040-1047. Seismic Behavior of Masonry Walls: Modeling of Hysteret-ic Rules, Miha Tomaževič and Marjana Lutman, ST

Sept. 96, p1048-1054.

Seismic Behavior of Older Steel Structures, Charles W. Roeder, Brett Knechtel, Eric Thomas, Anne Vaneaton, Roberto T. Leon and F. Robert Preece, ST Apr. 96, p365-373.

Seismic Behavior of Precast Parking Structure Diaphragms, R. B. Fleischman, R. Sause, A. B. Rhodes and S. Pessiki, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1139-1146.

Seismic Behavior of Structures with Flexible Diaphragms, Arturo Tena-Colunga and Daniel P. Abrams, ST Apr. 96,

Seismic Motion Incoherency Effects on Dynamic Response, Dan M. Ghiocel, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p624-627.

Seismic Performance of Architectural Glazing Systems, Richard A. Behr, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p115-

116.

Seismic Performance of Confined Sill Plate Connections, Joseph M. Bracci, Rebecca F. Stromatt and David G. Pollock, ST Nov. 96, p1357-1363.

FOHOCK, S1 NOV. 96, p1.37/-1363.
Seismic Response Assessment of Active-Controlled Multi-Story Buildings with Soil-Foundation Influence, F. Y. Cheng, S. Suthiwong and P. Tian, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1155-1163.
Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST Sent 94, p2583-2601.

Sept. 94, p2583-2601.

Seismic Response of Flexibly Supported Coupled Shear Walls, O. Chaallal and N. Ghlamallah, ST Oct. 96, p1187-1197.

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Seismic Stability Procedures for Solid-Waste Landfills, Jonathan D. Bray, Anthony J. Augello, Gerald A. Leo-nards, Pedro C. Repetto and R. John Byrne, GT Feb. 95, p139-151.

Simulating Seismic Response Behavior of Telecommunica-tions Equipment, Ronald Ziemian, Derek Mostoller and Kenneth Philogene, ST Oct. 96, p1247-1249.

Softening-Induced Dynamic Localization Instability: Seismic Damage in Frames, Zdeněk P. Bažant and Milan Jirásek, EM Dec. 96, p1149-1158.

Spatial Seismic Coefficients, Some Sensitivity Results, Zbigniew Zembaty, EM Apr. 96, p379-382.

Statistical Seismic Responses of Structures using Response Spectrum Matching Technique, Ruichong Zhang and Masanobu Shinozuka, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p527-530.

Steel Moment Frames with Welded Connections, Helmut

Steel Moment Frames with Welded Connections, Helmut Krawinkler, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1115-1122.Structural Control: Basic Concepts and Applications, Y. Fujino, T. T. Soong and B. F. Spencer, Jr., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1272-1287. p1277-1287.

System Identification Using Earthquake Acceleration Records, A.-W. Eigamal, M. Zeghal, H. T. Tang and J. C. Stepp, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p335-338.

Seismic simulators

U.S. Firm Builds Shake Table for Japan, John Casey, ET Aug./Sept. 96, p1,8.

Seismic stability

Analysis and Design of ER Damper for Seismic Protection of Structures, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, EM Oct. 96, p1003-1011.

Building Seismic Safety Council Project '97, James E. Beavers and R. Joe Hunt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p335-336.

A Cost Effective Rehab Scheme for URM Structures, M. Ala Saadeghvaziri, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p262-263

Drilled Shaft Load Testing Los Angeles Coliseum, Paul R. Schade and Barry J. Meyer. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p574-581.

The FEMA Program of Seismic Safety of Buildings, Ugo Morelli, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p159-160.

Nationally Applicable Guidelines for the Seismic Rehabiliattonally Applicable Guidelines for the Seismic Rehabili-tation of Existing Buildings, Christopher Rojahn, Daniel Shapiro, Lawrence D. Reaveley, William T. Holmes, Jack P. Moehle, James R. Smith and Ugo Morelli, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p276-277.

A New Semi-Active Control Device for Seismic Response Reduction, S. J. Dyke, B. F. Spencer, Jr., M. K. Sain and J. D. Carlson, (Engineering Mechanics, Y. K. Lin and T.

C. Su, 1996), p886-889.

Passive Control Systems for Mitigation of Near-Field Earthquake Ground Motions, Peter W. Clark and James M. Kelly, (Natural Disaster Reduction, George Housner, ed. and Riley M. Chung, ed., 1997), p217-218.

Research on Semiactive Dampers Makes Headway, Monica Maldonado, ET Aug./Sept. 96, p6-7.

Sensitivity Analysis of the Seismic Capacity for a RC Silo Due to Variance of Its Material Properties, Takeshi Ki-tahara and Hitoshi Seya, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p530-533

Tobin Preaches 'Covenant' for Seismic Safety, NE July 96, p15.

Urban Disaster Vulnerability Assessment & Lessening Is a Key for Safe Development, Mark Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p11-12.

Vibration Control of Cable-Stayed Bridges: Analytical Development, Armin G. Schemmann and H. Allison Smith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p898-901.

Vibration Control of Cable-Stayed Bridges: Control System Development and Experimental Results, Rahmat A. Shoureshi and Mark J. Bell, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p902-905.

Seismic studies

Dynamic Response Analysis of High Arch Dam-Water-Foundation System, Du Xiuli, Chen Houqun and Hou Shunzai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p987-988.

Generation of Ground Motion Time Histories as Non-Stationary Vector Processes: Response Spectrum Com-patible Seismograms, George Deodatis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p616-619.

Risk Assessment of Nambe Falls Dam, J. Lawrence Von Thun, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p604-635

Seismic Response of a Block on an Inclined Plane to Vertical and Horizontal Excitation Acting Simultaneously, Liping Yan, Neven Matasovic and Edward Kavazanjian, Jr., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1110-1113.

Steel Connections Need More Research, A. Plumier, CE Sept. 96, p35.

Integrating the Refraction Seismic Method into Stream Crossing Characterization for Scour and Excavation Conditions, Michael L. Rucker, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.

 Roth, ed., 1996), p1163-1177.
 Nine-Component Vertical Seismic Profiling at Yucca Mountain, Nevada, A. H. Balch, Cemal Erdemir, R. W. Spengler and W. Clay Hunter, (High Level Radioactive Waste Management, Technical Program Committee, Waste Management, 1996), p155-156.

Pavement Evaluation with Seismic Tomographic Imaging, S. Nazarian, D. Yuan, D. Doser and K. Dhanasekharan,

S. Nazarian, D. Yuan, D. Doser and K. Dhanasekharan, (Case Histories of Geophysics Applied to Civil Engineer-ing and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p56-72.Results of Multiple High-Resolution Geophysical Surveys at Yucca Mountain, E. Majer, M. Feighner, L. Johnson, K. Lee, T. Daley, E. Karageorgi, P. Parker, T. Smith, K. Williams, A. Romero, T. McEvilly, D. Ponce and V. Langenheim, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p151-154.Seismic Reflection, Evidence Acaptata Shallow Detach-Seismic Reflection, Evidence Acaptata Shallow Detach-

ment, recinical Program Committee, 1990, p151-154.
Seismic Reflection Evidence Against a Shallow Detachment Beneath Yucca Mountain, Nevada, Thomas M.
Brocher and W. Clay Hunter, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p148-150.

Use of Geophysics to Aid in Mapping Basalts Relevant to Ground Water Flow and a Landslide Hazard at Hager-man Fossil Beds National Monument, P. Michaels, L. from Possil Beta Stational Monthlett, P. Michaels, S. Growney and P. Donaldson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p14-26.

Correction, CE Mar. 96, p31. Earthquakes, Bombs and Mines, CE July 96, p8. Simulated Seismic Load Tests on Reinforced Concrete Col-

urnns, S. Watson and R. Park, ST June 94, p1825-1849. Structural Behaviour of High Strength Concrete Columns, Robert Park, (Worldwide Advances in Structural Con-crete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p365-374. Weld Performs Under Earthquake Conditions, CE Aug. 96,

p16.

Seismic waves

Assessing the Local Geologic Component of the Earth-Assessing the Local Geologic Component of the Earth-quake Hazard in the Pertland Metropolitan Area, Mathew A. Mabey and Ian P. Madin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p177-178.
Geophysical Characterization of Florida Limestone—An Diskinsing Con-History D. S. Savane, P. M. Diskinsing Con-History D. S. Savane

Geophysical Characterization of Florida Limestone—An Investigative Case History, D. S. Saxena, R. M. Dickinson and A. Saxena, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p73-85.

Recent Developments in Stochastic Mechanics Relevant to Earthquake Engineering, M. Shinozuka, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grieoriu ed. 1906), p1-1.

ed. and Mircea D. Grigoriu, ed., 1996), p1-1.

Spectral Relative Motion of Two Structures due to Seismic Travel Waves, Van Jeng and Kazuhiko Kasai, ST Oct. 96, p1128-1135.

Seismology International Technology Transfer of Hydrologic Components, Eugene A. Stallings, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p325-326.

Major New Seismic Provisions Proposed for the 1997 UBC, Robert Bachman, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p333-334.

612

Advanced Traveller Information Systems: Experience from the PLEIADES and ROMANSE Projects, D. J. Jeffery and R. J. Meekums, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p296-304.

Analysis of Bivariate Censored Low Flows, Shiping Liu, Jye-Chyi Lu and Cemal Unal, HY Feb. 96, p97-103.

ASCE Opposes California Amendment on A/E Services, CE July 96, p70.
ASCE Publishes Guide to Federal A/E Contracts, CE May

96, p72-73.

Competition Should Be Based on Quality, Thomas W. Blackburn, CE June 96, p28. Considering Constructor Prequalification, Gary D. Bates, P.E., ME Nov./Dec. 96, p10.

Constructor Prequalification: Choosing the Best Construc-tor and Avoiding Constructor Failure, Jeffrey S. Russell, 1996, 0-7844-0052-0, 200pp.

Consulting Engineering: A Guide for the Engagement of Engineering Services, rev. ed. (M&R No. 45), Task Committee on Revision of Manual No. 45 of the Committee on Standards of Practice of the American Society of Civil Engineers, (David F. Garber, chmn.), 1996, 0-7844-0152-7, 50pp.

Corps Moves Closer to Bid Shopping, Allen W. Hatheway, CE June 96, p35.

Culture of Using Mobile Cranes for Building Construction, Aviad Shapira and Jay D. Glascock, CO Dec. 96, p298-

Design-Build Origins in Question, Dean E. Stephan, Jeffrey L. Beard and Michael Charles, CE Aug. 96, p26,28. Engineers, Not QBS, Insure Quality, Mark W. Fantozzi, CE Apr. 96, p30,32.

Frequent "Failure Modes" an A/E/C Might Expect in Their Business, William M. Hayden, Jr., ME Sept/Oct. 96,

Guest Editorial, Robert W. Foster, SU Aug. 96, p95-96. Impact of Commuter-Rail Services in Toronto Region, Sarah Stewart Wells and Bruce G. Hutchinson, TE July/ Aug. 96, p270-275.

Merit Shop Recruitment and Selection Practices in Ala-bama, Roger S. Wolters and Rebecca C. Burleson, CO June 96, p152-157.

Methods and Procedural Considerations in Demolishin Tall Concrete Chimneys, Kenneth K. Walker, Cliff Schexnayder, Richard E. Mayo and Kenneth D. Walsh, CO Sept. 96, p223-230.

New Version of Manual 45 Ready, CE Dec. 96, p70. Procurement Issues, Delon Hampton, ME Nov./Dec. 94,

p45-49

Quality of Ground Water (M&R No. 85), Committee on Ground Water Quality of the Environmental Engineering Division of the American Society of Civil Engineers, (Sayed M. Sayed, chmn.), 1996, 0-7844-0137-3, 200pp. Regarding Bid Competition, James F. Adams, CE May 96,

A Strategy for Urban Transit Route Selection, Stefano Carrese and Stefano Gori, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

p144-148. A User's Guide to Federal Architect - Engineer Contracts, 2nd edition, James B. Goodowens, 1996, 0-7844-0145-4,

Value Engineering in the Assessment of Exterior Building Wall Systems, Abdulmohsen Al-Hammad and Moham-mad A. Hassanain, AE Sept. 96, p115-119.

Selenium

Agroforestry as a Method of Salt and Selenium Manag ment on Irrigated Land in the San Joaquin Valley, Re-becca F. Muñoz and Vashek Cervinka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p400-405. Drainage Recirculation Project for Water Quality, Kevin Johansen and Robert Stoddard, (North American Water

and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1105-1110.

Dynamic vs. Quasi-Static Effluent Limits, Joe Karkoski, (North American Water and Environment Congress & Destructive Water, Chenchayva Bathala, ed., 1996).

Semi-rigid connections
3D Simulation of End-Plate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94, p3122-3136.

Modeling for Moment-Rotation Characteristics for End-Plate Connections, Y. J. Shi, S. L. Chan and Y. L. Wong,

ST Nov. 96, p1300-1306.
Shaking Table Tests of Rigid, Semirigid, and Flexible Steel Frames, Marwan N. Nader and Abolhassan Astaneh-Asl, ST June 96, p589-596.

Uniqueness in Analysis of Semirigid Frames, S. T. Ariarat-nam and L. Xu, ST Jan. 96, p110-111.

Seminars

Issues in Risk Perception and Communciation of Importance to a Regulator: Results of an International Seminar Sponsored by HMIP, Daniel A. Galson, Roger D. Wilmot and Ray V. Kemp. (High Level Radioactive Waste Management, Technical Program Committee, 1996), p502-504.

Leadership Development, Jim Krug, ME Nov./Dec. 96,

Sensitivity analysis

Assessment and Implications of Local Channel Instability on the Prediction of Bridge Scour, Thomas M. Heil and Peggy A. Johnson, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

Biosphere Model for Assessing Doses from Nuclear Waste Disposal, Marsha I. Sheppard, R. Zach, S. C. Sheppard, B. D. Amiro, G. A. Bird, J. A. K. Reid and J. G. Szekely, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p240-243

Calibration of a Water Quality Model Using the Influence Coefficient Algorithm, Kyung Soo Jun and Kil Seong Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p4010-4015.
CO₂ and Temperature Effects on Evapotranspiration and Irrigated Agriculture, Jorge A. Ramírez and Bryce Finnerty, IR May/June 96, p155-163.

Compositional Modeling Study of Alcohol Flooding for Recovery of DNAPL, Stanley Reitsma and Bernard H. Kueper, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p526-537.

Lassinii V. Redul, ed., 1990), p520-537.
Examination of Exploration Options of the Yucca Mountain
CHn Unit, Kurt E. Suchsland, Jerry L. King and Richard
D. Memory, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p300-302.
Finite Element Interval Estimation by Convex Model, Shiagery, Nakagiri, and Nobuliny. Voghikayay. (Pa-hillinia

rinite Element Interval Estimation by Convex Model, Shi-geru Nakagiri and Nobuhiro Yoshikawa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p278-281. Hindeast Simulations of Ocean Currents in Norwegian Coastal Waters; Part 2: Summary of the Main Results, Eivind A. Martinsen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), n301-403.

Long Term Prediction of Far-Field Heat Conduction, Bahram Nassersharif and Lixing Ma, (High Level Radio-active Waste Management, Technical Program Committee, 1996), p438-441.

tee, 1996), p438-441.
A Method for Structural Reliability Analysis of Marine Structures Using Combined Plate and Frame Structure Models, Hiroo Okada, Koji Masaoka, Yoshisada Murotsu, Shigeyuki Hibi and Wataru Kiyokawa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p150-153.
Modeling Impact of Small Kansas Landfills on Underlying Aquifers, Marios Sophoeleous, Nicholas G. Stadnuk and

Aquifers, Marios Sophocleous, Nicholas G. Stadnyk and Miles Stotts, EE Dec. 96, p1067-1077.

Optimization and Sensitivity of Retaining Structures, Askin

Saribaş and Fuat Erbatur, GT Aug. 96, p649-656.
Parameter Estimation of Structures from Static Strain Measurements. II: Error Sensitivity Analysis, Masoud Sanayei and Michael J. Saletnik, ST May 96, p563-572. Parametric Sensitivity of Comprehensive Model of Aerobic Fluidized-Bed Biofilm Process, A. B. Shahalam, R. El-Samra, G. M. Ayoub and A. Acra, EE Dec. 96, p1085-

Probabilistic Analysis of Tendon Loads for a TLP in Deep Water, Charles G. Acquaah and Robert B. Gilbert, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Recent Advances in Sensitivity Analysis for Thermomechanical Postbuckling of Composite Panels, Ahmed K. Noor, EM Apr. 96, p300-307.

Reliability Analysis of Pipeline on Elastic Seafloor, H. Y. Yeh and Hengyun Li. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p752-755.

Reliability-Based Optimization of Composite Structures, Xiaoping Liu and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangool, ed. and Mircea D. Grigoriu, ed., 1996), p122-125.

Response Surface Method for Time-Variant Reliability Analysis, Timothy H.-J. Yao and Y.-K. Wen, ST Feb. 96, p193-201.

Sensitivity Analysis of Flow in Multilayered Leaky Aquifer Systems, Peter Indelman, Gedeon Dagan, Alexander H.-D. Cheng and Driss Ouazar, HY Jan. 96, p41-45.

Sensitivity Analysis of Furrow-Irrigation Performance Parameters, Dawit Zerihun, Jan Feyen and J. Mohan Reddy, IR Jan./Feb. 96, p49-57.

Sensitivity Analysis of the Seismic Capacity for a RC Silo Due to Variance of Its Material Properties, Takeshi Ki-tahara and Hitoshi Seya, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p530-533.

Composite Materials Using the Microbond Test, W. M. Cross, L. Kjerengtroen, R. Winter, W. Jiang, W. Fan and J. J. Kellar, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p356-365.

P. Chong, ed., 1996), p350-363. Sensitivity Studies of Unsaturated Groundwater Flow Modeling for Groundwater Travel Time Calculations at Yucca Mountain, Nevada, Susan J. Altman, Clifford K. Ho, Bill W. Arnold and Sean A. McKenna, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p190-192.

Sensitivity Study of Waste Rollover Using Probabilistic Fi-nite Element Analysis, Arshad Alfoqaha, William Cofer and M. A. Khaleel, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p914-917.

Systems for Forecasting Flows and Their Uncertainty, Kon-stantine P. Georgakakos, Alexandre K. Guetter and Jason A. Sperfslage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2360-2365.

Total System Performance Predictions (TSPA-1995) for the otal System Performance Predictions (15PA-1995) for the Potential High-Level Waste Repository at Yucca Mountain, S. David Sevougian, Robert W. Andrews and Jerry A. McNeish, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p295-297.

Use of GIS Mapping to Illustrate the Sensitivity of Wind Hazard Insurance Loss Estimation to Modeling Parameters, Andrew Steckley, Lawrence A. Twisdale and Peter J. Vickery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p201-202.

21st Century Earth Observing Systems: Emerging Role for Spaceports, Stanley A. Morain, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p245-253.

Acquisition of Subsurface Comet Samples, Richard Welch, Donald Sevilla, Don Noon and Albert Delgadillo, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p129-135.

An Al Agent Construct for Space and Planetary Science Applications, Lee Plansky and Nancy Linarez-Royce, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p341-348.

Air Force Planetary Defense Technology, J. Darrah, S. Worden and G. H. Stokes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p32-45.

Autonomous Mapping System for an Interior Finishing Robot, Abraham Warszawski, Yehiel Rosenfeld and Igal Shohet, CP Jan. 96, p67-77.

Development of a Wireless Global Bridge Evaluation and Monitoring System (WGBEMS), Kenneth Maser, Robert Egri, Abba Lichtenstein and Steven Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p734-741

An Electro-Optical Accelerometer for Civil Structural Applications, Maria Q. Feng. (Materials for the New Millennium, Ken P. Chong, ed., 1996), p877-886.

Embedded Fiber Optic Displacement Sensor for Concrete Elements, Xi Chen, Farhad Ansari and Hong Ding, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p359-365.

Embedded Sensors for Improved Early-Warning Emergen-cy Response to Damaged Structures, Peter L. Fuhr, Dryver R. Huston and Edward Von Turkovich, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p39-40.

Estimation of Frequency-Dependent Reflection Coefficients Using Current and Elevation Sensors, David A. Huntley, David J. Simmonds and Mark A. Davidson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p57-68.

Fiber Sensors for Damage Detection on Large Structures and for Assessment of Deformation Behavior of Cemen titious Materials, W. R. Habel, D. Hofmann, B. Hillemeier and F. Basedau, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p355-358.

First Smart Bridge Tested, CE June 96, p18.

First Smart Bridge Tested, ET Apr/May 96, p1,6.

A Flexible Machine-Vision System for Traffic Monitoring Applications, James F. Alves, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p171-175.

Active Seismic Response Control Using Static Output Feedback, I. E. Köse, W. E. Schmitendorf, F. Jabbari and J. N. Yang, EM July 96, p651-659.

Intrusion Detection by Linear Active Cameras, J.-P.
DeParis, L. Duvieubourg and J.-G. Postaire, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p114-118.

Issues Related to Intelligent Bridge Monitoring, A. Emin Aktan, Arthur J. Helmicki and Victor J. Hunt, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p750-757

Micromechanics Based Design of Optical Fiber Crack Sensor, Christopher K. Y. Leung and Neill Elvin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p236-239.

Millimetre Radar System for the On-Board Lateral Dis-tance Acquisition: Performances Evaluation and Infra-structure Constraints, Corrado Cugiani and Luigi Giub-bolini, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p656-660.

Neural Network Control for Accurate Rebar Bending, Phillip S. Dunston, S. (Ranji) Ranjithan and Leonhard E. Bernold, (Analysis and Computation, Franklin Y. Cheng,

ed., 1996), p492-501.

A New Hydrogen Microsensor for Space Applications, Jes sica Knoll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1285-1289.

On-Line Motion Planning for the Three-Link Revolute Arm in an Unknown Three-Dimensional Environment, Sanjay Tiwari and Brandon Kroupa, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p1-7.

Operational Satellite Remote Sensing for Mineral Exploration, Charles Sabine, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p237-244. Optical Fiber Sensors for Advanced Civil Structures, Marten J. de Vries, Stephen H. Poland, Jennifer L. Grace, Vivek Arya, Kent A. Murphy and Richard O. Claus, (En-gineering Mechanics, Y. K. Lin and T. C. Su, 1996), p64-67.

Recent Advancements in Smart Tagged Composites for In-frastructure, Robert F. Quattrone and Justin B. Berman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1045-1054.

Shape Memory Release Device Experiment, Bernie F. Carpenter, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p76-79.

Signal Processing Study for an FM/CW Collision Avoid-ance System, Pascal Deloof, Atika Menhaj, Jamal Assaad, Nathalie Haese and Christian Bruneel, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p661-665.

Measurement of Strain and Temperature Using Fiber Grating Sensors, Faramarz Farahi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Structural Sensing with Fiber Optic Systems, Raymond M. Measures, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p224-227.

Studying the Ozone Layer from Space, Emilia K. Arguello, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1259-1261.

System Design for Safe Robotic Handling of Nuclear Mate rials, William Drotning, Walter Wapman, Jill Fahrenholtz, Howard Kimberly and Joel Kuhlmann, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p241-247.

Temperature Determination for a Contacting Body Based on an Inverse Piezothermoelastic Problem, Fumihiro Ashida and Theodore R. Tauchert, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p784-787.

"Marriage" of Fiber Optic and Wireless Communications Supporting Intelligent Transportation Systems, Bruce C. Abernethy, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p248-255.

Separation Inelastic Vibration Phase Theory for Seismic Pounding Mitigation, Kazuhiko Kasai, Anil R. Jagiasi and Van Jeng, ST Oct. 96, p1136-1146.

New Block Copolymers for Membrane Materials, Francis A. DiGiano, Ying Chu, Joseph M. DeSimone, Benny D. Freeman, Camille Kassis and Doug Betz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1638-1644.

Juvenile Fish Separator Design, Daniel M. Katz, (North

American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1117-1122. Turbulent Transport Effect on Hydrocyclone Performance, Michio Nonaka and Hisami Tashiro, EE Apr. 96, p306-

Service life

Degradation of Reinforced Concrete Structures Under Aggressive Conditions, Michael P. Enright, Dan M. Frango pol and George Hearn, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p978-987.

Electrochemical Treatment of Concrete: A New Approach to Extend the Service Life of Chloride Contaminated, Carbonated, or Alkali Silica Reactive Concrete Struc-tures, David W. Whitmore and Keith Stewart, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1504-1511.

Hybrid Columns of FRP and Concrete, Mohsen Shahawy, Amir Mirmiran and Michel Samaan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p73-82

Infrastructure Obsolescence and Design Service Life, An-

Intrastructure Osobesecnee and Design Service Life, Andrew C. Lemer, IS Dec. 96, p117-118.
On Estimating the Effect of Passivating Inhibitors on the Time for Corrosion Initiation of Steel in Concrete, A. A. Sagüés, S. C. Kranc and R. G. Powers, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1522-1530.

Predicting the Service Lives of Materials of Construction, Predicting the Service Lives of Materials of Construction, Geoffrey Frohnsdorff, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p38-53.
Repair of Main Pass 69 Waterflood Platform, G. E. Sgouros, T. E. Webster and N. M. Hennegan, WW July/

Aug. 96, p165-171.

Service Life of Timber Trestles, William G. Byers, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p720-723.

service loads

Evaluation of Service Load Behavior of Small Bridges Using Strain Measurement, Ben T. Yen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p667-

Offinal Design of Prestressed Concrete Transmission Poles, Fatma Y. Kocer and Jasbir S. Arora, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p111-122. Sectional Depth of Prestressed Concrete Beams with Ex-cess Capacity, Y. H. Chai, ST July 96, p788-793.

Service Load Test of 1:3 Scale Shell Bridge Model, F. S. Fanous, F. W. Klaiber and W. G. Wassef, ST Feb. 96,

Serviceability

Structural Optimization to Practical Tall Steel Building Design, Chun-Man Chan and Joohyuk Park, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p123-134.

Deflection Serviceability Design for Wood Members and Systems, D. Rosowsky and K. Fridley, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p452-

Effects of Ground Subsidence on a House, R. M. Bennett, E. C. Drumm, G. Lin, T. Triplett and L. Powell, CF Nov.

96, p152-158.

90, p132-1738.
The Importance of Maintaining Smooth Airport Pavements, Tony Gerardi, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p295-305.
Measuring and Modeling Dynamic Loads Imposed by Moving Crowds, A. Ebrahimpour, A. Hamam, R. L. Sack and W. N. Patten, ST Dec. 96, p1468-1474.

Sack and w. N. Fatteri, ST Dec. 90, p. 1406-1474.
New Approach to Roadway Performance Indices, Chiu Liu and Robert Herman, TE Sept/Oct. 96, p329-336.
Probabilistic Evaluation of Wood-Joist Floor Vibrations, Omar A. Jaradat, Arshad A. Al-Foqaha'a and Kenneth J. Fridley, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p342-345.

Serviceability Reliability Analysis of Reinforced Concrete

Serviceability Renability Analysis of Reinforced Concrete Structures, Mark G. Stewart, ST July 96, p794-803.
Serviceability System Factor for Design of Wood Floors, K. J. Fridley, D. V. Rosowsky and P. Hong, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p792-

Structural Load Modeling and Combination for Perform ance and Safety Evaluation by Y.-K. Wen, T. Igusa, EM

Feb. 96, p183-184. Structural Serviceability Review and Standard Implementation, Bruce Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p436-443. Target Safety Level for Bridges, Andrzej S. Nowak and Vi-

jay K. Saraf, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p696-703.

Customer Oriented Train Scheduling in Underground Railway Systems, Riccardo Minciardi, Massimo Paolucci and Raffaele Pesenti, (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Enhancing AVM Systems by Operator Support DRS Func-tionalities, G. Ambrosino, M. Boero and P. Sassoli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p413-417. Methodologies for the Analytic Definition of Uniform Travelling Time-Shifts of an Urban Public Transportation Service, Severo Pace and Graziana Ghio, (App tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p139-143.

Privatization: A Cure for Our Ailing Infrastructure? Charles R. Rendall, CE Dec. 96, p6.

Settlement analysis

Acceleration of Landfill Stabilization Using Leachate Recycle, T. G. Townsend, W. L. Miller, Hyung-Jib Lee and J. F. K. Earle, EE Apr. 96, p263-268.

Cover-Subsidence Sinkhole Evaluation of State Road 434, Longwood, Florida, Jon Foshee and Brian Bixler, GT Nov. 94, p2026-2040.

Down-Hole Collapse Test System, Sandra L. Houston, His-ham H. H. Mahmoud and William N. Houston, GT Apr.

Estimating Settlement of Sand Caused by Construction Vi-bration, S. Drabkin, H. Lacy and D. S. Kim, GT Nov. 96,

Finite Element Modeling of Settlements on Spatially Ran-dom Soil, G. M. Paice, D. V. Griffiths and G. A. Fenton, GT Sept. 96, p777-779.

Ground-Movement-Related Building Damage, Storer J. Boone, GT Nov. 96, p886-896.

Loading Tests on Circular and Ring Plates in Very Dense Cemented Sands, Nabil F. Ismael, GT Apr. 96, p281-

Mechanical and Load-Settlement Characteristics of Two Lunar Soil Simulants, Steven W. Perkins and Craig R. Madson, AS Jan. 96, p1-9.

Negative Skin Friction on Piles in Layered Soil Deposits, K. S. Wong and C. I. Teh, GT June 95, p457-465.

Predicted and Observed Cyclic Performance of Piles in Calcareous Sand, Riadh H. Al-Douri and Harry G. Poulos, GT Jan. 95, p1-16.

Settlement control

Analysis of Deep Excavation with Column Type of Ground Improvement in Soft Clay, Chang-Yu Ou, Tzong-Shiann Wu and Hsii-Sheng Hsieh, GT Sept. 96, p709-716.

Foundation Design Considerations for Construction on Marshlands, A. Rhett Whitlock and Shahzad S. Moosa, CF Feb. 96, p15-22.

Retrofit of Black Butte Hydroelectric Project Penstock, George A. Inverso, John A. Schwartz, Stephen M. Hat-Erik Bodholt and Billy Ferguson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p469-476.

Shakwak Highway Project—Construction Challenges, Robin Walsh, Donaldson MacLeod and Dennis Cook, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p640-651.

Simplified Method for Design of Underpinning Piles, M. Makarchian and H. G. Poulos, GT Sept. 96, p745-751.

Unique Pile Combination Supports New Tennis Complex, CE Dec. 96, p10,12.

Numerical Simulation of DNAPL Emplacement and Redis-tribution in Heterogeneous Porous Media at the M Area of the Savannah River Site, Rex A. Hodges and Ron W. Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p619-627.

Wetland Designs for Environmental Protection— Application in India, Subijoy Dutta, Dennis A. Haag and Jon B. Kraft, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3722-3727.

Sanitary Engineers in American Cities: Changing Roles from the Age of Miasmas to the Age of Ecology, Martin V. Melosi, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p108-122.

Sewage bacteria

Bacterial and Chemical Pollution of Littoral Waters of Lake acteriai and Chemical Poliution of Littoral Waters of Lake Ohrid at Pogradic - Town Area, Valer Angleli, Vasilika Petro and Ramazan Bukli, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2536.

An Appropriate Technology to Treat Domestic Sewage, S.
A. Mohsin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2748-2753.

Characteristics of Radial Jets and Mixing under Buoyant Conditions, Zhen-Ren Guo and James J. Sharp, HY Sept.

96, p495-502

An Introduction to Taipei Suburban Sewage Collection and Treatment Systems, Chiang-Tsai Lin and Der-Liang Sheen, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3170-3175.

The South Bay Ocean Outfall, Frank X. Collins, Gregory W. McBain, Jon Y. Kaneshiro, Luciano Meiorin and Larry Stout, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2044-2049.

Wastewater Treatment Facility Aeration Project, Gary L. Eddy, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p506-517.

Sewage sludge
Anaerobic Biodegradation of High Energetics in Digestion
Sewage Sludge, Sung-Hyun Kwon, Frank J. Y. Shiu and Teh Fu Yen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala. ed., 1996), p794-799.

Operational Strategy for Metal Bioleaching Based on pH Measurements, Y. G. Du, R. D. Tyagi and T. R.

Sreekrishnan, EE July 95, p527-535.
Pilot Study Shows Higher Methane Yields, CE May 96, p14-15

Planning Biosolids Land Application Rates for Agricultural Systems, David M. Crohn, EE Dec. 96, p1058-1066.

Sewage treatment

An Introduction to Taipei Suburban Sewage Collection and Treatment Systems, Chiang-Tsai Lin and Der-Liang Sheen, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3170-3175.

Swirl Technology: Enhancement of Design, Evaluation, and Application, Richard Field and Thomas P. O'Connor. EE Aug. 96, p741-748.

Wetland Designs for Environmental Protection—Application in India, Subijoy Dutta, Dennis A. Haag and Let Be Control of the Control Jon B. Kraft, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3722-3727.

Sewage treatment plants

A New Strategic Management of Pumping Station in Sewer Systems, David Tsoi and Tsun-Hou Kuan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2486-2491.

Under-Harbor Sewage Tunnel Holes Through, CE Apr. 96, p10.

Sewer design

Abwasser-Hydraulik: Theorie Und Praxis (Sewer Hydraulics: Theory and Practice) by Willi H. Hager, Ben Chie Yen, HY Oct. 96, p591.

Crossing Bridges with Ductile Iron Pipe—Update 1995, Michael S. Tucker, (Pipeline Crossings 1996, Lawrence

F. Catalano, ed., 1996, p120-129.

Determining Rehabilitated Sewer Flow Capacity, Joseph Barsoom, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p97-104. Engineers Outfox Nature to Bury Sewer Line, CE Dec. 96,

An Interception by Boston, Dennis J. Doherty, P.E. and Irene McSweeney Woodfall, P.E., CE Oct. 96, p45-47.

New Materials and Methods for Insitu Rehabilitation of Underground Pipe, Richard D. Blackmore, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1298-1307.

Oregon Engineers Repair Century-Old Catenary-Shaped Sewer, CE Feb. 96, p83.

Sewer, C.E. Peb. 30, pb.3.

Fhysical Modeling to Determine Head Loss at Selected Surcharged Sewer Manholes, K. H. Wang, T. G. Cleveland, C. Towsley and D. Umrigar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3835-3840.

Relocation of Existing Pipelines at New Highway Crossings, Karl J. Rubenacker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p290-297.

Sewer Crossing of Creek with Bridge Widening, Surendra Anketell, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p275-281.

Ductile Iron Microtunneling Pipe, Non-Traditional Instal-lation Applications" Ralph R. Carpenter and Randall C. Conner, (Pipeline Crossings 1996, Lawrence F. Ca-talano, ed., 1996), p312-321.

Abwasser-Hydraulik: Theorie Und Praxis (Sewer Hydraulics: Theory and Practice) by Willi H. Hager, Ben Chie Yen, HY Oct. 96, p591. Correction, CE Apr. 96, p38.

Determining Rehabilitated Sewer Flow Capacity, ASCE Task Committee on Flow Characteristics of Pipeline Infrastructure Committee of the Pipeline Division, TE May/June 96, p258-261.

Engineers Outfox Nature to Bury Sewer Line, CE Dec. 96, p87,89.

po 7,89.
Evaluating Coatings for Concrete Wastewater Facilities, C. Vipulanandan, H. Ponnekanti, Dara N. Umrigar and A. D. Kidder, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p851-862.
Giant, Man-Made Eel Inspects City's Sewers, CE Apr. 96,

p8.
A GIS Sewer Database for a University Campus, D. J. Schuller, D. I. Pusey and A. R. Rao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1765-1770.
Honolulu's Street Relief, Gregory L. Raines, P.E. and James K. Honke, P.E., CE Sept. 96, p70-72.
Modeling Dry Weather Wastewater Flow in Sewer Networks, D. Butler and N. J. D. Graham, EE Feb. 95, p161-173.
A New Strategic Management of Pumping Station in Sewer

A New Strategic Management of Pumping Station in Sewer Systems, David Tsoi and Tsun-Hou Kuan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2486-2491.

Ordinary Operating Conditions of Large Channels of Mos-cow's Sewerage Network, Yuri A. Ermolin, IR May/ June 96, p145-148.

Overflow Impacts on River Studied, CE May 96, p8.

Plumbing the Quality of a Sewer System, Thomas M. Galeziewski, Samuel A. Edmondson and Robert Webb, CE Jan. 96, p55-57.

Wastewater System Design and Evaluation, Leonard Bell and Troy Norris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p949-957.

Construction Through Crude Oil, Kyle R. Ott, Richard J. Switalski and Dale J. Sadowski, CE Feb. 96, p56-59. Membrane Analogy for Saint-Venant Torsion: New Results, S. M. Heinrich, EM Nov. 96, p1110-1112.

Shah, Niranjan S. (Fellow, ASCE)
President Nominates ASCE Fellow to NIBS Board, NE Sept. 96, p15.

Shake table tests

Behavior of Beam-Column Connections Under Axial Col-umn Tension, El Mostafa M. Higazy, Amr S. Elnashai and Mihran S. Agbabian, ST May 96, p501-511.

Full-Scale Resonance Tests of a Railway Bridge, E. Mara-gakis, B. M. Douglas, S. Haque and V. Sharma, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p183-190.

617 SHAPE

Inelastic Behavior of Steel Frames with Added Viscoelastic Dampers, K. C. Chang, S. J. Chen and M. L. Lai, ST Oct. 96, p1178-1186.

Predicting the Mode, Susceptibility, and Rate of Weathering of Shales, Paul M. Santi and Engin C. Koncagül, (Design with Residual Materials: Geotechnical and C struction Considerations, Gordon Matheson, ed., 1996).

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST

Sept. 94, p2583-2601

Shaking Table Tests of Rigid, Semirigid, and Flexible Steel Frames, Marwan N. Nader and Abolhassan Astaneh-Asl,

ST June 96, p589-596.

Theoretical and Experimental Studies on Hybrid Control of Seismic Structures, F. Y. Cheng, P. Tian, V. Rao, K. Martin, F. Liou and J. H. Yeh, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p322-338. U.S. Firm Builds Shake Table for Japan, John Casey, ET

Aug./Sept. 96, p1,8.

Measurement of the Undrained Pore Pressure Response of a Shale in Triaxial Tests, Tomoyuki Aoki, Chee P. Tan, Rory H. T. Cox and William E. Bamford, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1086-1089.

Predicting the Mode, Susceptibility, and Rate of Weathering of Shales, Paul M. Santi and Engin C. Koncagül, (Design with Residual Materials: Geotechnical and Con struction Considerations, Gordon Matheson, ed., 1996), p12-26.

Shallow foundations

Application of Numerical Limit Analyses for Shallow Foundations on Clay, Andrew J. Whittle and Boonchai Ukritchon, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p132-135.

Bearing Capacity of Shallow Foundations on Noncohesive Soils, Bohdan Zadroga, GT Nov. 94, p1991-2008.

Dynamic Analysis of Axisymmetric Foundations on Poroe-lastic Media, Gary F. Dargush and Manoj B. Chopra, EM July 96, p623-632.

Probability Distributions Used in 100-Year Return Period of Air-Freezing Index, Peter M. Steurer, CR Mar. 96,

Seismic Bearing Capacity of Foundation on Cohesionless Soil, L. Dormieux and A. Pecker, GT Mar. 95, p300-303.

Shallow water

Alternatives for Managing Shallow Ground Water in Arid Irrigated Areas, James E. Ayars, (North American Water and Environment Congress & Destructive Water, Chen-

and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), pl 83-188. Application of a Coupled 3-D Hydrodynamics-Sediment-Water Quality Model, Xinjian Chen and Y. Peter Sheng, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p325-339.

Approximate Riemann Solvers in FVM for 2D Hydraulic Shock Wave Modeling, D. H. Zhao, H. W. Shen, J. S. Lai and G. Q. Tabios, III, HY Dec. 96, p692-702.

Depth-Averaged Equations for Free Surface Flows, Guohong Duan and Guixian Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p213-218. Dispersive-Flow Energy Dissipator, Shou Long Yang, HY Dec. 94, p1401-1408.

An Evaluation of Tidal Predictions in the Yellow and East China Seas, Cheryl Ann Blain, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p429-441.

Field Measurements of Erosion across a Shallow Water Es-tuarine Mudflat, M. C. Christie, K. R. Dyer, M. J. Fen-nessy and D. A. Huntley, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p759-770.

Finite-Volume Two-Dimensional Unsteady-Flow Model for River Basins, D. H. Zhao, H. W. Shen, G. Q. Tabios, III, J. S. Lai and W. Y. Tan, HY July 94, p863-883.

Flow Properties of the Swash Zone, M. Brocchini and D. H. Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p221-232.

The Influence of Turbulence Closure Strategy on Numerical Modeling of Shallow Water Tides, Roger R. Grenier, Jr. and Richard A. Luettich, Jr., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p143-155.

Mexican Border Ground Water Agreement, Conrad G. Keyes, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2330-2334.

The Modelling of Plunging Breakers by the Introduction of a K-I Turbulence Closure Model, Michele Drago and Luigi Iovenitti, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p317-328.

Numerical Simulation of Unsteady Flow at Po River Delta, D. Ambrosi, S. Corti, V. Pennati and F. Saleri, HY Dec.

96, p735-743.

Parameterisation of Triad Interactions in Wave Energy Models, Y. Eldeberky and J. A. Battjes, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p140-148.

Pier Scour at Wide Piers, Peggy A. Johnson, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2193-2201.

Selective Withdrawal through Intake Fitted with a Collar, James J. Sharp, T. M. Parchure and Z. R. Guo, HY Dec. 96, p683-686.

Shallow and Surfacing Ground Water in an Arid Urban Environment, D. L. Smith and J. C. Guitjens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1495-1500.

Shallow Ground Water Management with a Modified Subsurface Drainage System, J. E. Ayars, R. A. Schoneman, F. Dale and P. Shouse, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2130-2135.

Studies on Wave, Current and Suspended Sediment Characteristics at the Surf Zone, Chien-Kee Chang and Ching-Her Hwang, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p728-738.

Subharmonic Edge Waves. Stability Analysis, Antonio Lechuga, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p281-292.

Suspended-Solids Flux at a Shallow-Water Site in South San Francisco Bay, California, Jessica R. Lacy, David H. Schoellhamer and Jon R. Burau, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3357-3362.

The Use of an Equivalent Porosity Method to Model Flow in Marshes, Ian P. King and Lisa C. Roig, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3734-3739.

Velocity Profile in Shallow Coastal Waters, Habib D. Anwar, HY Apr. 96, p220-223.

Wave Field in the Efflux of River Water, Akira Mano and Subandono Diposaptono, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p185-196.

Wave Propagation in Shallow Waters: Modelling and Real Data, José C. Santás and José M. de la Peña, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p128-139.

Waves on a 1:100 Slope: Experiments and Numerical Models, G. Liberatore, M. Petti, M. Drago and M. Sclavo, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p355-365.

Boolean Modeling and Analysis of Smart Material Properties, S. Dobson, M. Noori and Á. Crespo, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p838-841.

Dome-Shaped Space Trusses Formed by Means of Postten-sioning, G. Dehdashti and L. C. Schmidt, ST Oct. 96, p1240-1245.

A Family of Invariant Stress Surfaces, Steen Krenk, EM Mar. 96, p201-208.

Finite Actuator VGT Manipulator Shape Control Paradigm, William C. Farrow, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p86-92.

Fractals of Aggregates Correlated with Creep in Asphalt Concrete, Mohan Yeggoni, Joe W. Button and Dan G. Zollinger, TE Jan./Feb. 96, p22-28.

Fuzzy Controlled Genetic Algorithm Search for Shape Op-timization, Chee Kiong Soh and Jiaping Yang, CP Apr. 96, p143-150.

Human Factors in Highway Geometric Design, George Kanellaidis, TE Jan. Feb. 96, p59-66.

Versatile Variable-Node Flat-Shell Element, Chang-Koon Choi and Wan-Hoon Lee, EM May 96, p432-441.

Sharp-crested weirs

Modeling Overfalls Using Vertically Averaged and Mo-ment Equations, Abdul A. Khan and Peter M. Steffler, HY July 96, p397-402.

Submerged Flow Regimes of Rectangular Sharp-Crested Weirs, S. Wu and N. Rajaratnam, HY July 96, p412-414.

Bending and Shear Behavior of Web Elements with Openings, M. Y. Shan, R. A. LaBoube and W. W. Yu, ST Aug. 96, p854-859.

Bolted Field Splices for Steel Bridges, Firas Sheikh-lbrahim and Karl H. Frank, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p290-297.

Calculation of Stress Intensity Factors Using Finite Elements and the Compliance Approach, Hisham Abdel-Fattah and Sameer A. Hamoush, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p154-159.

Dynamic Response of Box Tubes to Combined Shear and Torsion, Y. L. Mo and R. Y. Yang, ST Jan. 96, p47-54.

Effectiveness Factor of Concrete in Continuous Deep Beams, A. F. Ashour and C. T. Morley, ST Feb. 96, p169-178.

Experimental and Numerical Studies of Shear Layers in Granular Shear Cell, Jan-Olov Aidanpää, Hayley H. Shen and Ram B. Gupta, EM Mar. 96, p187-196.

Finite Element Analysis of Fracture Behavior of ECC Shear Beams, Petr Kabele and Hideyuki Horii, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p409-418.

Hysteretic MDOF Model to Quantify Damage for RC Shear Frames Subject to Earthquakes, H. Uğur Köylüoğlu, Søren R. K. Nielsen and Ahmet Ş. Çakmak, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p768-771.

Inelastic Behavior of Asymmetric Multistory Buildings, Juan C. De la Llera and Anil K. Chopra, ST June 96, p597-606.

Issues of Uncertainty Regarding Localized Strains in Gran-ular Soils, M. A. Mooney, R. J. Finno, G. Viggiani and W. W. Harris, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p312-325.

Lateral Load Behavior of High Strength Fiber Reinforced Concrete Columns, Ramesh Nagarajah and David H. Sanders, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p396-407.

Reliability of the SASW Method for Determination of the Shear Modulus of Soils, Karen E. Tuomi and Dennis R. Hillunen, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1225-1238.

Response to Arbitrarily Time-Varying Forces Using Convex Model, Chris P. Pantelides and Shyh-Rong Tzan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1252-1258.

Shear and Reaction Distributions in Continuous Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE Nov. 96, p155-165.

Shear Stiffness D_Q, for C-Core Sandwich Panels, T. C. Fung, K. H. Tan and T. S. Lok, ST Aug. 96, p958-966.

"SIMCON-A Novel High Performance Fiber-Mat Reinforced Cement Composite for Repair, Retrofit and New Construction", Neven Krstulovic-Opara, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p288-297

Buckling and Vibration of Thick Laminates on Pasternak Foundations, Y. Xiang, S. Kitipornchai and K. M. Liew, EM Jan. 96, p54-63.

Buckling of Laminated Composite Beams, Carol Shield and Tim Morey, (Engineering Mechanics, Y. K. Lin and

and Tim Morey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1010-1013.

Continuum Model for Analysis of Multiply Connected Perforated Cores, Domenico Capuani, Marco Savoia and Ferdinando Laudiero, EM Aug. 94, p1641-1660.

Dynamics of Highly Deformable Sandwich Frame Structures, H. Deng and L. Vu-Quoc, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1147-1150.

Stability of Shear Deformable Thin-Walled Space Frames and Circular Arches, Sung-Pil Chang, Sung-Bo Kim and Moon-Young Kim, EM Sept. 96, p844-854.

Analytical Model for Shear Critical Reinforced-Concrete Members, W. Chung and S. H. Ahmad, ST June 95, p1023-1029

Behavior of Beam-Column Connections Under Axial Column Tension, El Mostafa M. Higazy, Amr S. Elnashai and Mihran S. Agbabian, ST May 96, p501-511.

Strain Localization in Confined High-Strength Concrete Columns, Daniel Cusson, François de Larrard, Claude Boulay and Patrick Paultre, ST Sept. 96, p1055-1061.

General Integral Formulation of Turbulent Buoyant Jets in Cross-Flow, Vincent H. Chu and Joseph H. W. Lee, HY Jan. 96, p27-34.

Mechanism Study of Landslides, Dagang Zhang and Mos-tafa A. Foda, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p258-261.

C. Sa. 1990, p.20-201.
On the Relationship between Net-Momentum Fluxes and Wall-Normal Velocity Fluctuations, Fabián López and Marcelo García, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p661-664.

C. Su, 1996), pool-664.
 Platelet Activation in Time Varying Shear Flow Field, C. Cornelius Glismann and Ned H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p39-42.
 Shear Dispersion in the Benthic Boundary Layer, C. G. Hannah, J. W. Loder and Y. Shen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p454-465.
 Shability of Shallow Shear Flows, Vincous H. Chu, (Ferri, Stability of Shallow Shear Flows, Vincous H. Chu, (Ferri, Stability of Shallow Shear Flows, Vincous H. Chu, (Ferri, Stability of Shallow Shear Flows, Vincous H. Chu, (Ferri, Shallow)

Stability of Shallow Shear Flows, Vincent H. Chu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996). p1074-1077

Synchronized Measurements of Bed-Shear Stress and Flow Velocity in Open Channels with Simulated Vegetation, Fabian López and Marcelo García, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3651-3655.

Shear forces

Forces in Pile Foundations under Seismic Loading, Amir M. Kaynia and Saeed Mahzooni, EM Jan. 96, p46-53.

Negative Shear Lag in Framed-Tube Buildings, Y. Singh and A. K. Nagpal, ST Nov. 94, p3105-3121. Shear Lag in Shear/Core Walls, A. K. H. Kwan, ST Sept. 96, p1097-1104.

Warping Solution for Shear Lag in Thin-Walled Orthotrop-ic Composite Beams, Roberto Lopez-Anido and Hota V. S. GangaRao, EM May 96, p449-457.

Shear modulus

Dynamic Properties of Cohesive Soils Treated with Lime, K. Fahoum, M. S. Aggour and F. Amini, GT May 96, n382-389

Effect of Degree of Weathering on Dynamic Properties of Residual Soils, Emir José Macari and Laureano Hoyos, Jr., GT Dec. 96, p988-997.

Investigation of Structural Properties of Used Formwork Stringers, Saeed Karshenas and Eyad Mizian, MT Feb. 96, p51-56. Model of Shear Wave Speed as a Function of Depth in Water-Saturated Sand, Nicholas P. Chotiros and Adri-enne M. Mautner, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p804-807.

Shear properties

Development of Localization in Undrained Deformation, J. W. Rudnicki, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p939-942.

Granular-Flow Rheology: Role of Shear-Rate Number in Transition Regime, Cheng-lung Chen and Chi-Hai Ling, EM May 96, p469-480.

Shear Resistance of Gypsum-Sheathed Light-Gauge Steel Stud Walls, Reynaud Serrette and Kehinde Ogunfunmi, ST Apr. 96, p383-389.

Shear strain

Formation of Shear Zones in Reinforced Sand, Scott E. Shewbridge and Nicholas Sitar, GT Nov. 96, p873-885. Statistical Model for Sand Compaction Under Cyclic Shear Strain, R. Ghanem and M. El-Mestkawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p722.

Computer Modelling for a Discrete Particle System, Kofi B. Acheampong, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p731-734.

Defects in Soft Clays: A Challenge to Site Characterization for Stability Analysis, G. A. Leonards and R. J. Deschamps, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996),

Drained Sand Behavior in Axisymmetric Tests at High Pressures, Jerry A. Yamamuro and Poul V. Lade, GT

Feb. 96, p109-119.

Effect of Gravel on Pumping Behavior of Compacted Soil, Robert W. Day, GT Oct. 96, p863-866.

Embankment Dams in the Piedmont/Blue Ridge Province, Chuck Wilson and Ray Martin, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p27-36.

Formation of Shear Zones in Reinforced Sand, Scott E. Shewbridge and Nicholas Sitar, GT Nov. 96, p873-885.

HDPE Geomembrane/Geotextile Interface Shear Strength, Timothy D. Stark, Thomas A. Williamson and Hisham T. Eid, GT Mar. 96, p197-203.

Improvement of Soft Clays by High-Voltage Electrokinet-ics, Julie Q. Shang and Wayne A. Dunlap, GT Apr. 96,

Investigation of Structural Properties of Used Formwork Stringers, Saeed Karshenas and Eyad Mizian, MT Feb. 96, p51-56.

Maximum Shear Strengths of Reinforced Concrete Struc-tures, Li-Xin "Bob" Zhang and Thomas T. C. Hsu, (Worldwide Advances in Structural Concrete and Ma sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

Probabilistic Analysis of Randomly Distributed Fiber-Reinforced Soil, Gopal Ranjan, R. M. Vasan and H. D.

Charan, GT June 96, p419-426.

Repair and Retrofit of Reinforced Concrete Columns, Riyad S. Aboutaha, (Natural Disaster Reduction, George Housner, ed. and Riley M. Chung, ed., 1997), p313-

Sand Reinforced with Shredded Waste Tires, Gary J. Foose, Craig H. Benson and Peter J. Bosscher, GT Sept. 96, p760-767.

Seismic Shear Strength of Reinforced Concrete Columns M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Sensitivity Studies of the Interfacial Shear Strength in Composite Materials Using the Microbond Test, W. M. Cross, L. Kjerengtroen, R. M. Winter, W. Jiang, W. Fan and J. J. Kellar, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p356-365.

Shear Strength of Beams with Corrugated Webs, Mohamed Elgaaly, Robert W. Hamilton and Anand Seshadri, ST Apr. 96, p390-398.

Shear Strength of Reinforced Geosynthetic Clay Liner, Robert B. Gilbert, Federico Fernandez and David W. Horsfield, GT Apr. 96, p259-266.

Surface Cleanliness Effects on Lunar Regolith Shear Strength, Howard A. Perko, John D. Nelson and Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p689-698.

Uncertainty in Back Analysis of Slopes, Robert B. Gilbert, Stephen G. Wright and Eric Liedtke, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p494-517.

Undrained Sand Behavior in Axisymmetric Tests at High Pressures, Poul V. Lade and Jerry A. Yamamuro, GT Feb. 96, p120-129.

Analyzing of Two Dimensional Slope Stability and Foun-dation Problems Considering Soil-Structure Interaction Effect, Stanley Z. He, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Cement Among Grains, Jack Dvorkin, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p869-872.

Centrifugal, Gravity and Side-wall Effects in Annular Shear Cells, Cliff K. K. Lun, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p104-107.

Dimensional Analysis of Bond Modulus in Fiber Pullout, Jyrki Kullaa, ST July 96, p783-787.

Effect of Acceleration on Bottom Shear Stress in Tidal Estuaries, A. Y. Kuo, J. Shen and J. M. Hamrick, WW Mar./Apr. 96, p75-83.

Field Measurements of Erosion across a Shallow Water Es-tuarine Mudflat, M. C. Christie, K. R. Dyer, M. J. Fen-nessy and D. A. Huntley, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

Measurements of Erosion of Undisturbed Bottom Sedi-ments with Depth, Joe McNeil, Catherine Taylor and Wilbert Lick, HY June 96, p316-324.

Mechanical Stress in Pediatric Heart Disease: Computa-tional Modeling of Associated Defects in Subaortic Stenosis, Michael D. VanAuker, Pedro del Nido, Theresa A. Tacy, Gunnlaugur Sighusson and Edward G. Cape, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p470.

A Model for Bed Surface Shear Stress Fluctuations, César Mendoza, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p669-672.

Numerical Modeling of Water Flow over Porous Media, Christopher Y. Choi, Peter M. Waller and Fukumura Ka-zunari, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2433-2438.

A Quasi-3D Model of Longshore Currents, A. F. Garcez Faria, E. Thornton and T. Stanton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p389-400.

Sensitivity Studies of the Interfacial Shear Strength in Composite Materials Using the Microbond Test, W. M. Cross, L. Kjerengtroen, R. M. Winter, W. Jiang, W. Fan and J. J. Kellar, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p356-365.

Shear Properties of Components Used in Stressed-Skin Panels, I. Robert Kliger and Patrick J. Pellicane, MT

May 96, p77-82.

Shear Stresses and Hydrodynamics of Combined Waves and Currents, R. D. MacIver, R. R. Simons and A. J. Grass, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p676-685

Sizing Dumped Rock Riprap, David C. Froehlich and Craig A. Benson, HY July 96, p389-396.

Strain Rate and Preshear Effects in Cyclic Resistance of Soft Clay, G. Lefebvre and P. Pfendler, GT Jan. 96, p21-26.

Streambed Armoring, C. O. Chin, B. W. Melville and A. J. Raudkivi, HY Aug. 94, p899-918.

Synchronized Measurements of Bed-Shear Stress and Flow Velocity in Open Channels with Simulated Vegetation, Fabián López and Marcelo García, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3651-3655.

Transition from Hydraulic Jump to Open Channel Flow, S. Wu and N. Rajaratnam, HY Sept. 96, p526-528.

Undrained Multidirectional Direct Simple Shear Behavior of Cohesive Soil, Don J. DeGroot, Charles C. Ladd and John T. Germaine, GT Feb. 96, p91-98.

Vertical Profiles of Longshore Currents and Bed Shear Stress, E. B. Thornton, C. M. C. V. Soares and T. P. Stanton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p449-459.

Wave Stress and Longshore Current on Barred Profiles, T. C. Lippmann, E. B. Thornton and A. J. H. M. Reniers, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p401-412.

Constitutive Behavior of Granular Media Using a Lattice Type Model, S. Ramakrishnan, Muniram Budhu and George Frantziskonis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p713-716.

Dynamic Properties of Piedmont Residual Soils, Roy H. Borden, Lisheng Shao and Ayushman Gupta, GT Oct.

Geotechnical Properties of Oil-Contaminated Kuwaiti Sand, Hasan A. Al-Sanad, Walid K. Eid and Nabil F. Is-

mael, GT May 95, p407-412.

Interaction Between Geomembranes and Granular Materials, Luis E. Vallejo and Yun Zhou, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p82-96.

Mechanical Response of Woven Graphite/Copper Composites, Brett A. Bednarcyk, Christopher C. Pauly and Marek-Jerzy Pindera, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p628-631.

MRI Studies of Direct Shear Tests on Round Particles, Tang-Tat Ng, Marlene Kelley and James Sampson, (En-gineering Mechanics, Y. K. Lin and T. C. Su, 1996), p572-575.

Analysis of Free Vibrations of Tall Buildings, Qiusheng Li, Hong Cao and Guiqing Li, EM Sept. 94, p1861-1876.

Building Codes and Natural Disasters - 2 Case Studies, Kenneth R. Andreason, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p758-764.

Classification Methodology for Coupled Shear Walls, O. Chaallal, D. Gauthier and P. Malenfant, ST Dec. 96,

Ductile Masonry Construction in California, Hanns U. Bau-mann, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p93-100.

Editor's Note, David Darwin, ST Oct. 96, p1127.

A Finite Element Damage Model for the Evaluation and Rehabilitation of Brick Masonry Shear Walls, Luigi Gambarotta and Sergio Lagomarsino, (Worldwide Avances in Structural Concrete and Masonry, A. Schultz, ed. and S. L. McCabe, ed., 1996), p72-81.

An Innovative Plastic Housing System, E. Burnett, A. Arenja and L. Holroyd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p545-554.

The Kobe Earthquake: Performance of Engineered Build-ings, David R. Bonneville, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p917-925.

Loss of Capacity of Concrete Shear Walls, Hassan Sassi and Richard Ranous, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p80-81.

Seismic Base Isolation Study for a Kentucky Building, John P. Miller and Nathan C. Gould, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p389-

Seismic Behavior of Structures with Flexible Diaphragms Arturo Tena-Colunga and Daniel P. Abrams, ST Apr. 96, p439-445.

smic Resistance of Partially-Grouted Masonry Shear Walls, Arturo E. Schultz, (Worldwide Advances in Strucwalls, Atland Schultz, Charles and S. L. McCabe, ed., 1996), p211-222.
Seismic Response of Flexibly Supported Coupled Shear Walls, O. Chaallal and N. Ghlamallah, ST Oct. 96,

p1187-1197.

Finite Amplitude Shear Wave Instabilities, H. Tuba Özkan and James T. Kirby, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p465-476.

Looking for Wave Groups in the Surf Zone, Merrick C. Haller and Robert A. Dalrymple, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p81-92.

Model of Shear Wave Speed as a Function of Depth in Water-Saturated Sand, Nicholas P. Chotiros and Adrienne M. Mautner, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p804-807.

Pulse Transmission System for Measuring Wave Propaga-tion in Soils, Koichi Nakagawa, Kenichi Soga and James K. Mitchell, GT Apr. 96, p302-308.

Surface Response of a Cracked Layered Half-space Subjected to an Antiplane Impact, S. W. Liu, J. C. Sung and M. S. Lin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p616-619.

System Identification Using Earthquake Acceleration Records, A.-W. Elgamal, M. Zeghal, H. T. Tang and J. C. Stepp, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p335-338.

Design of Sheet Pile Walls, U.S. Army Corps of Engineers, 1996, 0-7844-0135-7, 75pp.

Iron Filing Installation Cleans Contaminants, CE Nov. 96, p22.

Compression Strength of Pultruded Flat Sheet Material, J. T. Mottram, MT May 94, p185-200.

Durability and Long Term Performance of Cementitious Composites, A. Bentur, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1502.

Effect of Sheet Bonding Condition on Concrete Members Having Externally Bonded Carbon Fiber Sheet, Hiroyuki Yoshizawa, Toru Myojo, Masayoshi Okoshi, Mutuki Mizukoshi and Howard S. Kliger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), pl 608-1616.

Shell structures

Active Vibration Control of Double Wall Composite Shells to Random Inputs, Chen-Ying Wang and Rimas Vaicaitis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p842-845.

Analysis and Design of the Ponce Coliseum in 1969 and 1996, Alex C. Scordelis, Pere Roca and Antonio R. Mari, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

p278-286.

Evaluation of Cracking of the Miami Marine Stadium Hy-perbolic Paraboloid Roof Structure, Michael L. Brainerd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1659-1668.

Experiments for Ultimate Strength of Reinforced Concrete Cylindrical Panels under Lateral Loading and Comparison with FEM Analysis, Makoto Takayama, Kazuhiko Mashita, Shiro Kato, Yasuhiko Hangai and Haruo Kunieda, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p310-321.

Limit Design of Axisymmetric Shells with Application to Cellular Cofferdams, P. de Buhan and A. Corfdir, EM

Oct. 96, p921-929.

Reliability/Cost of Adaptive Intraply Hybrid Fiber Com-posite Structures, Christos C. Chamis, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p644-647.

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Service Load Test of 1:3 Scale Shell Bridge Model, F. S. Fanous, F. W. Klaiber and W. G. Wassef, ST Feb. 96, p210-216.

Shellfish

Attachment Strength of Zebra Mussels on Natural, Polymeric, and Metallic Materials, Josef Daniel Ackerman, Catherine M. Cottrell, C. Ross Ethier, D. Grant Allen and Jan K. Spelt, EE Feb. 96, p141-148.

Copper and Copper-Nickel Alloys as Zebra Mussel Anti-foulants, Jane M. Dormon, Catherine M. Cottrell, D. Grant Allen, Joseph D. Ackerman and Jan K. Spelt, EE Apr. 96, p276-283.

Chelle

Analysis of the Nonlinearity Associated with the Free Vibration of an Orthotropic Shell, Jamal F. Nayfeh and Nicholas J. Rivieccio, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl115-1121.

Engineering Innovations Highlighted at Research Symposi-um, ET Mar/Apr. 96, p1,5.

Nonlinear Dynamics of Unidirectional, Fiber-Reinforced Tori, Raouf A. Raouf and Anthony N. Palazotto, EM Mar. 96, p271-276.

Three-Dimensional Analysis of Doubly Curved Laminated Shells, Chih-Ping Wu, Jiann-Quo Tarn and Shu-Man Chi, EM May 96, p391-401. Versatile Variable-Node Flat-Shell Element, Chang-Koon

Choi and Wan-Hoon Lee, EM May 96, p432-441.

Vibration of Laminated Shallow Shells on Quadrangular Boundary, A. V. Singh and V. Kumar, AS Apr. 96, p52-

Ship bridge collisions

Risk Analysis of Ship and Barge Collision Loads on Bridg-es, Michael A. Knott, (*Probabilistic Mechanics & Struc-tural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p724-727.

Recasting a Foundry (Available only in Structures Special Issue), Gary W. Loomis and Dave P. Knepper, CE May 96, p14A-16A.

Shipping

Bounding Axial Profile Analysis for the Topical Report Database, Chien-Hsiang Chen and Theodore A. Parish, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p336-339.

Program Committee, 1990, p.30-353.

Dense Organic Liquids Reduce GA-4 Reactivity Margin, B. Snyder, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p333-335.

Technical Program Committee, 1996), p333-335. Evaluation of a Bi-Directional Aluminum Honeycomb Impact Limiter Design, Marvin J. Doman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p357-359. Impacts of SNF Burnup Credit on the Shipment Capability of the GA-4 Cask, Amir S. Mobasheran, William Lake and John Richardson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p330-332. p330-332.

Legal Weight Truck Cask Response to Regulatory Format Thermal Events, Part 1: Fuel Cladding, M. Greiner, R. J. Faulkner and Y. Jin, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p351-353.

p331-333. Legal Weight Truck Cask Response to Regulatory Format Thermal Events, Part 2: Containment Seal, M. Greiner, Y. Jin and R. J. Faulkner, (High Level Radioactive Waste Management, Technical Program Committee, 1996). p354-356.

Reducing Environmental Impacts through Non-Uniform Loading of Casks, N. Barrie McLeod, (High Level Radi-oactive Waste Management, Technical Program Committee, 1996), p372-373.

Route Assessment Using Comparative Risk Factors Inte-grated through a GIS, Douglas M. Toth and William J. O'Connell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p363-365.

Author Responds to Accusations of Carelessness, Mark L. Peckham and David A. Sutter, CE July 96, p28-29.

Controlling Chaos to Prevent Ship Capsizing, Mingzhou Ding, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p434-437.

Entrainment of Eggs and Larval Fish Into Propeller Jets. Stephen T. Maynord, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3147-3152.

Finite Element Interval Estimation by Convex Model, Shi-geru Nakagiri and Nobuhiro Yoshikawa, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p278-281.

First Passage Time of Nonlinear Ship Rolling in Nonsta-tionary Random Seas, C. W. S. To and Z. Chen, (*Proba-*bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p250-253.

Marine Engines Emissions for Vessels of the United States Coast Guard, Zoltan C. Mester, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3355-3356.

Probability Based Design Requirements for Ship Struc-Josain W. Basan K. Waller and C. Waller and C. Waller and Caregory J. White. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p98-101.

Probability Based Design Requirements for Unstiffened Panels in Ship Structures, Bilal M. Ayyub, Gregory J. White, Alaa E. Mansour and Paul H. Wirsching, (*Proba*bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Probability-Based Design Requirements for Longitudinally Stiffened Panels in Ship Structures, G. J. White, B. M. Ayyub, A. E. Mansour and P. H. Wirsching, (Probabilis-tic Mechanics & Structural Reliability, Dan M. Frango-pol, ed. and Mircea D. Grigoriu, ed., 1996), p110-113.

Probability-Based Design Requirements with Respect to Fatigue in Ship Structures, P. H. Wirsching, A. E. Mansour, B. M. Ayyub and G. J. White, (*Probabilistic Me*chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p114-117.

Radiation Hydrodynamics of a Slightly-Submerged Body, P. Ananthakrishnan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p832-835.

Statistical Characteristics of Strength and Load Random Variables of Strictures, Khaled Atua, Ibrahim As-sakkaf and Bilal M. Ayyub, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-cea D. Crigoriu, ed., 1996), p106-109.

Ultimate Transverse Strength and Reliability Analysis of Offshore Production Ships, Xiaozhi Wang and Lars M. Sørhaug, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p146-149.

Uncertainty Measures in Reliability Assessment of Ship Structures, Bilal M. Ayyub and Kwan-Ling Lai, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p621-626

Viscous Ship Waves on Water of Finite Depth, Andy T. Chan and Allen T. Chwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p515-518.

Shoaling

Combined Refraction-Diffraction - Wave-Current Interaction Over a Complex Nearshore Bathymetry, B. A. O'Connor, P. B. Sayers and N. J. MacDonald, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p173-184.

Wave Groups Approaching a Beach: Full Irrotational Flow Computations, T. C. D. Barnes and D. H. Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), pl.16-127.

Editor's Note, David Darwin, ST May 96, p469.

Shape Memory Release Device Experiment, Bernie F. Carpenter, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p76-79.

Approximate Riemann Solvers in FVM for 2D Hydraulic Shock Wave Modeling, D. H. Zhao, H. W. Shen, J. S. Lai and G. Q. Tabios, III, HY Dec. 96, p692-702.

Shock Waves in Curved Synthetic Cables, A. A. Tjavaras and M. S. Triantafyllou, EM Apr. 96, p308-315.

Soil Fracture Technique Stops Blast Shock Waves, CE May 96, p12.

Shopping centers

Another Times Square Attraction (Available only in Struc-tures Special Issue), Howard Shin, CE May 96, p12A-

Firm Serves As a Model for its Piers, CE Oct. 96, p97.

Membrane Technology Helps Shopping Center Clean Wastewater, CE Dec. 96, p89.

Retail Renovations (Available only in Structures Special Issue), Abdol Haghayeghi, CE May 96, p10A-12A.

Shore protection

Corps' Shoreline Work Assessed, CE Oct. 96, p11.

Experimental Study of the Flow Around a Breakwater, Mathieu Mory and Luc Hamm, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p501-512.

The Great Lakes Storm Damage Reporting System, David Wallin and P. S. Chawla, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p183-184.

History and Heritage in Coastal Engineering in The Nether-lands, Eco W. Bijker, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p390-412

History and Heritage of German Coastal Engineering, Hanz D. Niemeyer, Hartmut Eiben and Hans Rohde, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p169-213.

History of Coastal Engineering in Great Britain, Rendel Palmer, ed. and Tritton Limited Development and Engi-neering Consultants, ed., (History and Heritage of Coast-al Engineering, Nicholas C. Kraus, ed., 1996), p214-274.

History of Coastal Engineering in Spain, M. A. Losada, R. Medina, C. Vidal and I. J. Losada, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p465-499.

History of Coastal Engineering in the USA, Robert L. Wiegel and Thorndike Saville, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p513-600.

Monitoring Results of a Nearshore Disposal Berm, Emre N. Otay, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p547-558.

Permeable Pile Groins, Arved J. Raudkivi, WW Nov/Dec. 96, p267-272

Wave Run-Up: Recent IBW PAN Investigations, Jerzy Ko-lodko, Jaroslaw Kapiński, Marek Szmytkiewicz and Ryszard B. Zeidler, (Coastal Dynamics '95, William R.

Dally, ed. and Ryszard B. Zeidler, ed., 1996), p197-208. Shoreline changes

Behaviour-Oriented Models of Shoreface Evolution, Marcel J. F. Stive, Huib J. De Vriend, Peter J. Cowell and Alan Wm. Niedoroda, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p998-

Corps' Shoreline Work Assessed, CE Oct. 96, p11.

Estimation of Frequency-Dependent Reflection Coefficients Using Current and Elevation Sensors, David A. Huntley, David J. Simmonds and Mark A. Davidson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p57-68.

Improving Input Wave Data for Use with Shoreline Change Models, Kevin R. Bodge, Christopher G. Creed and Andrew W. Raichle, WW Sept./Oct. 96, p259-263.

Mitigation Measures for Eroding Muddy Shores, Ashish J. Mehta and Robert Kirby, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3728-3733.

Multiscale Shore Variability at Two Coasts, Pierluigi Aminti, Zbigniew Pruszak and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p617-628.

Reproducibility of Beach Profiles and Sand Ripples Generated by Huge Waves, Masahiro Ito, Hiroshi Murakami and Takeshi Ito, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p698-708.

A Shoreline Risk Index for Northeasters, David Kriebel, Robert Dalrymple, Anthony Pratt and Vincent Sakovich, (Natural Disaster Reduction, George W. Housner, ed.

and Riley M. Chung, ed., 1997), p251-252.

Signatures of Coastal Change at Mesoscales, Timothy W. Kana, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed., 1996), p987-997

South Carolina Coastal Erosion Study: Inlet Morpho-dynamics and Sediment Transport, P. A. Work, W. E. Rogers and E. J. Hayter, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1047-

Stochastics of Sediment Transport, Shore Evolution and Their Input, Rafall Ostrowski, Zbigniew Pruszak, Grzegorz Różyński and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p963-974.

Time Series Analysis of Long-Term Beach Level Data from Lincolnshire, UK, Howard N. Southgate and Luisa M. Beltran, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1006-1017.

Two-Dimensional Modeling of River Dynamics for the Expansion of Clover Island, Kennewick, Washington, Thomas S. Wang, David P. Simpson and Raymond Walton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2861-2866.

Verification of the Bruun Rule for the Estimation of Shoreline Retreat Caused by Sea-Level Rise, Nobuo Mimura and Hisamichi Nobuoka, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p607-616.

622

Analysis of Shoring Loads Using Field Data, T. W. Phil-brick, Jr. and D. V. Rosowsky, (Building an Internation-al Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p711-718.

and Jamshid Monammadi, ed., 1996), py 11-18. Field and Laboratory Measurements of Shoring Loads, Dryver R. Huston, Peter L. Fuhr and Jamie Willsey, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p704-710.

System Risk for Multi-Storey Reinforced Concrete Build-ing Construction, Deepthi Epaarachchi, Mark G. Stewart and David V. Rosowsky, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p230-233.

Applications of Soil Nailing in Residual Soil, James W. Sigourney. (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p57-65.

A Gatehouse for Johnson, Pedro Sifre and David Harrison,

CE Feb. 96, p44-47.
Nailing A Landslide (Available only in the Geo/ Environmental Special Issue), Al Colarusso, CE Nov. 96, p13A-15A.

Cellulose Fiber Reinforced Concrete, Parviz Soroushian, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p809-818.

Desiccation Theory for Soft Cohesive Soils, A. Naser Abu-Hejleh and Dobroslav Znidarčić, GT June 95, p493-502

Interfacial Shrinkage in Mortars, K. Sujata, Yunping Xi and Hamlin M. Jennings, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1669-1676.

Prediction of Concrete Cracking Under Coupled Shrinkage and Creep Conditions, Wei Yang, Kejin Wang and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p564-573.

Shrinkage Control in Acrylamide Grouts and Grouted Sands, V. Jasti, C. Vipulanandan, David Magill and Don Mack, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p840-850.

Some Phenomenological Aspects of High Performance Concretes, and their Consequences for Numerical Analysis, Ravindra Gettu, Ignacio Carol and Pere C. Prat, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p506-517.

Utilization of Recycled Fibers in Concrete, H. C. Wu, Y. M. Lim, V. C. Li and D. J. Foremsky, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p799-808.

Shrinkage cracking

A Fracture Mechanics Model for Shrinkage Cracking Ring, C. Ouyang, W. Yang and S. P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p861-864.

Signal processing

Application of Chaotic Dynamics to Stochastic Resonance, Marek Franaszek and Emil Simiu, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p86-89.

Assessment of Damage Identification Algorithms on Experimental and Numerical Bridge Data, David V. Jauregui and Charles R. Farrar, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p892-899.

Jamshu Mohamman, ed., 1990, psy-2-sys-Characterization of Granular Material by Low Strain Dynamic Excitation and ANN, Salome Romero and Sibel Pamukcu, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1134-1148.

Leveling by GPS Relative Positioning with Carrier Phases, Joz Wu and Shiou-Gwo Lin, SU Nov. 96, p145-157.

Signal Processing Study for an FM/CW Collision Avoidance System, Pascal Deloof, Atika Menhaj, Jamal Assaad, Nathalie Haese and Christian Bruneel, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p661-665.

Wavelet Transforms for Incident Detection on Motorways, Simon Cohen and Bian-shun Jing, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p222-226.

Signalized intersections

Geographic Database for Traffic Operations Data, Cesar A. Quiroga and Darcy Bullock, TE May/June 96, p226-234. Reexamining Vehicle-Actuation Strategies at Isolated Signalized Intersections, Michael Cassidy, Yu-Hao Chuang and Jeff Vitale, TE May/June 96, p235-540.

em.

Alkali-Silica Reaction in Concrete with Waste Glass as Aggregate, Christian Meyer, Stephen Baxter and Weihua Jin, (Materials for the New Millennium, Ken P. Chong, ed. 1996, p. 1358-1367.

ASR Behavior of Class C Fly Ash Modified Cement, Anil Misra, H. P. Niu, Bryan R. Becker and Jinshi Liu, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p348-355.

Earle T. Andrews, ASCE's 98th President, Dies at 94, NE Sept. 96, p15.

Electrochemical Treatment of Concrete: A New Approach to Extend the Service Life of Chloride Contaminated, Carbonated, or Alkali Silica Reactive Concrete Structures, David W. Whitmore and Keith Stewart, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1504-1511.

Resistance of Silica-Fume Concrete to Corrosion-Related Damage, Safwan A. Khedr and Ahmed F. Idriss, MT May 95, p102-107.

Some Phenomenological Aspects of High Performance Concretes, and their Consequences for Numerical Analysis, Ravindra Gettu, Ignacio Carol and Pere C. Prat, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p506-517. Stress Due to Alkali-Silica Reactions in Mortars, C. F. Ferraris, E. J. Garboczi, F. L. Davis and J. R. Clifton, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1379-1387.

Silicate

Benefits/Impacts of Utilizing Depleted Uranium Silicate Glass as Backfill for Spent Fuel Waste Packages, R. B. Pope, C. W. Forsberg, R. C. Ashline, M. D. DeHart, K. W. Childs and J. S. Tang. (High Level Radioactive Waste Management, Technical Program Committee, 1996), p369-371.

p309-371.
Depleted-Uranium-Silicate Backfill of Spent-Fuel Waste Packages for Repository Containment and Criticality Control, Charles W. Forsberg, Ron B. Pope, Ron C. Ashline, Mark D. DeHart, Kenneth W. Childs and Jabo S. Tang, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p366-368.

Long-Term Corrosion Behavior of Environmental Assessment Glass, W. L. Ebert and J. K. Bates, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p399-401.

Silo

Granular Flow Based on Non-Newtonian Fluid Mechanics, Sergio A. Elaskar, Luis A. Godoy and Alejandro T. Brewer, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p394-397.

Su. 1990), p.994-397.

Sensitivity Analysis of the Seismic Capacity for a RC Silo Due to Variance of Its Material Properties, Takeshi Kitahara and Hitoshi Seya, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p530-533.

Technique for Precise Measurement of Large-Scale Silos and Tanks, Xiaoli Ding, Richard Coleman and J. Michael Rotter, SU Feb. 96, p14-25.

Silts

Desilting Basin System of the Dul Hasti Hydroelectric Project, Daniel Develay, Jean Binquet, E. Divatia and C. R. Venkatesha, HY Oct. 96, p565-572.

Impacts due to Density Current Deposition in Reservoirs, Jiahua Fan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2097-2102.

Managing Sediments in Reservoirs at FERC, Shou-shan Fan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2084-2090.

On Silt Abrasion Erosion of Three Gorges Hydraulic Turbine in the Future, Shehua Huang, Wei Li and Liangjun Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3856-3862.

Stress and Temperature Effects on Silt Frost Heave, Seyed M. Marandi, Douglas I. Stewart and Terrence W. Cousens, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p23-34.

Silty soil

Earth Slide on Geomembrane, A. C. Stamatopoulos and P. C. Kotzias, GT May 96, p408-411.

Vertical Migration of Diesel into Silty Sand Subject to Cyclic Freeze-Thaw, K. W. Biggar and J. C. R. Neufeld, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p116-127.

Simple shear tests

Strain Rate and Preshear Effects in Cyclic Resistance of Soft Clay, G. Lefebvre and P. Pfendler, GT Jan. 96, p21-26.

Undrained Multidirectional Direct Simple Shear Behavior of Cohesive Soil, Don J. DeGroot, Charles C. Ladd and John T. Germaine, GT Feb. 96, p91-98.

Simulation

3-D Graphical Simulation for Temporary Facility Planning using Object-Oriented Building Product Model, Kenji Ito, Yuji Kano, Jun Ueda and Shinichi Setoguchi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p49-55. Accidental Pollution Simulation System and Pollutant Transboundary Transport Problems for Tura River, N. N. Shagalova, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p714.

ACPSS—Animated Construction Process Simulation Sys-tem, Liang Y. Liu, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Adaptive Search Optimization in Reducing Pump Operat-ing Costs, S. Pezeshk and O. J. Helweg, WR Jan/Feb.

96, p57-63.

30, p. 740.3.
30, p. 740.3.
Addressing Uncertainty in Rock Properties through Geostatistical Simulation, Sean A. McKenna, Marc V. Cromer, Christopher A. Rautman and William P. Zelinski, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p. 297-311.

ALPS: The Automated Lift Planning System, Mike Williams and Craig Bennett, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p812-817.

Analysis and Simulation of Road Profiles, V. Rouillard, M. A. Sek and T. Perry, TE May/June 96, p241-245.

An Analysis of Strong-Discontinuities in Inelastic Solids with Applications to the Finite Element Simulation of Strain Localization Problems, F. Armero and K. Gariki-pati, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p136-139.

Analytical Modelling of Damage Based on an Improved Percolation Model, A. Delaplace, S. Roux and G. Pijau-dier-Cabot, (Engineering Mechanics, Y. K. Lin and T. C.

Su. 1996), p1171-1174.

Application of a Coupled 3-D Hydrodynamics-Sediment-Water Quality Model, Xinjian Chen and Y. Peter Sheng. (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p325-339.

Application of a Reliability-Based Fatigue Life Model to a Gas Turbine Engine Structure, Robert G. Tryon, Thomas A. Cruse and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p636-639.

Application of an Optical Monitor in Automatic Control of Coagulation Dosing in Water Treatment Operations, Chihpin Huang and Chi-Bing Liu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2450-2455.

Application of Discrete Event Methodologies to Urban Multimodal Transportation Systems, Angela Di Febbraro and Simona Sacone, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p154-158.

Applications of CFD Flow Modelling in Building Design, J. R. Sinclair, P. A. Irwin, K. M. Matsui, M. Vanderhey-den and F. Kriskic, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p997-1004.

Approach to Failure Mode Analysis of Large Structures, Shaowen Shao and Yoshisada Murotsu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p704-707.

Artificial Gravity, Zachary Zutavern, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1315-1318.

Automated Optimal Structural Design Synthesis using Machine Generated Rule Base and Artificial Neural Net-works, J. M. Deshpande, M. J. Skibniewski and K. Lucprasert, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p867-873.

Autonomous Mapping System for an Interior Finishing Robot, Abraham Warszawski, Yehiel Rosenfeld and Igal

Shohet, CP Jan. 96, p67-77.

BALANCE - A Method for Traffic Adaptive Signal Control Field Trial and Simulation Studies, Bernhard Friedrich and Hartmut Keller, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p615-619.

Calibration and Simulation of Non-Gaussian Translation Processes, M. Grigoriu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p804-807

Carbon Reduction of Iron Oxides in Lunar Simulants, Scott Hayes, Heather Hamlett and Roberta Bustin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p734-740.

Centrifugal, Gravity and Side-wall Effects in Annular Shear Cells, Cliff K. K. Lun, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p104-107.

Chaotic Advection in a Bioengineering System, Ahmet C. Omurtag, Victor Stickel and Rene Chevray, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p450-453.

Characterization of Turbulent Scales in Atmospheric Wind by Orthonormal Wavelets, M. R. Hajj, H. W. Tieleman nd M. Bikdash, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p971-974.

A Comparative Analysis of FORM/SORM and Polynomial Chaos Expansions for Highly Nonlinear Systems, R. Ghanem and D. Ghiocel, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p535-538.

Comparative Simulation of Oil Weathering, Hector R. Fuentes, Rudolf Jaffé, Vassilios A. Tsihrintzis and Rahul V. Shrotriya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p559-564.

A Comparison Between Linear Stability and Direct Numerical Simulation of Waves in a Trailing Vortex, Saad Ragab, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1058-1061.

Comparison of Construction Alternatives Using Matched Simulation Experiments, Photios G. Ioannou and Julio C. Martinez, CO Sept. 96, p231-241.

A Comparison of Geological and Stochastic Approaches to Characterization of Heterogeneity and their Effects on Simulations of Pump-and-Treat Systems, Peter E. Riemersma, Jean M. Bahr and Mary P. Anderson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1003-1018.

Comparison of Some Simulation Algorithms on Basis of Distribution, Marc P. Mignolet and Maruvada V. Harish,

EM Feb. 96, p172-176.

Computer Modelling and Simulation for High Speed Railway Applications, C. Ianniello, S. Savio and G. Sciutto, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p54-58.

Constitutive Behavior of Granular Media Using a Lattice Type Model, S. Ramakrishnan, Muniram Budhu and George Frantziskonis, (Engineering Mechanics, Y. K.

Lin and T. C. Su, 1996), p713-716.

A Decision Support System for Minimizing the Distur-bance of Airfield Construction (SFIA Case Study), Adib Kanafani and Manar Shami, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p234-245.

Design Live Loads for Crowds in Motion, A. Ebrahimpour and R. L. Sack, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

Mohammadi, ed., 1996), p420-427.

Development of a Pressure Suit Simulation System for Neutral Buoyancy Operations, David L. Akin and Claudia U. Ranniger, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p552-

Development of Remediation Technologies Simulators, Mark S. Dortch and Christian J. McGrath, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2583-2588.

Digital Image Analysis of Two-Dimensional Fluidized Beds at Lunar Gravity, D. J. Brueneman, L. L. Sorge, M. A. Gibson, C. W. Knudsen and H. Kanamori, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p769-775. Discussions of a 3D Numerical Simulation of Transient Regional Groundwater Flow and Transport, Bernard B. Hsieh, Mansour Zakikhani and William D. Martin, (North American Water and Environment Congress & Destructive Water, Chenchavva Bathala, ed., 1996).

Dominant Eddy Simulation in Turbulent Flow, J.-B. Zhang and V. H. Chu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p438-441.

- DRACULA Microscopic, Day-to-Day Dynamic Model-ling of Traffic Assignment and Simulation, Ronghui Liu, Dirck Van Vliet and David Watling, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p444-448.
- Dynamic Mechanical Properties of SBR Modified Asphalt, Fariborz Gahvari and Imad L. Al-Qadi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p133-
- Dynamic Vehicle Allocation Under Real Time Information: Operational Considerations and Potential Efficiencies, Amelia C. Regan, Hani S. Mahmassani and Patrick Jaillet, (Applications of Advanced Technologies in Transpor-tation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p690-694.

The Effects of Construction Joint in Mass Concrete, Donald D. Liou, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p193-202.

Empirical Simulation Technique Based Storm Surge Frequency Analyses, Norman W. Scheffner, Leon E. Borgman and David J. Mark, WW Mar./Apr. 96, p93-101.

Energy Dissipation in Dynamic Failure Simulations, Thomas Münz, Karsten Rix and Kaspar Willam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1046-1049.

Equilibrium/Control Results and the Approach to Near-Equilibrium of a New Dynamic Micro-Simulation/ Assignment Model on a Network Model of York, R. Clegg, M. O. Ghali and M. J. Smith, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p568-572.

Estimating Effects of TLC Into Urban Public Road Transport, Luigi Biggiero, Massimo Di Gangi and Bruno Mon-tella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p66-70.

Estimation of Annual Storm Runoff Coefficients by Contin-uous Simulation, Ashok Pandit and Ganesh Gopalakrish-

nan, IR July/Aug. 96, p211-220.

Estimation of Turning Movement Proportions from Partial Sets of Traffic Counts at Intersections, Gary A. Davis and Chang-Jen Lan, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p628-632.

Evaluation of a Real-Time Expert System for Surface Street Traffic Management and Control, Stephen G. Ritchie, Filippo Logi, Seungmin Kang and Craig Rindt, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p276-280.

Evaluation of the Nitrogen Cycle in a Tidal Flat, Kyoko Hata, Iwao Oshima, Takcaki Kuramoto and Kisaburo Nakata, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p542-554.

An Evaluation of TLC Systems Benefits and Potential Mar-ket in Italy, Ennio Cascetta and Bruno Montella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p59-65.

Expected Moments Alogrithms for Flood Frequency Analysis, William L. Lane and Timothy A. Cohn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2185-2190.

Experimental Implementation of Hybrid Control, J. Pandya, Z. Akbay, M. Uras and H. Aktan, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1172-1179.

Fatigue Analysis with Random Loads, Igor Rychlik and Georg Lindgren, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-

Reliability, Dan M. Frangupoi, ed. and Filica E. Sogoriu, ed., 1996), p46-49.

First Exit Times in Non-Linear Dynamical Systems by Advanced Monte Carlo Simulation, H. J. Pradlwarter and W. Kliemann, (Engineering Mechanics, Y. K. Lin and T.

C. Su, 1996), p523-526.

Flexible Boundary for Discrete Element Simulation of Granular Assemblies, Runing Zhang and Stein Sture, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p)25-720.
Flood Quantiles for Small Watersheds Using Peak Elevation to Volume Method, Michael C. Morgan and Eric D. Loucks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p146-151.

Flow Propagation Description in Dynamic Network Load-ing Models, Vittorio Astarita, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p599-603.

Formulation and Implementation of Improved Zero-Thickness Interface Elements, V. N. Kaliakin, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

p285-288.

p.265-268. A Framework for Dynamic Network Traffic Simulation on Distributed Systems, Mithilesh Jha, Anupam Joshi and Kumares Sinha, Applications of Advanced Technologies in Transportation Engineering, Yogos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p.388-393.

Fuzzy Arithmetic for Ecological Risk Management, Jacques Ganoulis, Iraklis Bimbas, Lucien Duckstein and Jacques Ganouits, trakits binnois, Lucien Duckstein and Istvan Bogardi, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p401-415. Generation of Ground Motion Time Histories as Non-Stationary Vector Processes: Response Spectrum Com-

patible Seismograms, George Deodatis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p616-619.

Graphic-Based Interactive Path Planning for Large-Scale Bridge Maintenance Cranes, Sungwoo Moon and Leonhard E. Bernold, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p79-85.

Graphical Simulation for Project Planning: 4D-PlannerTM Mike Williams, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p404-409.

Hybrid Stochastic Finite Elements and Generalized Monte Carlo Simulation, R. Ghanem, (Probabilistic Mechanics & Structural Reliability. Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p182-185.

Hydraulic and Sediment Models for Design of Restoration of Former Tidal Marshland, Guang-dou Hu, M. L. Johnson and R. B. Krone, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Hydrodynamic Modeling for Assessing Engineering Alter-natives for Elevating the Kennedy Causeway, Corpus Christi, Texas, Cheryl A. Brown, Nicholas C. Kraus and Adele Militello, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p681-694.

Influence of Spatial Variability of Soil Properties on Seismically Induced Soil Liquefaction, Radu Popescu, Jean H. Prevost and George Deodatis, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1098-1112.

The Influence of Turbulence Closure Strategy on Numerical Modeling of Shallow Water Tides, Roger R. Grenier, Jr. and Richard A. Luettich, Jr., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng,

1996), p143-155.

An Integrated Model for Network Traffic Management for megrated Model for Network Traffic Management for Long Term Disruptions, Mithilesh Jha, Srinivas Peet and Samer Madanat, (Applications of Advanced Technol-ogies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p335-340. Investigating the Non-Convexity of the Groundwater Quali-ty Management Response Function, David P. Ahlfeld and Mary Palumbo, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p854-856.

Bathala, ed., 1990), p854-850.
Lanfill Site Evaluation and Application of MODFLOW to simulate Hydraulically Conductive Zones in Bedrock Associated with Diabase Dikes in North Carolina, M. A. Ponti, Jr., Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996).

Larew, Richard E. Ashraf S. Barsoum and Fabian C. Hadipriono, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p906-912.

Lift Off and Entrainment of Sediments, J. M. Redondo, M. A. Sánchez and R. Castilla, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

p709-719.

Limit State Design Method of Structural System Using Reliability-Based Optimization and Efficient Monte-Carlo Simulation Technique, Wataru Shiraki, (Building an In-ternational Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p635-

Linked Lists for Transport Simulations Using Lagrangian Parcels, Poojitha D. Yapa, Li Zheng and Tomonao Koba-yashi, CP Jan. 96, p88-90.

An LPI Numerical Implicit Solution for Unsteady Mixed-Flow Simulation, D. L. Fread, Ming Jin and Janice M. Lewis, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3222-327.

Magnetic Investigation of a Simulated Hazardous Waste Site, Susan E. Burns and Kenneth E. Lemons, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-

 Chartes D. Shackerlott, ed., rischin F. veson, ed. and Mary J. S. Roth, ed., 1996), p813-825.
 Managing Border Irrigation for Near-Zero Discharge, T. S. Strelkoff and A. J. Clemmens, (North American Water and Environment Congress & Destructive Water, Chendre Chendre Progress) chayya Bathala, ed., 1996), p1711-1715.

Mechanical and Load-Settlement Characteristics of Two Lunar Soil Simulants, Steven W. Perkins and Craig R.

Madson, AS Jan. 96, p1-9.

Mechanical Properties of JSC-1 Lunar Regolith Simulant, J. Ledlie Klosky, Stein Sture, Hon-Yim Ko and Frank

J. Ledlie Klosky, Stein Sture, Hon-Tim Ko and Frank Barnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p680-688.
Micromechanical Simulation of Geotechnical Problems using Massively Parallel Supercomputers, David W. Washington and Jay N. Meegoda, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p717-721.

Mode Search Algorithm for System Reliability under Earthquake Load, Hideki Idota and Tetsuro Ono, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p978-981.

p9/6-76-76.
A Model of Meteoroid Atmospheric Entry with Implica-tions for the NEO Hazard and the Impact of Cornet Shoe-maker-Levy 9 on Jupiter, D. A. Crawford and M. B. Boslough, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p81-87.

Model Studies of Effects on Lunar Soil of Chemical Explo-sions, Chaun-Ping Lin, Deborah J. Goodings, Leonhard E. Bernold, Richard D. Dick and William L. Fourney,

GT Oct. 94, p1684-1703.

Modeling Groundwater Contaminant by Unstructured FVM, Jinglian J. Liu, Bharat K. Soni and Victor L. Zitta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Modeling the Periodic Stratification and Gravitational Circulation in San Francisco Bay, California, Ralph T. Cheng and Vincenzo Casulli, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p240-254.

Multimedia Development Software: Object-Oriented Inter-face-Based Simulation, Hossam El-Bibany, CP Oct. 96,

p295-299.

The Nature of Passivity of Reinforcing Steel, Farrel Martin and Jan Olek, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1111-1120.

A New Software Architecture for Finite Element Analysis,

New Software Architecture for Finite Element Analysis, Graham Archer, Christopher Thewalt and Gregory L. Fenves, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p683-689. onlinear SDOF System Subject to Poisson-Distributed Pulse Process, Sau-Lon James Hu, George Tsiatas and

Shuang Jin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p680-683.

626

Nonparametric Estimation of Low-Flow Frequencies, Kaz Adamowski, HY Jan. 96, p46-49.

Numerical Simulation of Flow Field Around Buildings.

Numerical Simulation of Flow Field Around Buildings, Da-hai Yu and Ahsan Kareem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p490-493.Numerical Simulation of Internal Kelvin Waves with Z-level and Sigma Level Models, David J. Schwab, Dmitry Beletsky, William P. O'Connor and David E. Dietrich, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p298-312.Numerical Simulation of Permasera Deformation in Elevi-

and Raiph 1. Cheng, 1990), p.296-312.

Numerical Simulation of Permanent Deformation in Flexible Pavement Systems Subjected to Moving Loads, David J. Kirkner, Weixin Shen, Michael I. Hammons and Donald M. Smith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p430-433.

Numerical Simulation of Transcriptor in the New York

Numerical Simulation of Temperature in the New York Bight, S. Rao Vemulakonda, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p66-79.

on Efficiency and Accuracy in Simulations of Granular-type Systems, Yi Sun and Oleg Vinogradov, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p96-99. On the Development of a Selective Algorithm in Advanced

Monte Carlo Simulation, Helmut J. Pradlwarter, Napat Harnpornchai and Gerhart I. Schuëller, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol,

ed. and Mircea D. Grigoriu, ed., 1996), p14-17.

On-Line Motion Planning for the Three-Link Revolute Arm in an Unknown Three-Dimensional Environment, Sanjay Tiwari and Brandon Kroupa, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p1-7

Optimal Polynomial Control of a Duffing System, Anil K

Optimal Polynomial Control of a Duffing System, Anil K. Agrawal and Jann N. Yang, Eingineering Mechanics, Y. K. Lin and T. C. Su, 1996), p890-893.
Optimization and Simulation in Design and Operation of Reservoirs, A. Afshar and F. Peyrovian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1956-1961.
Practical Probabilistic Approach Using Spreadsheet, B. K. Low, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1284-1302. 1302

Probabilistic Analysis of Ocean Outfall Mixing Zones, Hening Huang, Robert E. Fergen, John R. Proni and John

J. Tsai, EE May 96, p359-367

Probabilistic Model for the Simulation of Traffic Flows over Highway Bridges, Cesar Crespo-Minguillon and Juan R. Casas, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p26-29.

Probabilistic Simulation of Decomposition of Liquid Pro-

pellant, N. R. Moore, N. W. Ferraro, D. H. Ebbeler, L. E. Newlin, J. J. Blandino, R. A. Beaudet, C. M. Moran and S. H. Moore, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p640-643. Probabilistic Simulation of Geologic Waste Disposal Facilities Using the Repository Integration Program (RIP), Ian Miller and Rick Kossik, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p944-964.

Random Elastic Response Characteristics of Bar Structures by Monte Carlo Simulation, Michael Koutsoukis and Edmund S. Melerski, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p812-815.

Random Vibration of a Hysteretic Oscillator, Arvid Naess and Vibeke Moe. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p514-517.

Random Vibration of Mechanical and Structural Systems

Random Vibration of Mechanical and Structural Systems by T. T. Soong and Mircea Grigoriu, Dan M. Frangopol, EM Feb. 96, p184.
Reducing the Vulnerability of Transmission Lines in Hurri-cane Regions by Choosing Minimum Life Cycle Cost Designs, Peter J. Vickery and Lawrence A. Twisdale, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p245-246.
Reliability Evaluation of Slender HSC Columns, Sofia M.

C. Diniz and Dan M. Frangopol, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p242-245.

Milcea D. Origoriu, ed., 1990, p.242-243.
Reliability of High-Strength Concrete Columns, Sofia M.
C. Diniz and Dan M. Frangopol, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p213-222.
Research to Application: Network Models to Simulate Flow and Transport in Heterogeneous Media, John F. Peters and Stacy E. Howington, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2571-2576.

chayya Bathala, ed., 1996), p2571-2570.
Risk Based Analysis of Major Rehabilitation of Hydraulic Structures Using REPAIR, David Moser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2498-2503.
Robust Stabilization of Systems with Time Delays, Mohammad Hosseini and Firdaus Udwadia, (Probabilistic Dan M. Franco.

tic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p438-441.

Scale Effects of Shallow Foundations on Lunar Regolith, Scale Effects of Shallow Foundations on Lunar Regolith, Steven W. Perkins and Craig R. Madson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p963-972.Sediment Impacts on Yield from a Two-Reservoir System in Puerto Rico, Gregory L. Morris, (North American Water and Environment Congress & Destructive Water,

Waler and Environment Congress & Destructive Waler, Chenchayya Bathala, ed., 1996), p2103-2108. Segregation in Hopper Flows, Masami Nakagawa, Xiaoshan Lin and G. G. W. Mustoe, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p386-389. Seismic Behavior of Masonry Walls: Experimental Simula-tion, Miha Tomaževič, Marjana Lutman and Ljubo Pet-

ković, ST Sept. 96, p1040-1047

Selecting Design Conditions as Part of a Watershed Ap-proach to Water Quality Control, David W. Dilks and Kathryn A. Sweet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1543-1548. Simulated Seismic Load Tests on Reinforced Concrete Col-

umns, S. Watson and R. Park, ST June 94, p1825-1849. Simulating Nature Wind Waves in a Wave Flume, John Z. Yim, C.-R. Chou and M.-Y. Lai, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p45-56.

Simulating Seismic Response Behavior of Telecommunica-tions Equipment, Ronald Ziemian, Derek Mostoller and Kenneth Philogene, ST Oct. 96, p1247-1249.

Simulating the Transport of an Algae Bloom off the West Coast of Vancouver Island, M. G. G. Foreman, J. F. R. Gower, R. E. Thomson and J. Y. Cherniawsky, (Estua-rine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p180-191.

Simulation and Visualization of Martian Rover, William

Simulation and Visuanization of Martian Rover, Wilman Lincoln, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p143-149.
Simulation of Channel Changes Induced by a Reservoir, Howard H. Chang, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2109-2113. Simulation of Dilute Gas-Solid Flows in Horizontal Channels, Cliff K. K. Lun and Hong S. Liu, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p390-393. Simulation of Dune and Nourished Berm Erosion During

Storm Surges, Jürgen Newe and Hans-H. Dette, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p850-861.
Simulation of Ergodic Multivariate Stochastic Processes,

George Deodatis, EM Aug. 96, p778-787.

Simulation of Multi-Dimensional, Multi-Variate, Non-Gaussian, Homogeneous Stochastic Fields with Applica-tions to Soil Liquefaction, Radu Popescu, George Deo-datis and Jean H. Prevost, Qrobabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), 808-811.

Simulation of Nonlinear Structures with Artificial Neural

Simulation of Nonlinear Structures with Artificial Neural Networks, Thomas L. Paez, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p72-75.
Simulation of Pulsatile Flow Past a St. Jude Valve, L. Niu, D. Bluestein and R. T. Schoephoerster, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p330-333.
Simulation of Regional Ground-Water Flow on a Transboundary Flowline; Trans-Pecos, Texas and Chihuahua, Mexico, Barry J. Hibbs, Bruce K. Darling, John M. Sharp, Jr. and John B. Ashworth, (North American Water and Environment Converses & Destructive Water Chem. and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1323-1330.

chayya Bathaia, ed., 1990, pl.323-1330.
 Simulation of Suspended Particles Transport in the Entrance Region of Tube Flow, Shi-kang Wang and N. H.
 C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C.
 Su, 1996), p462-465.
 Simulation of Unsaturated Zone Virus Transport Adjacent

to Municipal Wells, D. D. Adelman and M. A. Tabidian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1742-1747

A Simulation Procedure for First Passage Problems of Non-linear Structures, Veit Bayer and Christian Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p816-819.

Simulation-Based Reliability Assessment for Structural Engineers by Pavel Marek, Milan Gustar, and Thalia Anagno, James T. P. Yao, ST July 96, p841.

Simulations of the Maine Coastal Current, Monica J. Hol-boke and Daniel R. Lynch, (Estuarine and Coastal Mod-eling, Malcolm L. Spaulding and Ralph T. Cheng,

1996), p156-167.

Smooth Modelling of Oblique Contact with Friction of Turbine Blades: Behaviour Analysis Under Random Excitation, Erick Tournu, Sergio Bellizzi and Béatrice Costa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p760-763

Spaceborne Fourier Transform Hyperspectral Imager, Leonard John Otten, III, Andrew D. Meigs and R. Glenn Sellar, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p224-230.

Spatial Variability of Soil Parameters, Derin N. Ural, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p341-352.

SpatioTemporal Stochastic Open-Dhannel Flow, Timothy K. Gates and Muhammad A. Al-Zahrani, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p346-351.

Standpipe Solids Transfer Behavior in a Lunar Gravity Flu-idized Bed, Les L. Sorge, David J. Brueneman, J. Dale idized Bed, Les L. Sorge, David J. Brueneman, J. Ortego, Jr., Michael A. Gibson, Christian W. Knudsen, Hiroshi Kanamori and B. Kent Joosten, (Engineering, in Space, Stewart W. Construction, and Operations in Space, Stewart Johnson, ed., 1996), p776-782.

Statistical Moments of Principal Stress-Related Quantities in Random Vibration Analysis, Ronald S. Harichandran and Mu-Tsang Chen, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p962-965.

Stochastic Modeling of Imperfections in Beams, B. W. Yeigh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p676-679

Stochastic Parallel-Brittle Networks for Modeling Materials, D. A. Gasparini, P. Bonacuse, L. Powers and A. Romeo, EM Feb. 96, p130-137.

Synchronized Measurements of Bed-Shear Stress and Flow Velocity in Open Channels with Simulated Vegetation, Fabian López and Marcelo García, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3651-3655.

- A System Approach for Identifying and Improving Hydraulic Numerical Modeling Reliability, Bernard B. Hsieh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2725-2730.
- System Identification Study of a 1:10 Scale Steel Model using Earthquake Simulator, Satish Nagarajaiah and Xiaojiang Ma, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p764-767.
- Theory and Simulations of Relaxation and Cyclic Granular Flows, Marijan Babic and William J. Bocchieri, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p. 108-111.
- Three-Dimensional Finite-Element Simulation of FWD Loading on Pavement Systems, W. Uddin, R. M. Hackett, P. Noppakunwijai and Z. Pan, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p284-294.
- Three-Dimensional Simulation of River Ice Jams, Mark A. Hopkins, Steven F. Daly and James H. Lever, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p582-593.
- Three-Dimensional Simulation of Structural Pounding During Earthquakes, M. Papadrakakis, C. Apostolopoulou, A. Zacharopoulos and S. Bitzarakis, EM May 96, p423-431.
- Time-Dependent Reliability Analysis of Redundant Brittle Systems, Animesh Dey and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p700-703.
- The Tram Simulation in Helsinki A New Research Method, Jarkko Niittymäki and Kari J. Sane, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p76-80.
- Transition from Partial Factors Method to Simulation Based Reliability Assessment in Structural Design, Pavel Marek and Milan Gustar, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996, p558-651.
- Trip Mode Recommendation Using Travel Time Prediction, Michael Cremer, Carsten Holtmann and Stefan Schrieber, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p330-334.
- Using Virtual Reality to Avoid Construction Falls, Diah R. Soedarmono, Fabian C. Hadipriono and Richard E. Larew, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p899-905.
- Wave Induced Nearshore Circulation in the Ebro Delta, A. Sánchez-Arcilla, F. Collado, M. G. Coussirat and A. Rodriguez, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p437-448.

Simulation models

- Aid-to-Decision for Variable Message Sign Control in Motorway Networks during Incident Condition, Jean-Marc Morin, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p378-382.
- The Analysis of Freeway Reconstruction Impacts on Travellers, Vittorio Astarita, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), a460.446
- Animation of Complex Construction Simulation Models, Photios G. Ioannou and Julio Martinez, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p620-626.
- Application of One- and Two-Dimensional Flow Models for an Evaluation of Riverine Wetland Hydrologic Functions, C. Charles Tai, Chou Fang and Apurba K. Borah, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p46-51.

- Applications of Predictive Numerical Simulations Using Calibrated Marcus Gopt and Hartmut Keller, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p394-397.
- Approaches to Simulating Organizational Behavior of Concurrent Design Teams. Yan Jin and Raymond E. Levitt, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p281-287. Bayesian Model for Fate and Transport of Polychlorinated
- Bayesian Model for Fate and Transport of Polychlorinated Biphenyl in Upper Hudson River, Laura J. Steinberg, Kenneth H. Reckhow and Robert L. Wolpert, EE May 96, p341-349.
- Calibration of a Water Quality Model Using the Influence Coefficient Algorithm, Kyung Soo Jun and Kil Soon Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4010-4015.
- Channel Junction Effects in Channel Network Flow Simulation, Gye-Woon Choi, Keun-Heung Kim and Sang-Jin Ahn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1899-1904.
- Civil Engineering Applications of Genetic Algorithms, Weng-Tat Chan and David K. H. Chua, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1072-1078.
- Civil Engineering, Jonge Vander Sky, ed., 1996), p1072-1078.

 Comparison of Computed Three-Dimensional Wave-Driven Currents with Measurements, Philippe Péchon and Arnaud Desitter, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p513-520.
- Comparison of Near-Field Dilutions Derived from In Situ Measurements and Simulated Dilutions at the Sand Island Sewage Outfall Plume, HI, A. A. Petrenko, B. H. Jones, T. D. Dickey and P. J. W. Roberts, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3886-3891.
- Computerized Tool for Hierarchical Simulation Modeling, Anil Sawhney and Simaan M. AbouRizk, CP Apr. 96, p115-124.
- Cropping Systems on the Delmarva Peninsula to Reduce Ground Water Contamination, W. F. Ritter and R. W. Scarborough, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2341-2346.
- Dam Foundation Erosion Study: Pit 4 Scale Model Simulation, R. J. Wittler, S. R. Abt, T. L. Lewis, J. F. Ruff and K. Adhya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3829-3834.
- A Damage Simulation Model for Buildings and Contents in a Hurricane Environment, N. Stubbs and D. C. Perry, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p989-996.
- A DEM Based Hydrologic and Sediment Transport Model, Menghua Wang and Allen Hjelmfelt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2695-2700.
- Depth-Averaged Boussinesq Equations Applied to Flow in a Converging Channel, Thomas Molls and Gang Zhao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p328-333.
- Effect of Grade Control Structures on DEC Streams, R. L. Bingner, E. J. Langendoon, L. Li and C. V. Alonso, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p280-285.
- Efficient Pump Representation for Fixed-Grid MOC in Pipeline Systems, David H. Axworthy and Bryan W. Karney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p370-375.
- Emulation of DWRDSM using Artificial Neural Networks and Estimation of Sacramento River Flow from Salinity, Nicky Sandhu and Ralph Finch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4335-4340.

Evacuation Strategies for Public Officials, T. Michael Carter, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p109-110.

Evaluating Strategies to Manage Seawater Intrusion, Tracy Nishikawa and Eric G. Reichard, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4323-4328.

Evaluating Subsurface Uncertainty Using Zonal Kriging, William L. Wingle and Eileen P. Poeter, (Uncertainty in

the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1318-1330.

Evaluation of Vehicle-Specific Information in Traffic Control Systems, Alireza Kamyab, T. H. Maze and Reginald R. Souleyrette, TE Nov./Dec. 96, p421-429.

Experiment with Simulation Models in Water-Resources Negotiations, René Reitsma, IIze Zigurs, Clayton Lewis, Vance Wilson and Anthony Sloane, WR Jan./Feb. 96,

Groundwater Flow Modelling at the Olkiluoto Site, Fin-land, Jari Löfman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p141-

Hindcast Simulations of Ocean Currents in the Norwegian Coastal Waters. Part 1: Model Set Up and Sensitivity Tests, Harald Engedahl, (Estuarine and Coastal Model-ing, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p379-390.

Hydrodynamic Simulations in Sediment-Carried Contaminant Modeling for the Buffalo River, New York, Ruo-chuan Gu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1039-1044.

The Impact of Numerical Precision on Optimal Ground-water Hydraulic Control, David P. Ahlfeld and R. Guy Riefler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p618-621.

Implementation and Application of Parallel Processing Computer Methods for Probabilistic Analysis, Harry R. Millwater, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p266-269

Integrated GIS Based Watershed Management Modeling System, L. E. Gomez, C. L. Chen and J. Herr, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p508-514.

Interseasonal Irrigation System Planning for Waterlogged Sodic Soils, S. N. Panda, S. D. Khepar and M. P. Kaushal, IR May/June 96, p135-144.

Mapping Groundwater Vulnerability to Nitrate and Pesticide Contamination in the Salinas Valley, Monterey County, California, Weibo Yuan, Joe LeClaire, Ali Diba, Michael Inada and Matt Zidar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1099-1104.

Mobility Forecast in an Urban Area through the Use of Neural Networks, Maria Nadia Postorino and Giuseppe M. L. Sarnè, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p213-217.

Modeling Freeway Lane Changing Behavior, Haris N. Koutsopoulos, Moshe E. Ben-Akiva, Rabi G. Mishalani and Kazi I. Ahmed, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Modeling of Rattlesnake Creek Watershed Using "Swat" Model, S. R. Ramireddygari, J. K. Koelliker and R. S. Govindaraju, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3241-3246.

Monte Carlo Simulation to Evaluate Slope Stability, Douglas Scott Chandler, (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p474-493.

Multicomponent NAPL Composition Dynamics and Risk, Catherine A. Peters, Paula A. Labieniec and Christopher D. Knightes, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation,

Substitute Transfer and Renderland Renderlan

A New Model of California's SWP/CVP Systems, Tariq N. Kadir and Miguel A. Marino, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3068-3073.

Numerical Simulation of DNAPL Emplacement and Redis-tribution in Heterogeneous Porous Media at the M Area of the Savannah River Site, Rex A. Hodges and Ron W. Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Laksh-

mi N. Reddi, ed., 1996), p619-627 Numerical Simulation of Hydraulic Jump, Anand Raman and M. Hanif Chaudhry, (North American Water and En-vironment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p4052-4057.

Ponding Study of January 1993 Storm Event within Airport Industrial Park, Oceanside, California, George Hsu and Yen-Hsu Chen, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2282-2287.

PRIMAVERA: Integrated ATT Strategies for Urban Arterials, F. O. Montgomery, A. D. May, K. A. Fox, F. Biora, V. Mauro and S. Jones, (Applications of Advanced Technologies in Transportation Engineering, Yorgos anedes, ed. and Francesco Filippi, ed., p685-689.

The Rapid Simulation of a Signalised Road Network, Gordon Russell, Neil Ferguson, Paul Shaw and John McInnes, (Applications of Advanced Technologies in Transportation Engineering, Vorges J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p449-454.

Reservoir Targets for Urban Water Supply Systems, B. J. C. Perera and Gary P. Codner, WR July/Aug. 96, p270-

Risk Analysis of Joint Reservoir Operation in Central Taiwan, Jan-Tai Kuo, Chang-Shian Chen and Yuan-Hsi Liao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Robustness of Reservoir Storage Reallocation Decisions to Climate Change, Andrew W. Wood, Dennis P. Letten-maier and Richard N. Palmer, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p19-37.

The Role of Circulation Patterns on the Simulation of Constituent Transport in San Juan Bay, Puerto Rico, Gavin Gong and James D. Bowen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p518-529.

Simulating DBP Precursor Transport in Sacramento Delta, Paul H. Hutton, Nirmala Mahadevan and Francis I. Chung, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3557-3562.

Simulating Evapotranspiration on Semi-Arid Rangelands, G. N. Flerchinger, C. L. Hanson, W. P. Kustas and M. A. Weltz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p424-429.

Simulation of Perilithic Algae as a Biofilm and its Interaction with the Water Column, Stephen A. Breithaupt, Ian P. King and Gerald T. Orlob, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1620-1625.
Simulation of Pesticide Transport for Verification of the DVDDEM Christopher Enright and Paul Hyston (North

DWRDSM, Christopher Enright and Paul Hutton, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3563-3568.

Subjective Probability Assessment in Water Resources Planning, Charles Yoe, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p294-314.

Technology Has Bright Future, Darryl W. Davis, CE May

96, p26-27.

Uncertainty in Comparative Analysis with Continuou Nonpoint Source Pollution Models, Dipmani Kumar and Conrad D. Heatwole, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1705-1710.

Uncertainty Model is a Redundancy, William Hayden, CE

Aug. 96, p31

Virtual Reality Modeling for Bridge Construction, Tsung-chieh Tsay, Fabian C. Hadipriono and Richard E. Larew, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p63-69.

Wind Wave Simulation in Coastal Zone, Tatjana Talipova, Efim Pelinovsky and Eliezer Kit, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p105-115.

Singapore Showcase, T. Y. Lin and Tan See Chee, P.E., CE

Nov. 96, p61-63.

Strategies for the Use of IT in the Construction Industry of Singapore, Krishan Mathur, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1065-1071.

Sinkholes

Building on Sinkholes: Design and Construction of Founda-tions in Karst Terrain, George Sowers, 1996, 0-7844-0176-4, 208pp.

Cover-Subsidence Sinkhole Evaluation of State Road 434, Longwood, Florida, Jon Foshee and Brian Bixler, GT Nov. 94, p2026-2040.

Dynamic Duo, John Prendergast, CE July 96, p40-43. Modeling of Sinkholes in Weakly Cemented Sand, Waleed A. Abdulla and Deborah J. Goodings, GT Dec. 96,

Rethinking Foundation Design in Karst Residuum, Ray-mond A. DeStephen and Steven E. Conner, (Design with Residual Materials: Geotechnical and Construction Con-

siderations, Gordon Matheson, ed., 1996), p49-56. Ted Williams Tunnel Gets OCEA Plaque at Boston Cere-

mony, NE Aug. 96, p14.

Tunnel Tops Record Field of 22 to Claim This Year's Outstanding Civil Engineering Achievement Award, NE May 96, p16.

Siphons

Performance of a Passively Refrigerated Gravel Pad Foundation in Fairbanks, Stephen Adamczak, Jr., (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p13-22.

Precast Concrete Low-Head Pressure Pipe Significant in Historic Irrigation Canal Rehab, John J. Meyer and Steven K. Wagner, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p265-274.

PVC Lined Steel Pipe Bridges for Gravity Sewers, Andrew E. Romer, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p441-448.

Sewer Crossing of Creek with Bridge Widening, Surendra Anketell, (Pipeline Crossings 1996, Lawrence F. Ca-talano, ed., 1996), p275-281.

Site evaluation

Achieving a Reasonable Level of Accuracy in Site Charac-terization in the Presence of Geologic Uncertainty, Lynn Yuhr, Richard C. Benson and Devraj Sharma, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p195-209.

Addressing Non-Aqueous Phase Liquids and Dissolved Plumes at Two Adjacent Superfund Sites with Commingled Groundwater Contamination, Jeffrey A. Dhont and Udai P. Singh, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p812-823.

Anaerobic Bacterial Quantitation of Yucca Mountain, Nevada Doe Site Samples, William W. Clarkson, Lee R. Krumholz and Joseph M. Suflita, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p39-40.

Analysis of Air Permeability Tests at Yucca Mountain, Nevada, Dave O. Cox and Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p160-162

Approach, Methods and Results of an Individual Elicitation for the Volcanism Expert Judgment Panel, Bruce M. Crowe, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p56-58.

An Assessment of Future Volcanic Hazard at Yucca Mountain, William R. Hackett, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

p59-60

Borehole UE-25 ONC #1 Drilling at Yucca Mountain, Nevada, Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Geotechnical Special Publication No. 62, Paul Michaels, ed. and Richard Woods, ed., 1996, 0-

7844-0208-6, 128pp. Characterization and Remediation of a Fuel Oil Plume, Dorinda L. Clause and Stacey R. Leake, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed.,

1996), p762-775

Comparisons of Site Characterization Methods Using Mixed Data, Donna M. Rizzo, Theodore P. Lillys and David E. Dougherty, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p167-179.

Controlling the Impacts of Development on Storm Water Quality through Proper Site Planning and Design, Jill C. Bicknell and Lisa Horowitz McCann, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3097-3102.

Chenchayya Bathaia, ed., 1996), p.3097-3102.

Coupled Modelling of Groundwater Flow and Hydrochemistry in the Sellafield Area, A. K. Littleboy, R. Metcalfe and D. J. Noy, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p.135-140.

Current Status of Paleohydrologic Studies at Yucca Mountain and Vicinity, Nevada, John S. Stuckless, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p.83-101.

Committee, 1996), p98-101.

Defects in Soft Clays: A Challenge to Site Characterization for Stability Analysis, G. A. Leonards and R. J. Deschamps, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1347-1366.

Defining the Potential Repository Siting Block Yucca Mountain, Nevada, Robert W. Elayer and Richard M. Nolting, III, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p157-159

Determination of Importance Process during Yucca Mountain Site Characterization, Peter S. Hastings, Dealis W. Gwyn and Robert F. Wemheuer, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p327-329.

A Discussion of Two SVE/Bioventing Pilot Studies, Robin D. Wankum, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p751-761.

Distribution and Nutrient Limitations of Heterotrophic Bac-teria from Yucca Mountain, D. L. Haldeman, L. Ragatz and P. S. Amy, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p30-32.

The Effect of Saturation on the Mechanical Properties of Tuff at Yucca Mountain, Moses Karakouzian and Nick

1utr at Yucca Mountain, Moses Karakouzian and Nick Hudyma, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p407-408. Effects of Soil Nonhomogeneity on SASW Testing, Nenad Gucunski, Vahid Ganji and M. H. Maher, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1083-1097.

Environmental Site Investigation Guidance Manual (M&R No. 83), Task Committee on Hazardous Waste Site As-sessment Manual of the Environmental Engineering Division of the American Society of Civil Engineers, (Yee K. Cho, chmn.), 1996, 0-7844-0096-2, 141pp. 631

Evaluating Subsurface Uncertainty Using Zonal Kriging, William L. Wingle and Eileen P. Poeter, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1318-1330.

Evaluation of a Bedrock DNAPL Pool Site, Daekyoo Hwang, Christopher Reitman and William Richardson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p731-742.

Evaluation of Geological Formations of West Ukraine from the Standpoint of Raw Disposal, Olga V. Shestopalova, (*High Level Radioactive Waste Management*, Technical Program Committee, 1996), p79-80.

- Evaluation of Groundwater Travel-Time Calculations for Yucca Mountain, R. W. Barnard, S. J. Altman, B. W. Ar-nold, C. K. Ho and S. A. McKenna, (High Level Radio-active Waste Management, Technical Program Committee, 1996), p193-195
- Gecenvironmental Evaluation of Geological Formations of Lithuania for Radioactive Waste Disposal, Valentinas Kadūnas and Jurgis Valūnas, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p83-85.
- Geostatistical Simulation, Parameter Development and Property Scaling for GWTT-95, Sean A. McKenna and Susan J. Altman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p181-
- Groundwater Monitoring System Design Using a Probabi-listic Observation Method for Site Characterization, Mauricio Angulo and Wilson H. Tang, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p797-812.
- Hazard Ranking of Landfills Using Fuzzy Composite Pro-gramming, Michael E. Hagemeister, David D. Jones and Wayne E. Woldt, EE Apr. 96, p248-258.
- Incorporating Uncertainty, Objective, and Subjective Data in Geologic Site Characterization, Patrick G. Kinnicutt and Herbert H. Einstein, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p104-118.
- Indian Programme on Deep Geological Disposal of Radio-active Waste, A. N. Prasad, K. Balu, R. K. Mathur and P. K. Narayan, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p22-24.
- Interference of Avian Guano in Analyses of Fuel-Contaminated Soils, David E. James, Tod E. Johnson and David K. Kreamer, EE Jan. 96, p74-76.
- Isotopic Systematics of Saline Waters at Aspö and Laxemar, Sweden, Bill Wallin and Zell Peterman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p41-42.
- Keys to Opening the Nation's First Deep Geological Re-pository in 1998, Michael H. McFadden and Leif G. Eriksson, (High Level Radioactive Waste Management, 1998, 2019, 2019). Technical Program Committee, 1996), p220-223.
- Lanfill Site Evaluation and Application of MODFLOW to simulate Hydraulically Conductive Zones in Bedrock Associated with Diabase Dikes in North Carolina, M. A. Ponti, Jr., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), 1008-1009.
- Modeling of Flow Through Fractured Tuff at Fran Ridge, Roger R. Eaton, Clifford K. Ho, Robert J. Glass, Michael J. Nicholl and Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee,
- Multifactor Spatial Analysis for Landfill Siting, Jehng-Jung Kao and Hung-Yue Lin, EE Oct. 96, p902-908.
- Network Expert Geographic Information System for Landfill Siting, Jehng-Jung Kao, Wei-Yea Chen, Hung-Yue Lin and Show-Jyi Guo, CP Oct. 96, p307-317.

- A Neural Network Approach for Site Characterization and Uncertainty Prediction, Yacoub M. Najjar and Imad A. Basheer, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996),
- Nopal I Uranium Deposit: A Study of Radionuclide Migra-tion, Virgina Wong, Elizabeth Anthony and Philip Goodell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p43-45.
- Numerical Analyses of Reinforced Underground Openings Subjected to Seismic Loadings, Fei Duan and Saeed Bonabian, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p412-414.
- Numerical Modeling for Saturated-Zone Groundwater Travel Time Analysis at Yucca Mountain, Bill W. Ar-nold and George E. Barr, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p187-189.
- Mountain, Y. S. Wu, T. M. Bandurraga, C. F. Ahlers, S. Finsterle, G. Chen, C. Haukwa, G. S. Bodvarsson, E. Kwicklis, J. Rousseau and L. Flint, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p73-75.
- Organizing and Evaluating Uncertainty in Geotechnical Engineering, Robert V. Whitman, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1-28.
- Performance Assessment Modeling of the Proposed Gent-ing Island Repository Facility, Yudi U. Imardjoko, Dan-iel B. Bullen and Sofyan Yatim, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p172-175.
- Physical Sampling for Site and Waste Characterization, Ted L. Bonnough, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), p217-219.
- Potential Changes to Technical Issues in HLW Performance Assessment, N. A. Eisenberg and R. G. Wescott, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p288-290.
- A Radiological Disadvantage for Siting a Repository at Yucca Mountain, Peter Spiegler, (High Level Radioac-tive Waste Management, Technical Program Committee, 1996), p178-180.
- Radwaste Disposal in Clay—E. C. Everest Project, IPSN Contribution, Catherine Certes, Patrick Goblet and André Levassor, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p170-171.
- Radwaste Disposal in Granite—E.C. Everest Project, IPSN Contribution, P. Baudoin and C. Serres, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p168-169.
- Reducing Uncertainty in Environmental Site Characteriza-tion, Yi-Chang Tsai and J. David Frost, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1019-1033.
- Sensitivity Studies of Unsaturated Groundwater Flow Modeling for Groundwater Travel Time Calculations at Yucca Mountain, Nevada, Susan J. Altman, Clifford K. Ho, Bill W. Arnold and Sean A. McKenna, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p190-192
- Simulation and Observation of ESF Tunnel Effects on Bar-ometric Conditions, Parviz Montazer and Nick Stellava-to, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p92-94.
- Site Characterisation of a Complex DNAPL Site—An Australian Experience, J. M. Duran and J. A. Grounds, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p800-811.
- Site Selection and Evaluation of Geological Disposal of Radioactive Waste: Regulatory Aspects, G. Guentchev and L. Katzarska, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p86-88.

Status of Thermal Loading Evaluations for a Potential Reatus of Thermal Loading Evaluations for a Potential Re-pository, Steven F. Saterlie, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p442-444. system Identification Using Earthquake Acceleration Records, A.-W. Elgamal, M. Zeghal, H. T. Tang and J. C. Stepp, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p335-338.

Thermal Management with Ventilation, George Danko, Thomas A. Buscheck, John J. Nitao and Steven Saterlie, (High Level Radioactive Waste Management, Technical

Program Committee, 1996), p420-422.

To Know or Not to Know: The Site Characterization Process and Its' Role in Horizontal Directionally Drilled Pipeline River Crossings, Charles W. Hair, III, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p56-

Ukrainian Program of Radioactive Waste Disposal in Geo-logical Formations, Dmitri P. Khrushchov, Michail A. Pavlovsky and Valeri M. Starodoumov, (*High Level Ra*dioactive Waste Management, Technical Program Com-

mittee, 1996), p25-26.

Uncertainty in the Geologic Setting and Its Impact on Site Characterization, Richard C. Benson, Lynn Yuhr and Devraj Sharma, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p91-103.

Unsaturated Zone Flow Modeling for GWTT-95, Clifford K. Ho, Susan J. Altman, Sean A. McKenna and Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p184-186.

The Use of Direct Push Technologies in Expedited Site Characterization, Greg A. Stenback, Bruce H. Kjartan-son, Al Bevolo and David Wonder, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p180-194.

Use of Geologic Information in Site Characterization, Tien H. Wu, Mohamed A. Abdel-Latif, Michael A. Nuhfer and B. Brandon Curry, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth,

ed., 1996), p76-90.

Cu., 1990), p76-90.
Wee of Limited Information in a License Application to Construct a Repository, J. Michael McGarry, III and F. Stanley Echols, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p201-204.
Use of SID Method for Site Characterization, P. W. Jayawickrama, K. G. K. Jayakody and K. A. Rainwater,

Jayawickrama, K. G. K. Jayakody and K. A. Rainwater, (Uncertainty) in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p897-911. Variability in Site-Specific Seismic Ground-Motion Design Predictions, C. J. Roblee, W. J. Silva, G. R. Toro and N. Abrahamson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p. 1113-1136. p1113-1133.

Westbay/MOSDAX Instrumentation of UE-25 ONC #1 and USW NRG-4 at Yucca Mountain, Nevada, Nick Stellavato, (High Level Radioactive Waste Management, Tech-

nical Program Committee, 1996), p163-165. The Yucca Mountain Probabilistic Volcanic Hazard Analyne Yucca Mountain Probabilistic Voicanic Hazard Anniy-sis Project, Kevin J. Coppersmith, Roseanne C. Perman, Robert R. Youngs, Todd A. Crampton, Laurel A. DiSil-vestro, Richard P. Smith, C. Allin Cornell, Peter A. Mor-ris, Timothy Sullivan, Stephen T. Nelson and J. Carl Stepp, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p53-55.

Accessible Information, William J. Douglas and Izak Maitin, CE June 96, p59-61.

Analysis of Cone Pressuremeter Tests in Sands, H. S. Yu, F. Schnaid and I. F. Collins, GT Aug. 96, p623-632.

F. Schnaid and I. F. Collins, G.J. Aug. 20, poz. 2022. Application of Ground-Penetrating Radar to a Site Investigation Involving Shallow Faults, Christopher L. Liner and Jeffrey L. Liner, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p101-111.

Applications Surge for New Jersey Cleanup Funds, CE Feb. 96, p22.

Environmental Assessment of a Site for Civil Construction, S. M. Govorushko, UP Mar. 96, p18-31.

Environmental Site Investigation Guidance Manual (M&R No. 83), Task Committee on Hazardous Waste Site Assessment Manual of the Environmental Engineering Division of the American Society of Civil Engineers, (Yee K. Cho, chmn.), 1996, 0-7844-0096-2, 141pp.

Firm Serves As a Model for its Piers, CE Oct. 96, p97

A Geostatistically-Based Method to Assess Potential Haz-ardous Waste Sites Using Hard and Soft Data, Morris M. Dimberger and Richard W. Stephenson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p826-847.

Groundwater Flow Modelling at the Olkiluoto Site, Fin-land, Jari Löfman, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), p141-

High Density Polyethylene Pipe under High Fill: A Contin-uing Study, John J. Meyer and J. L. (Jack) Hilfiker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed.,

1996), p77-87.

Indirect Evidences for Quantification of Groundwater Flow: Assessment of the Consistency of Geohydrological Groundwater Flow Models and Hydrochemical Mixing/ Reaction Models of the Aspö Hard Rock Laboratory, Peter Wikberg and Ingvar Rhen, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p145-147.

New Jersey Fund Offers Help, H. Michael Sklar, CE June

96, p27.

Nine-Component Vertical Seismic Profiling at Yucca Mountain, Nevada, A. H. Balch, Cemal Erdemir, R. W. Spengler and W. Clay Hunter, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p155-156.

Practical Geoenvironmental Visualization, G. B. Baecher, J. A. Zarge and J. Shapiro, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p56-62.

Standardizing Environmental Assessments: A Practical Per-spective, J. R. Marsh, K. W. Green and T. Dong, EE Mar. 96, p222-226.

State Parameter from Self-Boring Pressuremeter Tests in Sand, H. S. Yu, GT Dec. 94, p2118-2135.

Update on Aguas Argentinas, CE July 96, p22,24.

The Use of Hydrologic Budget Techniques in Assessing Site Suitability for Wetland Creation, William R. Arcieri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3956-3961.

Value and Reliability of DNAPL-Source Location Programs: A Preliminary Framework, Travis C. McGrath, Robert B. Gilbert and Daene C. McKinney, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p187-198.

"Do Nothing" Title Misleading, Bruce E. Rittmann, Mi-chael C. Kavanaugh and Jacqueline A. MacDonald, CE Nov. 96, p36,38.

Site preparation, construction

Advanced Site Design Software for Landfill Closure and Remedial Design, Douglas Cervenak, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p818-824.

ArcSite: Enhanced GIS for Construction Site Layout, M. Y. Cheng and J. T. O'Connor, CO Dec. 96, p329-336.

Unique Pile Combination Supports New Tennis Complex, CE Dec. 96, p10,12.

Anatomy of a Wetland, Jim Renner, CE Jan. 96, p58-60.

Application of GIS in Site Selection for Nuclear Waste Dis-posal Facility, Grant Sheng, Isaac N. Luginaah and John Sorrell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p95-97.

633

Deep Geological Disposal Programs in Preparation and Under Development, D. P. Khrushchov, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p19-21.

Indian Programme on Deep Geological Disposal of Radio-active Waste, A. N. Prasad, K. Balu, R. K. Mathur and P. K. Narayan. (High Level Radioactive Waste Management, Technical Program Committee, 1996), p22-24.

Location of a Lunar Base: A Site Selection Strategy, Lawrence A. Taylor and Dong-Hwa S. Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p741-755.

Mitigation of Predation at a Juvenile Bypass Outfall Site, J. DenBleyker and L. J. Weber, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p893-898.

Remote Pipeline Routing with Application to Space Opera-

tions, Sandra C. Feldman, Ramona E. Pelletier, Wm. Ed-ward Walser, James C. Smoot and Douglas Ahl, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p231-236.

Route Location/Siting: A Review of Practices, Robert L. Schraeder, Charles H. Riddle and Willard H. Slater, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p23-56.

Site and Size Optimization of Contaminant Sources in Surface Water Systems, Nikolaos D. Katopodes and Michael Piasecki, EE Oct. 96, p917-923.

Site Selection and Evaluation of Geological Disposal of Radioactive Waste: Regulatory Aspects, G. Guentchev and L. Katzarska, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p86-88

Site Selection for Pipeline Waterway Crossings, Brian J. Doeing and David T. Williams, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996), p365-372.

Siting of Grade Control Structures, Chester C. Watson, John Smith and David S. Biedenharn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p286-291.

Ukrainian Program of Radioactive Waste Disposal in Geological Formations, Dmitri P. Khrushchov, Michail A. Pavlovsky and Valeri M. Starodoumov, (High Level Ra-dioactive Waste Management, Technical Program Committee, 1996), p25-26.

Site selection studies

Landfill Siting Using Geographic Information Systems: A Demonstration, Muhammad Z. Siddiqui, Jess W. Everett and Baxter E. Vieux, EE June 96, p515-523.

Please Include Site Plans, Jon Kraft, CE Feb. 96, p31.

Site-Specific Live Load Models for Bridge Evaluation, Michel Ghosn and Dan M. Frangopol, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p30-33.

Direct Sizing of Small Stormwater Pump Stations, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2072-2077.

A Family of Invariant Stress Surfaces, Steen Krenk, EM Mar. 96, p201-208.

Optimal Pipeline Sizing Technique, Helmi M. Hathoot, Ahmed I. Al-Amoud and Fawzi S. Mohammad, TE May/ June 96, p254-257.

Simple Formula for Eccentric Bolted Connection Design, Thomas W. Hartmann and Janelle K. Rohrbaugh, SC Feb. 96, p40-46.

Sizing Dumped Rock Riprap, David C. Froehlich and Craig A. Benson, HY July 96, p389-396.

Small Firms, Big Challenges, Monica Maldonado, CE Feb. 96, p60-63.

Size effect

Analysis of Concrete Pavements by Rectangular Thick-Plate Model, T. F. Fwa, X. P. Shi and S. A. Tan, TE Mar./Apr. 96, p146-154.

Compression Failure in Reinforced Concrete Columns and Size Effect, Zdenek P. Bažant and Yuyin Xiang, (World-wide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p443-451.

Nanotechnology and Orbital Debris, Hans-Joachim Blome and Thomas L. Wilson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996). p328-333

Non Linear Computation of Fiber Reinforced Micro-Non Linear Computation of Fiber Reinforced Micro-Concrete Structures, Mouloud Behloul, Régis Adeline and Gérard Bernier, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p518-529.Optimal Sizing of Width- and Depth-Constrained Trapezoi-dal Channels, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchaven Bathala, ed. 1996), 1924-4299

Chenchayya Bathala, ed., 1996), p4294-4299.

Oxygen Transfer Efficiency in Small Diffusers, Mark A. Turneo and Tamar J. Stephens, EE Jan. 96, p55-57.

Random Network Modeling for Determination of Representative Specimen Size of Compacted Clays, Suri Thangavadivelu, Lakshmi N. Reddi and Sunil Menon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p1303-1317.

Size Effects in the Fracture of Fiber Reinforced Materials, Roberta Massabó and Alberto Carpinteri, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p462-473.

Stochastic Parallel-Brittle Networks for Modeling Materials, D. A. Gasparini, P. Bonacuse, L. Powers and A. Romeo, EM Feb. 96, p130-137.

Zero-Brittleness Size-Effect Method for One-Size Fracture Test of Concrete, Zdeněk P. Bažant and Zhengzhi Li, EM May 96, p458-468.

Skew bridges

Shear and Reaction Distributions in Continuous Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE Nov. 96, p155-165.

Skewed structures

Girder Moments in Continuous Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE Feb. 96, p37-45.

Detection of Outliers in Pearson Type III Data, Colleen S. Spencer and Richard H. McCuen, HE Jan. 96, p2-10.

On Communicating Hydrologic Risk, Rafael G. Quim (Risk-Based Decision Making in Water Resources VII., Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene

Z. Stakhiv, ed., 1996), p265-271.

Punching Strength of Deck Slabs in Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE May 96, p59-66.

Skid resistance

Studded Tire Research in Norway, Finland and Sweden, Eric Johnson, Tony Barter and David Sterley, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p676-687.

Vehicle Traction Performance Comparison for Alaska Winter Seasons, J. John Lu, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p664-675.

Skin friction

On a Conceptual Model for Turbulent Skin Friction, Chao Si and Manhar Dhanak, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p293-296.

Velocity Profile in Shallow Coastal Waters, Habib D. Anwar, HY Apr. 96, p220-223.

Skin, structural members

Time Effects on Pile Skin Resistance, Juan M. Antorena and G. Thomas McDaniel, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p582-589.

Analysis of Concrete Pavements by Rectangular Thick-Plate Model, T. F. Fwa, X. P. Shi and S. A. Tan, TE Mar/Apr. 96, p146-154.

Cellular Rigid Pavement, John K. Bright and John R. Mays,

TE Sept./Oct. 96, p381-387. Closed-Form Back-Calculation of Rigid-Pavement Parame ters, Li Shuo, T. F. Fwa and K. H. Tan, TE Jan./Feb. 96, p5-11.

p5-11.

Concrete Pavements in Tunnels, J. S. Berg and P. M. Noss,

(Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), 9911-922.

Deflection Control of Two-Way Reinforced Concrete

Control Control of Two-Way Neinforced Concrete

Control of Two-Way Neinforced Concrete

Control of Two-Way Neinforced Concrete

Control of Two-Way Neinforced Concrete

Control of Two-Way Neinforced Concrete

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Control of Two-Way Neinforced Concrete

Contr

Slabs, Shyh-Jiann Hwang and Kuan-Yung Chang, ST Feb. 96, p160-168.

Effect of Reinforcement Corrosion on Flexural Behavior of Concrete Slabs, Abdullah A. Almusallam, Ahmad S. Al-Gahtani, Abdur Rauf Aziz, Fahd H. Dakhil and Rasheeduzzafar, MT Aug. 96, p123-127.

Effective Stiffness Model for Reinforced Concrete Slabs, Maria Anna Polak, ST Sept. 96, p1025-1030.

Practical Estimation of Two-Way Slab Deflections, Kuan-Yung Chang and Shyh-Jiann Hwang, ST Feb. 96, p150-159

Punching Strength of Deck Slabs in Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE May 96, p59-66.

Repair of Damaged Slab-on-Grade Foundations, Robert W. Day, SC May 96, p69-73.

Start the Presses! Ramon Gilsanz, CE Apr. 96, p65-67. Time-Dependent Degradation of Structural Systems During Fire -- A Method for Failure Prediction, Jiahong Jane Zuo and Jamshid Mohammadi, (Engineering Mechanics,

Y. K. Lin and T. C. Su, 1996), p1042-1045. Tracing Initiation and Propagation of Cracks in Composite Slabs, Yiching Lin, J. Y. Richard Yen and Chen-Fung Chen, ST July 96, p755-761.

Boltzmann-Matano Analysis of Chloride Diffusion into Blended Cement Concrete, P. J. Tumidajski and G. W. Chan, MT Nov. 96, p195-200.

Effect of Copper Slag on the Hydration of Blended Cementitious Mixtures. B. Mobasher, R. Devaguptapu and A. M. Arino. (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1677-1686.

Effectiveness of Blast-Furnace and Gasifier Slags at Reducing Ingress of Chloride Ions into Portland Cement Concretes in Marine Environments, G. J. Osborne, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p1503 High-Performance Concrete in Bridge Structures in Virginia, Celik Ozyildirim and Jose Gomez, (Materials for the New Millernium, Ken P. Chong, ed., 1996), p1357-1366.

nosphogypsum Slag Aggregate-Based Asphaltic Concrete Mixes, Paul T. Foxworthy, Raju S. Nadimpalli and Roger K. Seals, TE July/Aug. 96, p300-307.

Slenderness ratio

Reliability Analysis and Full-Scale Testing of Transmission Tower, M. J. Alam and A. R. Santhakumar, ST Mar. 96, p338-344.

Reliability of High-Strength Concrete Columns, Sofia M. C. Diniz and Dan M. Frangopol, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p213-222.

Earth Slide on Geomembrane, A. C. Stamatopoulos and P. C. Kotzias, GT May 96, p408-411.

Sliding

Control of Sliding-Isolated Buildings Using Sliding-Mode Control, J. N. Yang, J. C. Wu, A. M. Reinhorn and M. Riley, ST Feb. 96, p179-186.

Criteria for Initiation of Slide, Rock, and Slide-Rock Rigid-Body Modes, Harry W. Shenton, III, EM July 96, p690-693.

Earthquake Destructiveness Potential Factor and Permanent Displacements of Gravity Retaining Walls, Teresa Crespellani, Claudia Madiai and Giovanni Vannucchi, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p124-133.

Fuzzy Logic Based Control for Sliding Structures, Andrei M. Reinhorn, Ravi S. Subramaniam and Michael A. Riley, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p298-309. Gravity Current of Fluid Mud on Sloping Bed, Thijs van Kessel and C. Kranenburg, HY Dec. 96, p710-717.

An Innovative Plastic Housing System, E. Burnett, A. Arenja and L. Holroyd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p545-554.

Mechanism Study of Landslides, Dagang Zhang and Mos-tafa A. Foda, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p258-261.

Permanent Deformation on Preexisting Sliding Surfaces in Dams, George Gazetas and Nasim Uddin, GT Nov. 94, p2041-2061.

Reliability Assessment Methodology for Sliding Stability of Gravity Structures, Bilal M. Ayyub and Ru-Jen Chao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Seismic Analysis and Model Studies of Bridge Abutments, K. L. Fishman and R. Richards, Jr., (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p77-99.

Seismic Isolation of Bridges Using Sliding Isolation Systems, Paul F. Bradford and Ronald J. Watson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p41-47.

Stone Bridge Safety Assessed, CE May 96, p23.

Threshold Accelerations for Rotation or Sliding of Bridge Abutments, Rowland Richards, Jr., Kenneth L. Fishman and Randall C. Divito, GT Sept. 96, p752-759.

Bond and Slip of Plain Rebars in Concrete, Y. L. Mo and J. Chan, MT Nov. 96, p208-211.

Development and Characterization of Cellular Grouts for Sliplining, C. Vipulanandan and V. Jasti, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p829-

DSHA Versus PSHA for Critical Structures, Ellis L. Krinitzsky, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p241-242.

Evaluation of Bond Strength with Polypropylene Fiber Re-inforced Concrete, R. C. Zellers, V. Ramakrishnan, V. N. Rajpathak and S. Yu, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p123-132.

Issues of Uncertainty Regarding Localized Strains in Gran-ular Soils, M. A. Mooney, R. J. Finno, G. Viggiani and W. W. Harris, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p312-325.

Shear Properties of Components Used in Stressed-Skin Panels, I. Robert Kliger and Patrick J. Pellicane, MT May 96, p77-82.

Slip forms

Wisconsin Fast-Track Paving Experiences, Michael J. Hall, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p456-465.

Slip surface

Efficient Monte Carlo Technique for Locating Critical Slip Surface, Venanzio R. Greco, GT July 96, p517-525.

Unified Formulation for Analysis of Slopes with General Slip Surface, R. D. Espinoza, P. L. Bourdeau and B. Muhunthan, GT July 94, p1185-1204.

Slope indicators

Employment of Electronic Sand Level Gauges for Measurement of Beach Slope Deformation on Norderney Island, Kos'yan R., H. Kunz and I. Podymov, (Coastal Dy-namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p651-663.

Slope stability

Achieving Reliable Designs for Pipelines Traversing Un-stable Slopes, Dimitri A. Grivas, Chakravarthy Bhagwati, B. Cameron Schultz, Verne C. McGuffey, Gregg O'Neil and Gordon Simmonds, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996), p426-433.

Analysis of Rainfall-Induced Debris Flows, Scott A. Anderson and Nicholas Sitar, GT July 95, p544-552.

635

- Analyzing of Two Dimensional Slope Stability and Foundation Problems Considering Soil-Structure Interaction Effect, Stanley Z. He, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p832-837.
- Damage due to Northridge Earthquake Induced Movement of Landslide Debris, Robert W. Day and Dennis M. Poland, CF Aug. 96, p96-108.
- Efficient Monte Carlo Technique for Locating Critical Slip Surface, Venanzio R. Greco, GT July 96, p517-525.
- Failure of Desert View Drive Embankment, Robert W. Day, CF Feb. 96, p11-14.
- Formation of Shear Zones in Reinforced Sand, Scott E. Shewbridge and Nicholas Sitar, GT Nov. 96, p873-885.
- Landform Grading and Slope Evolution, Horst J. Schor and Donald H. Gray, GT Oct. 95, p729-734.
- A Landslide of Litigation, Walter F. Crampton, P.E., CE Oct. 96, p61-63.
- Monte Carlo Simulation to Evaluate Slope Stability, Douglas Scott Chandler, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p474-493.
- A Practical Approach to Uncertainty Modeling in Geotechnical Engineering, C. Hsein Juang and David J. Elton, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1269-1283.
- Probabilistic Slope Stability in Theory and Practice, Thomas F. Wolff, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p419-433.
- Reliability Applied to Slope Stability Analysis, John T. Christian, Charles C. Ladd and Gregory B. Baecher, GT Dec. 94, p2180-2207.
- Reliability Methods for Stability of Existing Slopes, John T. Christian, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p409-418.
- Slope Instability from Ground-Water Seepage, Muniram Budhu and Roger Gobin, HY July 96, p415-417.
- Soil Creep and Creep Testing of Highly Weathered Tropical Soils, Peter G. Nicholson, Philip W. Russell and Clint F. Fujii, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p195-213.
- Stability of a Steep Slope Supporting a Building, Stephen G. Wright and Frank G. Bryant, (Uncertainty in the Geologic Environment: From Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth. ed., 1996). n343-450.
- Roth, ed., 1996), p434-450. State of the Art: Limit Equilibrium and Finite-Element Analysis of Slopes, J. Michael Duncan, GT July 96, p577-596.
- Surficial Stability of Compacted Clay: Case Study, Robert W. Day, GT Nov. 94, p1980-1990.
- Uncertainty in Back Analysis of Slopes, Robert B. Gilbert, Stephen G. Wright and Eric Liedtke, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p494-517.
- Unified Formulation for Analysis of Slopes with General Slip Surface, R. D. Espinoza, P. L. Bourdeau and B. Muhunthan, GT July 94, p1185-1204.

Slope stabilization

- Anchoring a Landfill Expansion, Max Kroschel, Michael S. Snow and Thomas A. Williamson, CE May 96, p64-66.
- Mechanical Properties of Vitrified Soils, Christopher Y. Tuan and William C. Dass, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p731-740.
- Nailing A Landslide (Available only in the Geo/ Environmental Special Issue), Al Colarusso, CE Nov. 96, p13A-15A.
- Slope Stabilization Using Old Rubber Tires and Geotextiles, Paul S. H. Poh and Bengt B. Broms, CF Feb. 95, p76-79.

Stabilization of a Creeping Slope Using Soil Nails, Peter R. Cali, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p109-121.

Slope

- Capillary Pressure-Saturation Relationships in Fracture, Zitong Ye, Bing Han, Sishen Li and Jiafa Zhang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3869-3873.
- Cellular Confinement System Helps Hold Slope, CE Dec. 96, p87.
- Constitutive Modeling and Analysis of Creeping Slopes, Chandra S. Desai, Naresh C. Samtani and Laurent Vulliet, GT Jan. 95, p43-56.
- Design and Repair for Surficial Slope Failures, Robert W. Day, SC Aug. 96, p83-87.
- Estimating Wave-Induced Kinematics at Sloping Structures, Steven A. Hughes and Jimmy E. Fowler, WW July/Aug. 95, p209-215.
- July/Aug. 95, p209-215.
 Finite Analytic Method for Mild-Slope Wave Equation,
 Xiping Yu, EM Feb. 96, p109-115.
- Grading Design of Side Slopes Fitting Roadside Topography, George Kanellaidis, TE Jan./Feb. 96, p87-90. Gravity, Current of Fluid Mud on Sloping Bed. Thiis van
- Gravity Current of Fluid Mud on Sloping Bed, Thijs van Kessel and C. Kranenburg, HY Dec. 96, p710-717. Hydraulic Jump in Sloping Channels, Mustafa Gunal and Rangaswami Narayanan, HY Aug. 96, p436-442.
- Rangaswami rvarayanan, HY Aug. 90, p-30-442.
 Laboratory Experiments on Density Current Over a Sloping Bottom in Rotating Fluid, Dieter Etling and Gabriel Chabert d'Hieres, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p923-926.
- Local Scour Downstream of Hydraulic Structures, Gijs J. C. M. Hoffmans and Krystian W. Pilarczyk, HY Apr. 95, p326-340.
- Rapid Slope Monitoring, William F. Kane and Timothy J. Beck, CE June 96, p56-58.
- Reliability Applied to Slope Stability Analysis, John T. Christian, Charles C. Ladd and Gregory B. Baecher, GT Dec. 94, p2180-2207.
- Retaining Wall Enhances Flowering Residential Site, CE Jan. 96, p77.
- Seismic Response of a Block on an Inclined Plane to Vertical and Horizontal Excitation Acting Simultaneously, Liping Yan, Neven Matasovic and Edward Kavazanjian, Jr., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1110-1113.
- Studies on Wave, Current and Suspended Sediment Characteristics at the Surf Zone, Chien-Kee Chang and Ching-Her Hwang, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p728-738.
- Unified Formulation for Analysis of Slopes with General Slip Surface, R. D. Espinoza, P. L. Bourdeau and B. Muhunthan, GT July 94, p1185-1204.
- Waves on a 1:100 Slope: Experiments and Numerical Models, G. Liberatore, M. Petti, M. Drago and M. Sclavo, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p355-365.
- Wind Loads for Low-Rise Buildings on Escarpments, Brad Means, Timothy A. Reinhold and Dale C. Perry, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1045-1052.

Sloshing

Experimental Investigation of Tuned Liquid Dampers, Dorothy A. Reed, Harry Yeh, Jinkyu Yu and Sigurdar Gardarsson, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p215-216.

Sludge

- Anaerobic Degradation of Cornstarch in Wastewater in Two Upflow Reactors, Tin Sang Kwong and Herbert H. P. Fang, EE Jan. 96, p9-17.
- Aspects of River House Cleaning During Floods, Parviz Monadjemi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2192.
- Brewery Wastewater Treatment in UASB Reactor at Ambient Temperature, Yue-Gen Yan and Joo-Hwa Tay, EE June 96, p550-553.

Energy from Paper Sludge: Criteria and Hazardous Air Pol-lutants, Amy K. Zander, Thomas L. Theis and Michael Brennan, EE Aug. 96, p758-760. Evaluating Paint-Sludge Chars for Adsorption of Selected Paint Solvents, Byung R. Kim, Edward M. Kalis, Irving T. Salmeen, Carl W. Kruse, Ilham Demir, Stephen L. Carlson and Massoud Rostam-Abadi, EE June 96, p532-

eotechnical Properties of Paper Mill Sludges for Use in Landfill Covers, Horace K. Moo-Young and Thomas F. Zimmie, GT Sept. 96, p768-775. Geotechi

How Input Active Biomass Affects Sludge Age and Process Stability, Bruce E. Rittmann, EE Jan. 96, p4-8.

ess Stability, Bruce E. Rittmann, EE Jan. 96, p4-8. Improved Characterization of Mixing for Sludge Conditioning, Jimmy Roland Christensen, George Lee Christensen and Jens Aage Hansen, EE Mar. 95, p236-244. Incorporation and Rejection of Alum Sludge Flocs by an Advancing Freezing Front, Philip J. Parker, Anthony G. Collins and John P. Dempsey, (Cold Regions Engineering: The Cold Regions Engineering). Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p757-768.

Modeling Bacterial Decay Coefficient During SSDML Process, T. R. Sreekrishnan, R. D. Tyagi, J. F. Blais, N. Meunier and P. G. C. Cambell, EE Nov. 96, p995-1002.

Sensitivity Study of Waste Rollover Using Probabilistic Finite Element Analysis, Arshad Alfoqaha, William Cofer and M. A. Khaleel, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p914-917.

Soil Stabilization Utilizing Alternative Waste Materials, Greg Heckel and Riyad Wahab, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p318-327.

Sludge disposal
Drying Sludge Saves Costs, CE Oct. 96, p11.
Hazardous Soil Remediation: A Cooperative Effort Between Industry and Government, Wendy L. Cohen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1203-1208.

Sludge treatment
Conveyance of Water and Wastewater Residuals, Sludge Treatment, Utilization, Reclamation and Disposal Committee, ASCE, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p994-996.

Critical Issues in the Monitoring and Control of Toxic Air Contaminants at POTWs, Federico G. A. Vagliasindi and Vincenzo Belgiorno, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p81-86.

Improved Characterization of Mixing for Sludge Condition-ing, Jimmy Roland Christensen, George Lee Christensen and Jens Aage Hansen, EE Mar. 95, p236-244.

Titusville Cleans Up, CE Aug. 96, p18,20.

Eddy Pump Dredging Demonstration at Cresta Reservoir, Larry L. Harrison and Harry P. Weinrib, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2091-2096.

Friction Characteristics of Cohesionless Soil Penetrated by Polymer and Mineral Slurries, Kamal Tawfiq, P.E. and Hubert Lee Broughton, III, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1170-1178.

Geosynthetic Tubes for Confining Pressurized Slurry: Some Design Aspects, Dov Leshchinsky, Ora Leshchin-sky, Hoe I. Ling and Paul A. Gilbert, GT Aug. 96, p682-

Microbial Decontamination of Polluted Soil in a Slurry Process, M. J. Geerdink, R. H. Kleijntjens, M. C. M. van Loosdrecht and K. C. A. M. Luyben, EE Nov. 96, p975-

Study of Clay-Cernent Slurries with Mechanical and Elec-tromagnetic Waves, M. A. Fam and J. C. Santamarina, GT May 96, p365-373.

Slurry pipelines

Coal Pipelines Crossing Railroads: Legal Issues, Peter N. Davis and Henry Liu, (Pipeline Crossings 1996, Law-rence F. Catalano, ed., 1996), p254-264. Slurry walls

Bank Protection Toe-Downs and Local Pier Scour, Dennis L. Richards and Christopher J. Pauley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4172-4177.

Dam Requires Record-Setting Slurry Walls, CE Jan. 96,

p12,15.

A Multimedia Expert System for Slurry Wall Construction, Nie-Jia Yau and Chien-Hong Lu. (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p600-606.

Small busin

CERF Aids NSF in Revising Program That Reflects Needs of Construction Industry, NE July 96, p15.

of Construction Industry, Ne. 2 July 50, pp. 10. Construction Forum, SC Aug. 96, p69-70. Minority Set-Aside Unconstitutional, CE Oct. 96, p30. Redirecting ASCE Focus and Programs toward Greater Emphasis on Small Business, Joe Kaplan, SC May 96,

Small Business in the Construction Industry, Howard H.
 Bashford, SC Aug. 96, p71-73.
 Small Business is Big Business, Joseph Kaplan, SC Aug.

Small Businesses Fuel Economic Growth, Innovation, and Job Creation, Garold D. Oberlender, SC Aug. 96, p76-

Small, Smaller Smallest, Howard F. Greenspan, CE June 96, p28.

Small crafts

Wortley's Winter Wanderings: A Narrative, C. Allen Wortley, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p837-854.

Smoke control

Smoke control Applications of CFD Flow Modelling in Building Design, J. R. Sinclair, P. A. Irwin, K. M. Matsui, M. Vanderhey-den and F. Kriksic, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p997-1004. Computerized I&M Programs for Oil-Fired Space Heating Boilers, Alexander P. Economopoulos, EY Aug. 96, 261.74.

To Allay Brownfields "Misperceptions", Dante J. Tedaldi, P.E., CE Oct. 96, p37.

Large Strain Finite-Element Analysis of Snow, Günther Meschke, Changhong Liu and Herbert A. Mang, EM

July 96, p591-602. Road and Airfield Maintenance, John C. Becker and David C. Esch, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas,

ed., 1996), p249-270.

Surface Modifications to Reduce Thaw Degradation of Permafrost, John P. Zarling and Jasper Rajesh, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p46-59.

Waterproofing An Expanded Convention Center, CE Dec. 96, p89.

Snow cover
Flooding from Rain-on-Snow Events in the Sierra Nevada,
Worth American Water and Envi-Richard Kattelmann, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1145-1146.

Snow depth
The 1995 Flood in Southeastern Norway - Operational Forecasting, Warning, and Monitoring of a 200-year Flood, K. Repp, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2537.

Combining Snow and Earthquake Loads for Limit States Design, Bruce Ellingwood and David Rosowsky, ST Nov. 96, p1364-1368

Failure of a Stiffened Seat Bracket Connection, David L Weaver, Jason S. Yates and Randall W. Poston, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p468-474.

Investigating and Repairing of Wood Bowstring Trusses, Richard J. Kristie and Arne P. Johnson, SC Feb. 96, p25-30.

Long-Span Timber Trusses—Evaluating a Repair Method, Thomas E. Forsberg, SC May 96, p89-92.

Minimum Design Loads for Buildings and Other Structures, Revision of ANSI/ASCE 7-93 (St No. 95-007), American Society of Civil Engineers, 1996, 0-7844-0092-X, 220pp.

Snow Guards for Metal Roofs, Wayne Tobiasson, James Buska and Alan Greatorex, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p398-409.

Stochastic Snow Load Process Model from Daily Climatological Data, Kenneth J. Fridley, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p210-213.

Snow roads

Temporary Snow and Ice Pavement Structures, Robert L. Scher, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p87-120.

Snowmelt

Estimation of the Probable Maximum Rainfall and Snowmelt Floods Via Physically Based Model of River Runoff Generation, L. S. Kuchment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1337.

Social aspects

Changing Conditions and Water Elections, Charles H.
Lawrance, James M. Stubchaer and Jon A. Ahlroth, WR
July/Aug. 94, p458-475.

July/Aug. 39, p3-26-47.
Consensus as the Measure of Sustainability, Michael J. Bender and Slobodan P. Simonovic, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4148-4153.

Construction Automation: Demands and Satisfiers in the United States and Japan, John G. Everett and Hiroshi Saito, CO June 96, p147-151.

Environmental Justice: An Issue for States, Linda K. Murakami, Sia Davis and Deb Starkey, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p480-482.

Social communication

Business Development Basics, Mel Hensey, P.E., ME Nov./Dec. 96, p8-9.

Learning on the Jagged Edge, Bill Hayden, Jr., ME Jan./ Feb. 96, p23-25.

Social impact

Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996, 0-7844-0204-3, 144pp.

Construction Engineers Driving into the 21st Century, Vir K. Handa, CO Mar. 96, p1-6.

Editorial, Earl F. Burkholder, SU May 96, p45-46.

Engineering in Context: Engineering in Developing Countries, Laura Brigitte Parsons, El Oct. 96, p170-176.

Making Waves by Edward Wenk, Jr. Dan H. Pletta, El July 96, p136.

Social Consequences of Flood Mitigation, Elliott Mittler, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p369-370.

Urban Knowledge Parks and Economic and Social Development Strategies, George Bugliarello, UP June 96, p33-45.

Social needs

The Engineering Profession as a Major Role Player in the New South African Political Order, Kevin Wall, El Apr. 96, p73-77.

Ethical Responsibilities of Engineering Profession, Mark J. Holliday, El July 94, p270-272.

Occupational Hazards Scheme of Social Insurance in Saudi Arabia: Overview, M. Osama Jannadi, ME Mar/Apr. 96, p55-57.

Two Social Concerns of an ASCE Subcommittee, Mario Salvadori, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p30-34.

Social values

Learning on the Jagged Edge, Bill Hayden, Jr., ME Jan./ Feb. 96, p23-25.

Market, Not Engineers, Makes Decisions, Gerald L. De-Mers, CE Feb. 96, p32.

Socioeconomic data

Planning and Analysis of Airport Access Using GIS: SLCIA Example, John Bergener, Massoud Javid and Pranka Seneviratne, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p89-95.

Socioeconomic status

Long Term Scenarios for Europe in Space, Klaus Pseiner, Angelo Atzei and David Raitt, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p145-154.

Sociological factors

Civil Engineering and Disaster Responses in Developing Countries, Egon B. Westen, El Apr. 96, p89-92.

Flood Risk Management: New Concepts for an Objective Negotiation, O. Gilard, P. Givone and G. Oberlin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3918-3919.

Sodium

Use of NaOH to Control pH for Solubilization of Waste Activated Sludge, Jih-Gaw Lin, Cheng-Nan Chang and Shih-Ling Hsu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2468-2473.

Soft soils

Arching in Piled Embankments, B. K. Low, S. K. Tang and V. Choa, GT Nov. 94, p1917-1938.

Consolidation Characteristics of Phosphatic Clays, A. Naser Abu-Hejleh, Dobroslav Znidarcic and Bobby L. Barnes GT Apr. 96 p295-301

Nascr Adu-rigient, Booloans Samanch and Scale Barnes, GT Apr. 96, p295-301.

Defects in Soft Clays: A Challenge to Site Characterization for Stability Analysis, G. A. Leonards and R. J. Deschamps, Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1347-1366.

Desiccation Theory for Soft Cohesive Soils, A. Naser Abu-Hejleh and Dobroslav Znidarčić, GT June 95, p493-502.

Pore-Water Pressures in Freezing and Thawing Fine-Grained Soils, K. Dieter Eigenbrod, Sven Knutsson and Daichao Sheng, CR June 96, p77-92.

Soft Ground Improvement in Lowland and Other Environments, D. T. Bergado, L. R. Anderson, N. Miura and A. S. Balasubramaniam, 1996, 0-7844-0151-9, 433pp.

Soft-Ground Subway Construction, Mohammad Irshad, P.E. and John R. V. Dickson, P.E., CE Nov. 96, p54-57.

Softening

Finite Element Analysis of Discontinuities in Concrete, Hong D. Kang and Kaspar J. Willam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1054-1057.

Softening-Induced Dynamic Localization Instability: Seismic Damage in Frames, Zdeněk P. Bažant and Milan Jirásek, EM Dec. 96, p1149-1158.

Strength Growth as Chemo-Plastic Hardening in Early Age Concrete, Franz-Josef Ulm and Olivier Coussy, EM Dec. 96, p1123-1132.

Soil analysis

Calibration of XRF and Laboratory Analyses of Soil, Blair J. McDonald, Janice J. Trautner, Alan G. Seelos and Richard K. Glanzman, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p287-296.

Uncertainties in Characterising Soil Properties, Suzanne Lacasse and Farrokh Nadim, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p49-75.

Soil cemen

AASHTO Layer Coefficients for Cement-Stabilized Soil Bases, David N. Richardson, MT May 96, p83-87. Bank Protection Toe-Downs and Local Pier Scour, Dennis L. Richards and Christopher J. Pauley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4172-4177.

oil classification

Soil classification
The Reliability of Soil Classification Derived from Cone Penetration Test, Zhongjie Zhang and Mehmet T. Tumay, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p383-

Soil compaction
Statistical Model for Sand Compaction Under Cyclic Shear Strain, R. Ghanem and M. El-Mestkawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p722.
Use of Lunar Type Soil for Concrete Construction, Jay N. Meegoda, Hsin-Yu Shan, Jing-Fu Huang, Jia-Wen Tseng and Su-Hwa Cheng, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p614-620.

Soil compressibility
Importance of Strain Rate and Temperature Effects in Geotechnical Engineering, Serge Leroueil and Maria Esther Soares Marques, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p1-60.

oil conditions

Differing Site Conditions—Industry Consensus Opposes Ruling, S. Scot Litke, ME July/Aug. 96, p14-15. Mexico Earthquake Causes Casualties and Damage, CE

Jan. 96, p.24.
Nonlinear Soil Response—1994 Northridge, California, Earthquake, M. D. Trifunac and M. I. Todorovska, GT Sept. 96, p725-735.
Review of Factors Affecting In Situ Air Sparging, Daniel M. Baker and Craig H. Benson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p292-310.

Unique Pile Combination Supports New Tennis Complex, CE Dec. 96, p10,12.

Soil conservation

Earth Spillway Design Using SITES Software, Darrel M. Temple, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1930-1935.

Soil dynamics
Evaluation of Soil Liquefaction by Energy Principles, J.
Ludwig Figueroa, Adel S. Saada, Liqun Liang and Nitin
M. Dahisaria, GT Sept. 94, p1554-1569.
Multiphase Flow in Deforming Porous Media by the Finite
Element Method, Pedro Arduino and Emir J. Macari,
(Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Soil erosion

Cover-Subsidence Sinkhole Evaluation of State Road 434 Longwood, Florida, Jon Foshee and Brian Bixler, GT Nov. 94, p2026-2040.

Geo-data System for Landslide Hazard Assessment, Cas-sandra T. Rogers, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p70-

Soil freezing tests

Stress and Temperature Effects on Silt Frost Heave, Seyed

M. Marandi, Douglas I. Stewart and Terrence W.

Cousens, (Cold Regions Engineering: The Cold Regions
Infrastructure—An International Imperative for the 21st
Century, Robert F. Carlson, ed., 1996), p23-34.

Characterizing In Situ DNAPL Distribution, Mobility State, and Dissolution, Timothy J. Peck, Joy E. Ligé, Ian D. MacFarlane and Frank T. Barranco, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p103-114.

Conceptual Design of Soil Venting Systems, David W. DePaoli, James H. Wilson and Carl O. Thomas, EE May

96, p399-406.

LNAPL Detection, Measurement, and Distribution in the Subsurface Environment, David W. Ostendorf, Alan J. Subsurface Environment, David W. Ostendori, Alan J. Lutenegger, Russell J. Suchana, Paul S. Cheever and Samuel J. Pollock, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p91-102.

The Return of Deep Soil Mixing, Donald A. Bruce, CE Dec. 96, p44-46.

Soil investigations
Common Causes of Retaining-Wall Distress: Case Study, Edred T. Marsh and Richard K. Walsh, CF Feb. 96

Condition Assessment of Transportation Infrastructure Using Ground-Penetrating Radar, Kenneth R. Maser, IS

June 96, p94-101. Giant, Man-Made Eel Inspects City's Sewers, CE Apr. 96,

p8.
Seismic Signatures of Patchy Saturation, Jack Dvorkin and Amos Nur, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p645-648.

A Unified Description of Soil Behavior, Juan M. Pestana, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p281-284

Soil layers

AASHTO Layer Coefficients for Cement-Stabilized Soil

Bases, David N. Richardson, MT May 96, p83-87.

Bearing Capacity of Hydrated Geosynthetic Clay Liners,

Robert M. Koerner and Dhani Narejo, GT Jan. 95, p82-

Stochastic Finite-Element Analysis of Soil Layers with Random Interface, R. Ghanem and W. Brzakala, EM

Apr. 96, p361-369.
Unsaturated Hydraulic Conductivity of Two Compacted Barrier Soils, J. S. Meerdink, C. H. Benson and M. V. Khire, GT July 96, p565-576.

Choice of Input Fields in Stochastic Finite Elements, Ove Ditlevsen and Niels Jacob Tarp-Johansen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p820-837

Effect of Geogrid Reinforcement in Model Track Tests on

Pavements, Fereidoon Moghaddas-Nejad and John C. Small, TE Nov/Dec. 96, p468-474. Embankment Dams in the Piedmont/Blue Ridge Province, Chuck Wilson and Ray Martin, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p27-36.
Vertical Uplift Capacity of Horizontal Anchors, Kanakapura S. Subba Rao and Jyant Kumar, GT July 94, p1134-1147.

Soil modulus

Reliability of the SASW Method for Determination of the Shear Modulus of Soils, Karen E. Tuomi and Dennis R. Hiltunen, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996),

Soil nailing

Applications of Soil Nailing in Residual Soil, James W. Sigourney, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson,

ed., 1996), p57-65.

Nailing A Landslide (Available only in the Geo/ Environmental Special Issue), Al Colarusso, CE Nov. 96, p13A-15A.

Stabilization of a Creeping Slope Using Soil Nails, Peter R. Cali, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p109-121.

Soil permeability Cracks in Poroelastic Materials with a Highly Anisotropic Fluid Response, C. Atkinson and R. V. Craster, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), p212-215.

Fracturing for In-situ Bioremediation (Available only in acturing for in-state Bottenediation (Available only in Focus on Geo/Environmental Special Issue), Sankar N. Venkatraman, John R. Schuring, Thomas M. Boland and David S. Kosson, CE Mar. 96, p14A-16A. On Conductivity of Soils with Preferential Flow Paths, R. S. Govindaraju and J. Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1730-1735.

Statistics of Free Surface Flow through Stochastic Earth Dam, Gordon A. Fenton and D. V. Griffiths, GT June 96,

p427-436.

Soil pollution Aggregates for Construction from Vitrified Chromium Contaminated Soils, Jay N. Meegoda, W. Kamol-pormwijit, David A. Vaccari, A. S. Ezeldin, L. Walden, W. A. Ward, B. A. Noval, R. T. Mueller and S. Santora, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p31-46.

Alachlor Transport in Laboratory Soil Columns, Mutasem El-Fadel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1999-2004.

Biopolymers for Geotechnical Applications, Teh Fu Yen, Iris C. Y. Yang, Shiva Karimi and Geoffrey R. Martin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

CHEMFLO Modeling of Aquifer Bioremediation in Va-dose Zone, Avdhesh K. Tyagi, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2516-2521.

A Cost-Effective approach to In Situ Remediation of Soil and Groundwater at a Diesel Fuel Spill Site, David A. Nickerson and James N. Baker, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1379-1386.

Chayya Bathata, ed., 1990, p.1379-1380. Delineating Subsurface Contamination Using Geostatistical and Non-Intrusive Geophysical Methodologies, Sandra Bowling, Wayne Woldt and Dennis Schulte, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2230-2235.

Design and Implementation of a Multi-Faceted Site Reme-diation, Stephen A. Kessel and Arnold S. Vernick, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p541-546.

Development of Remediation Technologies Simulators, Mark S. Dortch and Christian J. McGrath, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2583-2588.

The Dielectric Constant of Soil-NAPL Mixtures at Low Frequencies (100 Hz—10 kHz), Victor A. Rinaldi and Emilio R. Redolfi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p163-174.

Do-Nothing Cleanups, Randall T. Hicks and Rais Rizvi, CE Sept. 96, p54-57.

Editor's Note, Thomas L. Theis, EE Nov. 96, p956.

EDTA-Enhanced Electrokinetic Extraction of Lead. Albert T. Yeung, Cheng-non Hsu and Rajendra M. Menon, GT Aug. 96, p666-673.

Electrokinetic Remediation. I: Pilot-Scale Tests with Lead-Spiked Kaolinite, Yalçın B. Acar and Akram N. Alshawabkeh, GT Mar. 96, p173-185.

Electrokinetic Remediation: II: Theoretical Model, Akram N. Alshawabkeh and Yalçın B. Acar, GT Mar. 96, p186-196

Electromigration of Nitrates in Soil, George Cairo, Dennis Larson and Donald Slack, IR Sept./Oct. 96, p286-290. Engineered Contaminated Soils and Interaction of Soil Geomembranes, Geotechnical Special Publication No. 59, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996, 0-7844-0213-2, 144pp.

Enhanced Trichloroethene Desorption from Long-Term Contaminated Soil Using Triton X-100 and pH Increases, Dipak Sahoo, James A. Smith, Thomas E. Imbrigiotta and Heather M. McLellan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1215-1220.

Field Investigation of Potential Contamination by Bitu-men-Coated Piles, Albert T. Yeung, Rajan Viswanathan and Jean-Louis Briaud, GT Sept. 96, p736-744.

Geochemical Modeling of Lead in Vadose Zone, K. V. Nedunuri, R. S. Govindaraju, A. P. Schwab and L. E. Erickson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1221-1226.

Interference by Natural Organics in Diesel Analyses, Paul Dworian, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p71-81.

Liability to Asset: Beneficial Reuse of Stabilized Contaminated Soils, Michael F. Conway, (Engineered Contami-nated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p47-56.

Loss of Contaminants from Soil During Runoff Events, A. Parr, S. Zou and B. McEnroe, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p70-81.

Mechanisms Involved in Vibratory Destabilization of NAPL Ganglia in Sands, Lakshmi N. Reddi and Hui Wu,

EE Dec. 96, p1115-1119.

Microbial Decontamination of Polluted Soil in a Slurry Process, M. J. Geerdink, R. H. Kleijntjens, M. C. M. van Loosdrecht and K. C. A. M. Luyben, EE Nov. 96, p975-

Neural Networks Predict Pesticide Leaching, Steven K. Starrett, Shelli K. Starrett, Yacoub M. Najjar and Judy C. Hill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1693-1698.

A New Direction in Remediation, Paul P. Parmentier and Ronald M. Klemovich, CE Apr. 96, p55-57.

Optimization of Soil Vapor Extraction System Design, Yung-Hsin Sun and William W-G. Yeh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1387-1392.

A Paradox at the rocky Mountai Arsenal, Colorado: Benefits of Applied Research, Robert D. Jarrett, Joseph P. Capesius and Mark A. Gonzalez, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1553-1554.

Petroleum Hydrocarbon Removal via Volatilization and Bi-odegradation at McGrath, Alaska, Paul C. Ramert and Wayne L. Ebrhardt, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Impera-tive for the 21st Century, Robert F. Carlson, ed., 1996), ed. 105

A Pilot-Scale Study of In Situ Hydrocarbon Remediation of Contamination in Soil and Groundwater at Fort Wain-Contamination in Soil and Orolindwater at Fort Wain-wright, Alaska, Timothy F. Gould and Mark Wallace, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p106-115.

Predicting Transport of Organics through Soil Columns using Distributed Mass-Transfer Rates, Teresa B. Culver and Stephen P. Hallisey, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p2005-2010.

Significance of Geologic Features on the Contaminant Mi-gration from Landfill Sites, Rao Nivargikar and Thomas Voss, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p988-993.

Small Inocula Can Effect In Situ Biodegradation, Rolf U. Halden and Daryl F. Dwyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2402.

SoilRisk: Risk Assessment Model for Organic Contami-nants in Soil, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE May 96, p388-398.

Surfactant Enhanced Electrokinetic Remediation of Gaso-line Contaminated Soils, Sujan K. Bhattacharya, David H. Foster and J. Mohan Reddy, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p311Surfactant-Enhanced Extraction and Biodegradation of a Non-Aqueous Phase Contaminant in Soil, Satishkumar Santharam, Larry Eugene Erickson and Liang-tseng Fan, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p419-430.

Use of Remediated Petroleum Contaminated Soils in Highway Construction, Jay N. Meegoda, Robert T. Mueller and Frank Palise, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p1-16.

Vertical Migration of Diesel into Sitty Sand Subject to Cy-clic Freeze-Thaw, K. W. Biggar and J. C. R. Neufeld, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p116-127.

Washing of Zinc (II) from Contaminated Soil Column, Allen P. Davis and Inderbir Singh, EE Feb. 95, p174-

Waste Using Organic-Clay Complex, Irene M.-C. Lo, EE Sept. 96, p850-855.

Wettability of NAPL-Contaminated Sands, Susan E. Powers, William H. Anckner and Thomas F. Seacord, EE Oct. 96, p889-896.

Soil porosity

Estimation of In Situ Hydraulic Properties of Saprolite, Gordon M. Matheson, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p66-73.

Soil properties

Analysis of Cone Pressuremeter Tests in Sands, H. S. Yu, F. Schnaid and I. F. Collins, GT Aug. 96, p623-632.

Analyzing Spatial Variability of In Situ Soil Properties, Don J. DeGroot, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p210-238.

Considering Uncertainty in Earthquake Response Spectra, Sara Wadia-Fascetti and Burcu Vuran Gunes, (Natural Disaster Reduction, George W. Housner, ed. and Riley

M. Chung, ed., 1997), p211-212.

Dempster-Shafer Approach to Soil Properties, David Rees Gillette, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1254-1268.

Determination of Post-Liquefaction Strength: Steady State vs Residual Strength, S. Thevanayagam, C. C. Wang and K. Ravishankar, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1210-1224.

Deterministic and Probabilistic Analyses of Preload Design at a Hydraulic Fill Site, S. Thevanayagam, E. Kavazan-jian, Jr., A. Jacob and S. Nesarajah, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J.

S. Roth, ed., 1996), p1417-1431. Effects of Soil Nonhomogeneity on SASW Testing, Nenad Gucunski, Vahid Ganji and M. H. Maher, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1083-1097.

Effects of Spatially Variable Intake on Surface Irrigation Advance, Dani Or and Wynn R. Walker, IR Mar/Apr. 96, p122-130.

Elastic Properties of Soils, Pierre-Yves Hicher, GT Aug. 96, p641-648.

Estimation of Driven Pile Resistance at an Overconsolidated Clay Site Using Geostatistical Methods, Gil L. Yoon and Michael W. O'Neill, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p950-953.

Estimation of In-Situ Test Uncertainty, Fred H. Kulhawy and Charles H. Trautmann, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p269-286.

Evaluating the Variability of Engineering Properties of Soil Deposits Using Fractals, Luis E. Vallejo, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p353-367.

Evaluation of Engineering Properties of Problematic Soils in Highway Construction, W. Virgil Ping, Sean McDonald and Robert K. H. Ho, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p721-730.

Fabric Anisotropy and Its Relationship to Macroscopic Constitutive Behavior of Clays, A. Anandarajah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p877-880.

Geostatistical Assessment of Spatial Variability in Piezocone Tests, Yasser A. Hegazy, Mayne Paul W. and Shahrokh Rouhani, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p254-268.

Geotechnical Properties of Oil-Contaminated Kuwaiti Sand, Hasan A. Al-Sanad, Walid K. Eid and Nabil F. Is-

mael, GT May 95, p407-412.

Inference of Dynamic Shear Modulus from Lotung Downhole Data, C.-Y. Chang, Chin Man Mok and H.-T. Tang, GT Aug. 96, p657-665.

Infiltration Properties at Two Sites in the Konza Prairie, R. S. Govindaraju, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1267-1272.

Influence of Spatial Variability of Soil Properties on Seismically Induced Soil Liquefaction, Radu Popescu, Jean H. Prevost and George Deodatis, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1098-1112.

Mechanical and Load-Settlement Characteristics of Two Lunar Soil Simulants, Steven W. Perkins and Craig R.

Madson, AS Jan. 96, p1-9.

Minimizing Uncertainties in Geotechnical Investigations, Yakov M. Reznik, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p149-166.

Modeling Stress-Strain Response of Clay Using Neural Nets, Yacoub M. Najjar, Imad A. Basheer and Hossam A. Ali, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p697-700.

On Quantifying Inherent Soil Variability, Kok Kwang Phoon and Fred H. Kulhawy, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p326-340.

Overcoming Soil Uncertainty in Prediction of Construction and Industrial Vibrations, Mark R. Svinkin, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1178-1194.

Probabilistic Analysis of Foundation Settlement, Gordon A. Fenton, G. M. Paice and D. V. Griffiths, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p651-665.

May 7. 3. Rolin, cu., 1720, portract.
Reliability Based Design of Reinforced Earth Structures,
Adnan A. Basma and Ali S. Al-Harthy, (Probabilistic
Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p788-791.

Simulation of Multi-Dimensional, Multi-Variate, Non-Gaussian, Homogeneous Stochastic Fields with Applications to Soil Liquefaction, Radu Popescu, George Deodatis and Jean H. Prevost, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p808-811.

Soil Thermal Properties for the Design of Underground Structures in Cold Regions, J. E. Steinmanis, D. Parmar, H. S. Radhakrishna and A. S. Judge, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p471-482. Spatial Variability of Soil Parameters, Derin N. Ural, (Un-certainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p341-352.

State Parameter from Self-Boring Pressuremeter Tests in Sand, H. S. Yu, GT Dec. 94, p2118-2135.

Stochastic Finite Element Method in Geomechanics, Gabriel Auvinet, Amine Bouayed, Sandra Orlandi and Arturo López, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1239-1253.

System Identification and Its Application to Estimating Soil Properties, Steven Glaser, GT July 95, p553-560.

Properties, Steven Glaser, G1 July 95, popp-3-500.
Three-Fluid Phase Flow in Heterogeneous Subsurface: Perturbation and Numerical Analyses, Alaa E. Abdin and Jagath J. Kaluarachchi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p513-525.
Uncertainties in Characterising Soil Properties, Suzanne Laguese and Enrokh Nadim (Illuscriptin) in the Goodon.

Lacasse and Farrokh Nadim, (Uncertainty in the Geolog-ic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.

Roth, ed., 1996), p49-75.

A Unified Description of Soil Behavior, Juan M. Pestana, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p281-284.

Soil resistance

Bayesian Liquefaction Resistance Analysis, Wilson H. Tang and Mauricio Angulo, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1195-1209.

Strain Level and Uncertainty of Liquefaction Related Index Tests, D. Roy, R. G. Campanella, P. M. Byrne and J. M. O. Hughes, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1149-1162.

Soil sampling

Son sampling Anaerobic Bacterial Quantitation of Yucca Mountain, Nevada Doe Site Samples, William W. Clarkson, Lee R. Krumholz and Joseph M. Suffita, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p39-40.

Characterizing In Situ DNAPL Distribution, Mobility State, and Dissolution, Timothy J. Peck, Joy E. Ligé, Ian D. MacFarlane and Frank T. Barranco, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p103-114.

Fluidized Drilling for Lunar Mining Applications, Brad R. Blair, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p813-820.

Influence of Hammer Type on SPT Results, Elliott E. Drumright, Charles W. Pfingsten and Robert G. Lukas,

Drumright, Charles W. Phingsten and Robert G. Lukas, GT July 96, p598-599.
Laser Induced Fluorescence and Cone Penetrometer Testing for Delineation of Hydrocarbons, Benjamin J. Timerson and Donald M. Moran, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p115-126.
Polymer Impregnation to Assist Undisturbed Sampling of Cohesionless Soils, Kevin G. Sutterer, J. David Frost and Jean Lou & Chargem, GT Mar. 96, e209-215.

Jean-Lou A. Chameau, GT Mar. 96, p209-215.

il saturation zones

Solistributed Hydrologic Modeling of Humid Regions, Fred L. Ogden, Brent A. Watts and B. Saghafian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2909-2914.

Soil settlement Earthquake-Induced Ground Settlements of Bridge Abur-ment Fills, Raj V. Siddharthan and Mahmoud El-Gamal, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p100-123.Rethinking Foundation Design in Karst Residuum, Ray-mond A. DeStephen and Steven E. Conner, (Design with Residual Materials: Geotechnical and Construction Con-tifications, Gordon Matheson ed. 1996), 199-56.

siderations, Gordon Matheson, ed., 1996), p49-56.

Soil stability

Erosion and Stability of a Mine Soil, Tien H. Wu, Alan T. Stadler and Chin-wah Low, GT June 96, p445-453.

Seismic Assessment for Offshore Pipelines, R. Bruschi, O. T. Gudmestad, F. Blaker and F. Nadim, IS Sept. 96, p145-151.

Assessing the Significance of Subgrade Variability on Test Section Performance, Maureen A. Kestler, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackefford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p685-694.

Iron(II) Amine Complex Soil Stabilization, David A. Hem-street and Ted S. Vinson, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p447-458.

Nailing A Landslide (Available only in the Geo/ Environmental Special Issue), Al Colarusso, CE Nov. 96, p13A-15A.

Pavement Design at Louisville: Optimizing Local Practice, Darren L. Piedmonte, (Meeting the Challenge: Rebuild-ing Inner City Airports, Prianka Seneviratne, ed., 1996).

Polymer Impregnation to Assist Undisturbed Sampling of Cohesionless Soils, Kevin G. Sutterer, J. David Frost and Jean-Lou A. Chameau, GT Mar. 96, p209-215.

Soft Ground Improvement in Lowland and Other Environ-ments, D. T. Bergado, L. R. Anderson, N. Miura and A. S. Balasubramaniam, 1996, 0-7844-0151-9, 433pp.

Soil Stabilization Utilizing Alternative Waste Materials, Greg Heckel and Riyad Wahab, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p318-327.

Biopolymers for Geotechnical Applications, Teh Fu Yen, Iris C. Y. Yang, Shiva Karimi and Geoffrey R. Martin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1602-1607.

Determination of Post-Liquefaction Strength: Steady State vs Residual Strength, S. Thevanayagam, C. C. Wang and K. Ravishankar, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1210-1224.

Reliability Assessment of Dike and Levee Embankments, Thomas F. Wolff, Edward C. Demsky, Jeffrey Schauer and Edward Perry, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p636-650.

Rate-dependent Deformation of Structured Natural Clays, Kenichi Soga and James K. Mitchell, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p243-

Strain Rate and Structuring Effects on the Compressibility of a Young Clay, Serge Leroueil, Didier Perret and Jacques Locat, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p137-150.

Effects of Soil Nonhomogeneity on SASW Testing, Nenad Gucunski, Vahid Ganji and M. H. Maher, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1083-1097.

Electrical Resistivity of Compacted Clays, Zeyad S. Abu-Hassanein, Craig H. Benson and Lisa R. Blotz, GT May

96, p397-406.

Importance of Strain Rate and Temperature Effects in Geo-technical Engineering, Serge Leroueil and Maria Esther Soares Marques, (Measuring and Modeling Time De-pendent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p1-60.

mittee, 1996), p33-35.

Issues of Uncertainty Regarding Localized Strains in Granular Soils, M. A. Mooney, R. J. Finno, G. Viggiani and W. W. Harris, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1986-2013, 225 1996), p312-325.

Non-Linear Models for Resilient Modulus Characterization of Granular Soils, Anand J. Puppala, Louay N. Mohammad and Aaron Allen, (Engineering Mechanics, Y. K.

Lin and T. C. Su, 1996), p559-562.

Pulse Transmission System for Measuring Wave Propaga-tion in Soils, Koichi Nakagawa, Kenichi Soga and James K. Mitchell, GT Apr. 96, p302-308.

Reliability of the SASW Method for Determination of the Shear Modulus of Soils, Karen E. Tuomi and Dennis R. Hiltunen, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1225-1238.

Strain Level and Uncertainty of Liquefaction Related Index Tests, D. Roy, R. G. Campanella, P. M. Byrne and J. M. O. Hughes, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996),

The Use of Direct Push Technologies in Expedited Site Characterization, Greg A. Stenback, Bruce H. Kjartanson, Al Bevolo and David Wonder, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p180-194.

Environmental Engineers Take Aim at Firing Range, CE Aug. 96, p18.

Hazardous Soil Remediation: A Cooperative Effort Be-tween Industry and Government, Wendy L. Cohen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1203-1208.

Innovative Bioventing System Construction/Operation in Cold Regions, Kimberly K. Stricklan and Randall L. Mattzela, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p351-359.

Optimization of Soil Vapor Extraction System Design, Yung-Hsin Sun and William W-G. Yeh, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1387-1392.

Petroleum Hydrocarbon Removal via Volatilization and Biodegradation at McGrath, Alaska, Paul C. Ramert and Wayne L. Eberhardt, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996),

A Pilot-Scale Study of In Situ Hydrocarbon Remediation of Contamination in Soil and Groundwater at Fort Wain-wright, Alaska, Timothy F. Gould and Mark Wallace, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p!06-115.

To Allay Brownfields "Misperceptions", Dante J. Tedaldi, P.E., CE Oct. 96, p37.

Conservative Characteristics-Based Schemes for Mass Transport, C. W. Li and T. S. Yu, HY Sept. 94, p1089-

Designing SVE to Remove Volatile LNAPLs, Richard Haimann, Kathleen Schoen, Mark Underwood, Jeff Munic and Jim Hartley, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p431-441.

Development of a Regional Atmospheric-Hydrologic Model for the Study of Climate Change in California, ZhiQiang Chen, M. Levent Kavvas, Liqin Tan and Su-Tzai Soong, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1093-1098.

The Dielectric Constant of Soil-NAPL Mixtures at Low Frequencies (100 Hz—10 kHz), Victor A. Rinaldi and Emilio R. Redolfi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p163-174.

A Discussion of Two SVE/Bioventing Pilot Studies, Robin D. Wankum, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation,

Lakshmi N. Reddi, ed., 1996), p751-761.

Effect of Reservoir Hedging on Crop Yield Under Deficit Irrigation Conditions, Arathi T. Seshan and K. Sriniva-san, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4226-4232.

Estimation of Flash Flood Potential for Large Areas, K. P. Georgakakos, A. K. Guetter and J. A. Sperfslage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1147

Evaluation of Engineering Properties of Problematic Soils in Highway Construction, W. Virgil Ping, Sean McDonald and Robert K. H. Ho, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p721-730.

Evapotranspiration Estimates under Deficient Water Sup-plies, J. L. Hatfield and R. G. Allen, IR Sept/Oct. 96,

p301-308.

642

Nonlinear Root-Water Uptake Model, Chandra Shekhar P. Ojha and Amaresh K. Rai, IR July/Aug. 96, p198-202.

Performance Evaluation of the Aeration Curtain at Hill Air Force Base, Utah, Paul R. Bitter and David A. Hoffman, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p776-787.

Soil Type Effect on NAPL Removal by Surfactant, Olubun-mi M. Ogunsola and Mark A. Tumeo, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed.,

1996), p281-291.

Soil Water Chemistry of Irrigation with Drainwater, B. R. Faulkner and J. C. Guitjens, (North American Water and Environment Congress & Destructive Water, Chem-

chayya Bathala, ed., 1996), p1483-1488.

Chayya Batthan, ed., 1720/1910-1910-1910 Systems for Porceasting Flows and Their Uncertainty, Kon-stantine P. Georgakakos, Alexandre K. Guetter and Jason A. Sperfslage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2360-2365.

Three-Dimensional Numerical Simulation of Soil Vapor Extraction, Albert T. Yeung and Hui-Tsung Hsu, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environent: Assessment and Remediation, Lakshmi N. Reddi,

ed., 1996), p442-453.

Two-Dimensional Parallel Computing Solution of Coupled Heat and Moisture Flow in Unsaturated Soil, Hywel Rhys Thomas and Chi Leung Welkin Li, CP July 96, p236-247.

Upscaled Soil-Water Retention Using van Genuchten's Function, Timothy R. Green, James E. Constantz and David L. Freyberg, HE July 96, p123-130.

Soil water movement

A Comparative Study of the Transformed Methods for Solving Richards' Equation, M. Rashidul Islam, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1748-1753.

Soil-Limiting Flow from Subsurface Emitters. II: Effect on Uniformity, A. W. Warrick and U. Shani, IR Sept./Oct. 96, p296-300.

oil, shear strength

Analyzing of Two Dimensional Slope Stability and Foun-dation Problems Considering Soil-Structure Interaction Effect, Stanley Z. He, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p832-837.

Soil-pile interaction

Difference between Load-Transfer Relationships for Laterally Loaded Pile Groups: Active P-Y or Passive P-δ, M. F. Bransby, GT Dec. 96, p1015-1018.

Forces in Pile Foundations under Seismic Loading, M. Kaynia and Saeed Mahzooni, EM Jan. 96, p46-53. LATWAK: Impact Test to Obtain Pile Lateral Static

Stiffness, Jean-Louis Briaud and Marc Ballouz, GT June 96, p437-444.

Modeling the Dynamic Nonlinear Response of Single Piles, Deepak Badoni and Nicos Makris, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1091-1098.

Negative Skin Friction on Piles in Layered Soil Deposits, K. S. Wong and C. I. Teh, GT June 95, p457-465.

Soil-pipe interaction

1500 mm Corrugated HDPE Pipe Installation and Performance, David J. Mailhot, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p69-76.

Pipe-Soil Interaction Analysis of Field Tests of Buried PVC Pipe, Senro Kuraoka, Balvant Rajani and Caizhao Zhan, IS Dec. 96, p119-120.

Pipeline Beam Models Using Stiffness Property Deforma-tion Relations, Zhilong Zhou and D. W. Murray, TE Mar./Apr. 96, p164-172

Ultimate Strength of Underwater Pipe-Soil Systems, Mehdi S. Zarghamee, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p230-236.

Soil-structure interaction

Analyzing of Two Dimensional Slope Stability and Foun-dation Problems Considering Soil-Structure Interaction Effect, Stanley Z. He, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p832-837.

Assessments of Lateral and Torsional Structural Responses Induced by Incoherent Ground Motions, G. D. Hahn and X. Liu, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996), p188-191.

Capacity and Stiffness of Bridge Abutments During Earth-quakes, Rakesh K. Goel, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p239-240.

Dynamic Analysis of Concrete Pavements Subjected to Moving Loads, Chih-Ping Wu and Pao-Anne Shen, TE Sept./Oct. 96, p367-373.

Dynamic Modeling and Response of Soil-Wall Systems, Anestis S. Veletsos and Adel H. Younan, GT Dec. 94, p2155-2179.

Dynamic Responses of Snallow-Buried Flexible Plates Subjected to Impact Loading, Hung-Liang (Roger) Chen and Shen-En Chen, ST Jan. 96, p55-60.

Dynamic Sub-Structure Method in Time Domain Using Analytical Representation of Dynamic Stiffness of Soil, Nagayuki Yoshida, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p184-187.

Dynamic Through-the Soil Interaction of Adjacent Surface or Buried Structures, D. C. Rizos and D. L. Karabalis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Fifect of Soil-Structure Interaction on Structural Response, Y. Yong, R. C. Zhang and J. Yu, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p1098-1101.

Explicit Stresses under Rectangular Footings, R. Irles and F. Irles, GT Feb. 94, p444-450.

Finite Element Transient Analysis (FETA) of Solids and Structures Including Soil-Fluid-Structure Interaction, D. C. Rizos, D. L. Karabalis, G. J. Cokkinides, J. L. Tassou-las and J. S. Mulliken, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p480-486.

Formulation and Implementation of Improved Zero-Thickness Interface Elements, V. N. Kaliakin, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

p285-288.

In-Situ Dynamic Response of Cantilever Walls, Sreenivas Alampalli and Ahmed-W. Elgamal, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p57-76. Influence of Foundation Nonlinearity on Offshore Towers Response, Mohamed H. El Naggar and Milos Novak, GT Sept. 96, p717-724.

Nonlinear Pile Foundation Analysis Using Florida-Pier, M. I. Hoit, M. McVay, C. Hays and P. W. Andrade, BE

Nov. 96, p135-142.

Probabilistic Seismic Analysis Including Soil-Structure In-teraction, Dan M. Ghiocel, Paul R. Wilson and Gary G. Thomas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p620-623.

Red River U-Frame Lock No. 1 Backfill-Structure-Foundation Interaction, Robert M. Ebeling and Reed L. Mosher, GT Mar. 96, p216-225.

Repair of Damaged Slab-on-Grade Foundations, Robert W.

Day, SC May 96, p69-73.

Seismic Evaluation and Retrofitting of U.S. Long-Span Suspension Bridges--Issues and Solutions, Subcommittee on Seismic Performance of Bridges, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p56-90.

Seismic Response Assessment of Active-Controlled Multi-Story Buildings with Soil-Foundation Influence, F. Y. Cheng, S. Suthiwong and P. Tian, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1155-1163.

Seismic Response of Flexibly Supported Coupled Shear Walls, O. Chaallal and N. Ghlamallah, ST Oct. 96,

p1187-1197.

Soil-Structure Interaction for Base-Isolated Buildings, Maria I. Todorovska, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p172-175.

Static Stiffness of Unbounded Soil by Finite-Element Method, John P. Wolf and Chongmin Song, GT Apr. 96, p267-273.

Architecture on the Moon: The Importance of Human Factors Considerations in the Design of a Lunar Base, John Bergquist, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1038-1044.

Blasting Densifies Volcanic Debris (Available only in Focus on Geo/Environmental Special Issue), Thomas C. Badger, CE Mar. 96, p8A-12A.

Building on the Moon, CE Oct. 96, p11.

Comparison of Spatial Variability of Infiltration Properties at Two Sites in Konza Prairie of East-Central Kansas, R. S. Govindaraju, J. K. Koelliker, M. K. Banks and A. P. Schwab, HE July 96, p131-138.

Constitutive Modeling and Analysis of Creeping Slopes, Chandra S. Desai, Naresh C. Samtani and Laurent Vul-

liet, GT Jan. 95, p43-56.

Creep Deformation and Stress Relaxation in Preloaded/ Prestressed Geosynthetic-Reinforced Soil Retaining Walls, Fumio Tatsuoka, Taro Uchimura, Masaru Tateyama and Katsumi Muramoto, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p258-272.

Crop Growth and Water Use Model for Lettuce, M. Gallar-do, R. L. Snyder, K. Schulbach and L. E. Jackson, IR Nov/Dec. 96, p354-359.

Erosion and Stability of a Mine Soil, Tien H. Wu, Alan T. Stadler and Chin-wah Low, GT June 96, p445-453.

Failure of Fiber-Reinforced Granular Soils, Radoslaw I Michalowski and Aigen Zhao, GT Mar. 96, p226-234.

Flushing of a Pb(II) Contaminated Soil Using HCl, EDTA, and CaCl2, Brian E. Reed, Patrick C. Carriere and Roderic Moore, EE Jan. 96, p48-50.

Guest Editorial, Pat Langhorne, CR Mar. 96, p1-5.

Implicit Integration Procedures and Consistent Tangent Op-erators for Bounding Surface Plasticity Models, P. Rahulkumar and S. Saigal, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p140-143.

Interference of Avian Guano in Analyses of Fuel-Contaminated Soils, David E. James, Tod E. Johnson and David K. Kreamer, EE Jan. 96, p74-76.

Iron Filing Installation Cleans Contaminants, CE Nov. 96,

Long-term Consequences of Recycling Drainage Water for Irrigation, S. R. Grattan and J. D. Rhoades, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1942-1947.

Lunar Excavating Research, Walter W. Boles and John F. Connolly, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p699-705.

Measuring and Modeling Time Dependent Soil Behavior, Geotechnical Special Publication No. 61, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996, 0-7844-0205-1, 288pp.

Mechanical and Load-Settlement Characteristics of Two Lunar Soil Simulants, Steven W. Perkins and Craig R.

Madson, AS Jan. 96, p1-9.

Mechanical Properties of JSC-1 Lunar Regolith Simulant, J. Ledlie Klosky, Stein Sture, Hon-Yim Ko and Frank Barnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p680-688.

Mechanical Properties of Vitrified Soils, Christopher Y. Tuan and William C. Dass, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p731-740.

Microbial Decontamination of Polluted Soil in a Slurry Process, M. J. Geerdink, R. H. Kleijntjens, M. C. M. van Loosdrecht and K. C. A. M. Luyben, EE Nov. 96, p975-982

Model for Efficiency of Soil Flushing Using PVD-Enhanced System, M. A. Gabr, J. Wang and J. J. Bowders, GT Nov. 96, p914-919.

Model Studies of Effects on Lunar Soil of Chemical Explosions, Chaun-Ping Lin, Deborah J. Goodings, Leonhard E. Bernold, Richard D. Dick and William L. Fourney, GT Oct. 94, p1684-1703.

Modified Oedometer for Arid, Saline Soils, Omar Saced Baghabra Al-Amoudi and Sahel N. Abduljauwad, GT

Oct. 94, p1892-1897.

MRI Studies of Direct Shear Tests on Round Particles, Tang-Tat Ng, Marlene Kelley and James Sampson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p572-575.

On New Materials, Thanks All Around, Christophe Tuan and Lawrence C. Muszynski, CE Feb. 96, p31.

Optimum On-Farm Irrigation Efficiency for Sustainable Agriculture, B. Davidoff, E. Craddock, M. Roos and F. Karajeh, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p189-194.

Oxygen Supplies for Bioremediation in Tundra Soils, Dan-iel M. White and Robert L. Irvine, (Cold Regions Engineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p339-350.

Reconsideration of Initiation of Liquefaction in Sandy Soils, Catherine E. Fear and Edward C. McRoberts, GT

Mar. 95, p249-261. REGA (Regolith Evolved Gas Analyzer), David S. McKay and Carlton C. Allen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Risk Variability Due to Uniform Soil Remediation Goals, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE July 96, p612-621.

Route Location/Siting: A Review of Practices, Robert L. Schraeder, Charles H. Riddle and Willard H. Slater, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p23-56.

Sand Reinforced with Shredded Waste Tires, Gary J. Foose, Craig H. Benson and Peter J. Bosscher, GT Sept. 96, p760-767.

Scale Effects of Shallow Foundations on Lunar Regolith, Steven W. Perkins and Craig R. Madson, (Engineering, Construction, and Operations in Space, Stewart W. Construction, and Operations in Space, Stewart Johnson, ed., 1996), p963-972.

Seismic Liquefaction Potential Assessed by Neural Net-works, Anthony T. C. Goh, GT Sept. 94, p1467-1480.

Simulation of Bioventing for Soil and Ground-Water Re-mediation, Paul D. McClure and Brent E. Sleep, EE Nov. 96, p1003-1012.

Surface Cleanliness Effects on Lunar Regolith Shear Strength, Howard A. Perko, John D. Nelson and Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p689-698.

Theory and Practice of Projectile's Penetration in Soils, Yu. Boguslavskii, S. Drabkin, I. Juran and A. Salman, GT

Oct. 96, p806-812.

Vibratory Excavation and Anchoring Tools for the Lunar Surface, J. Ledlie Klosky, Stein Sture, Hon-Yim Ko and Frank Barnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p903-911.

olcanic Glass -- Oxygen Ore on the Moon, Carlton C. Allen, John M. Woodell and David S. McKay, (Engi-Volcanic Glass neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p756-761.

Analytical Study and Verification of a Coupled Theory of on Mixtures for Application in Cone Penetration and Tunnel Boring in Soils, George Z. Voyiadjis, Murad Y. Abu-Farsakh and Mehmet T. Tumay, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p543-546.

SCS Runoff Equation Revisited for Variable-Source Runoff Areas, Tammo S. Steenhuis, Michael Winchell, Jane Rossing, James A. Zollweg and Michael F. Walter, IR May/June 95, p234-238.

Soils, unsaturated

Advective-Diffusive Contaminant Migration in Unsaturated Sand and Gravel, R. Kerry Rowe and K. Bady, GT Dec. 96, p965-975.

Two-Dimensional Parallel Computing Solution of Coupled Heat and Moisture Flow in Unsaturated Soil, Hywel Rhys Thomas and Chi Leung Welkin Li, CP July 96, p236-247.

Unsaturated Hydraulic Conductivity of Two Compacted Barrier Soils, J. S. Meerdink, C. H. Benson and M. V. Khire, GT July 96, p565-576.

Solar collectors

BootStrapping Space Resource Utilization with Tethers, Regolith Rockets and Micro Rovers, Bruce A. Mackenzie, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p321-327.

Performance Characteristics of a Smart Hinge for Solar Array Deployment, Dirk B. Warnaar and Rodney G. Gal-loway, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1162-1168.

Review of the Solar Power Satellite, James McSpadden and Kai Chang, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p254-259.

Solar Power Satellites, Rebecca Kluck, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1281-1284.

Solar Power Satellites as an Alternative Energy Source, Wendy Shefelbine, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1307-1310.

World and Lunar Solar Power Systems Costs, David R. Criswell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p293-301.

Concept for a Permanent Lunar Utilities System, David G. Schrunk, Bonnie L. Cooper and Burt L. Sharpe, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p935-941.

Editorial, Boris Berkovski, EY Dec. 96, pvi-x.

Optical Waveguide Solar Energy System for Lunar Materials Processing, T. Nakamura, J. A. Case and C. L. Senior, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p783-790.

A Preliminary Design of a Pilot Plant for the Production of Lunar Oxygen, W. E. F. L. Moulford, A. R. Martin, P. W. Cains, P. D. Martin and G. Tan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p762-768.

REGA (Regolith Evolved Gas Analyzer), David S. McKay and Carlton C. Allen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996). Sample Returns to Enable Asteroid Mining, Alan J. Willoughby, Alan L. Friedlander, Darla J. German, Mark K. Jacobs, Jeffrey A. George and Kurt J. Hack, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p840-846.

Solar Power Satellites, Rebecca Kluck, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1281-1284.

Solar Power Satellites as an Alternative Energy Source, Wendy Shefelbine, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1307-1310.

Technology for Mining of Building Materials at First Stages of Moon Development, Oleg V. Nagovicin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p830-839.

Using Ultra High Solar Flux in the Lunar Environment: Production of Cement and Other Applications, Joseph J. O'Gallagher, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p571-

Solar power generation

The Economics of Space Solar Power, Carissa Bryce Christensen, Douglas A. Comstock and John C. Mankins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p260-268.

The Production of Photovoltaic Devices in Space, A. Ignatiev and A. Freundlich, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Review of the Solar Power Satellite, James McSpadden and Kai Chang, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p254-259.

World and Lunar Solar Power Systems Costs, David R. Criswell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p293-301.

Architectural Considerations in Design of Lunar-Based Astronomical Observatories, Stewart W. Johnson, Koon Meng Chua, Milton Schwartz and Jack O. Burns, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p871-880.

Assessing Integrity of Weather Data for Reference Evapo-transpiration Estimation, Richard G. Allen, IR Mar/Apr. 96, p97-106.

Innovative Radiation Shields for Lunar Surface Operations, Milton Schwartz and Raymond S. Leonard, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p349-354.

Review of the Solar Power Satellite, James McSpadden and Kai Chang, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p254-259.

Solid waste disposal

Curbside Collection of Yard Waste: I. Estimating Route Time, Jess W. Everett and Shiv Shahi, EE Feb. 96, p107-114.

Curbside Collection of Yard Waste: II. Simulation and Application, Jess W. Everett and Shiv Shahi, EE Feb. 96,

IAC Network for Composition of Waste-Incineration Facility, Jehng-Jung Kao and Yu-Ying Liao, CP Apr. 96,

Mixing Influences on Cement-Based Waste Forms, James B. Stong, James R. Weber and Kevin J. Hull, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1597-1601.

iolid waste management

Editor's Note, Thomas L. Theis, EE July 96, p556. Editor's Note, Thomas L. Theis, EE Sept. 96, p778.

Environmental Linkages between Urban Form and Munici-pal Solid Waste Management Infrastructure, Tony Di Nino and Brian W. Baetz, UP Sept. 96, p83-100.

Managerial Fuzzy Optimal Planning for Solid-Waste Man-agement Systems, Ni-Bin Chang and S. F. Wang, EE July 96, p649-658.

Municipal Solid Waste Characterization in a Cold Remote Region, Abigail A. Ogbe and Christina Behr-Andres, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p780-791.

Optimal Regional Scheduling of Solid Waste Systems. I: Model Development, Jess W. Everett and Abhijit R.

Modak, EE Sept. 96, p785-792.

Optimal Regional Scheduling of Solid Waste Systems. II: Model Solutions, Abhijit R. Modak and Jess W. Everett, EE Sept. 96, p793-799.

Solid Waste Management in Rural Alaska, Henriette Molberg Hansen and Howard P. Thomas, (Cold Regions Engineering: The Cold Regions Infrastructure-An Interna tional Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p769-779.

Solid-Waste Management System Analysis with Noise Control and Traffic Congestion Limitations, Ni-Bin Chang, Y. C. Yang and S. F. Wang, EE Feb. 96, p122-

Survey to Estimate Residential Solid Waste Generation, Benjamin F. King and Raymond C. Murphy, EE Oct. 96,

Solid wastes

Acceleration of Landfill Stabilization Using Leachate Recy cle, T. G. Townsend, W. L. Miller, Hyung-Jib Lee and J. F. K. Earle, EE Apr. 96, p263-268.

Construction Waste: Quantification and Source Evaluation, B. A. G. Bossink and H. J. H. Brouwers, CO Mar. 96.

Editor's Note, Thomas L. Theis, EE Apr. 96, p247. Editor's Note, Thomas L. Theis, EE Oct. 96, p888.

GIGO: Spreadsheet-Based Simulation for MSW Systems, Robert P. Anex, Renée A. Lawver, Jay R. Lund and George Tchobanoglous, EE Apr. 96, p259-262.

Ground and Airborne Magnetic and Electromagnetic Surveys at a Hazardous Waste Site, Jonathan E. Nyquist, Les P. Beard and Don Johnson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p1-

Interference of Avian Guano in Analyses of Fuel-Contaminated Soils, David E. James, Tod E. Johnson and David K. Kreamer, EE Jan. 96, p74-76.

Optimal Waste Decomposition-Landfill as Treatment Process, Robert P. Anex, EE Nov. 96, p964-974

Pyrolysis Kinetics of Uncoated Printing and Writing Paper of MSW, Ching-Yuan Chang, Chao-Hsiung Wu, Jiann-Yuan Hwang, Jyh-Ping Lin, Wan-Fa Yang, Shin-Min Shih, Leo-Wang Chen and Feng-Wen Chang, EE Apr. 96, p299-305.

Sanitary Engineers in American Cities: Changing Roles from the Age of Miasmas to the Age of Ecology, Martin V. Melosi, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p108-122

Seismic Stability Procedures for Solid-Waste Landfills, Jonathan D. Bray, Anthony J. Augello, Gerald A. Leo-nards, Pedro C. Repetto and R. John Byrne, GT Feb. 95,

Solid Waste and Materials Systems Alternatives Study Summary, John R. Kasper and Stephen T. Smith, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p374-378.

Survey to Estimate Residential Solid Waste Generation, Benjamin F. King and Raymond C. Murphy, EE Oct. 96, p897-901.

Development of a CO2-Solidification Method for Recycling Concrete Wastes, Toshiyuki Hashida, Satoshi Teramura J. C. Ha and Hideaki Takahashi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p674-683.

Development of a Solidification Method for Pulverized Concrete Waste by Hydrothermal Hot-Pressing and Fiber Reinforcement, Kazuhiko Sato, Toshiyuki Hashida, Hideaki Takahashi and Nakamichi Yamasaki, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p684-693.

From Sediment to Solid, James R. Donnelly and William C. Webster, CE May 96, p41-43.

Leaching Characteristics of Solidification System of C3A/ CuO, Cheng-Fang Lin and Hwa-Wey Huang, EE Apr. 96, p323-326.

Low Temperature Solidification of CaCO, Using Hydro-thermal Hot-Pressing, Kazuyuki Hosoi, Toshiyuki Hashi-da, Hideaki Takahashi, Nakamichi Yarnasaki and Takashi Korenaga, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p694-700.

Mechanical Properties of Vitrified Soils, Christopher Y. Tuan and William C. Dass, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p731-740.

Stabilization/Solidification of Hazardous Wastes Using Fly Ash, Jafar Parsa, Stuart H. Munson-McGee and Robert Steiner, EE Oct. 96, p935-940.

Waste Using Organic-Clay Complex, Irene M.-C. Lo, EE Sept. 96, p850-855.

An Analysis of Characteristics of Basset Force on Particles Accelerating in Arbitrary Flow Field, Shehua Huang, Liangjun Cheng and Wei Li, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p448-453.

Finite Element Transient Analysis (FETA) of Solids and

Structures Including Soil-Fluid-Structure Interaction, D. C. Rizos, D. L. Karabalis, G. J. Cokkinides, J. L. Tassoulas and J. S. Mulliken, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p480-486

Recover Inorganic Solids from Obsolete Propellants, Frank J. Y. Shiu, Iris C. Y. Yang and T. F. Yen, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1373-1378.

Relative Celerities of Mobile Bed Flows with Finite Solids Concentrations, Peter H. Morris and David J. Williams, HY June 96, p311-315.

Scalping Makes Biosolids Safer, Saves Money, CE May 96, p21.

'Cold Fire' Degrades Organic Contaminants, CE Mar. 96, p15.

Solitary wave

A Finite Element Analysis of Mach Reflection by Using the Boussinesq Equation, Shoichiro Kato, Toshimitsu Takagi and Mutsuto Kawahara, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3440-3445.

Use of NaOH to Control pH for Solubilization of Waste Activated Sludge, Jih-Gaw Lin, Cheng-Nan Chang and Shih-Ling Hsu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2468-2473.

Cumulants-Based Analysis of Concentration Data from Soil-Column Studies for System Identification, Rao S. Govindaraju, Bhabani S. Das and Gerard J. Kluitenberg, HE Jan. 96, p41-48.

Field Evaluation of Water and Solute Distribution from a Point Source, Akbar Ali Khan, Muluneh Yitayew and A. W. Warrick, IR July/Aug. 96, p221-227.

Investigating the Non-Convexity of the Groundwater Quali-ty Management Response Function, David P. Ahlfeld and Mary Palumbo, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p854-856.

Model Uncertainty for the Advection-Dispersion Equation, Wade E. Hathhorn, (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth,

ed., 1996), p881-896.

Site Characterisation of a Complex DNAPL Site—An Australian Experience, J. M. Duran and J. A. Grounds, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p800-811.

Soil Water Chemistry of Irrigation with Drainwater, B. R. Faulkner and J. C. Guitjens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1483-1488.

Solution of the Advection-Dispersion Equation: Continuous Load of Finite Duration, Robert L. Runkel, EE Sept. 96,

p830-832.

Unsteady Finite-Analytic Method for Solute Transport in Ground-Water Flow, Whey-Fone Tsai and Ching-Jen Chen, EM Feb. 95, p230-243.

High Frequency Access to Low Gravity Experimentation in Organic Crystal Growth from Solutions, Michael G. Sportiello, Paul Todd, Ching-Yuan Lee, Craig E. Kundrot, Steve C. Schultz, Louis S. Stodieck and John M. Cassanto, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p378-384.

Solvents

Enhancement of In Situ Zero-Valent Metal Treatment of Contaminated Groundwater, D. R. Reinhart, C. Clausen, C. Geiger, N. Ruiz and G. Afiourny, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p323-332

Evaluating Paint-Sludge Chars for Adsorption of Selected Paint Solvents, Byung R. Kim, Edward M. Kalis, Irving T. Salmeen, Carl W. Kruse, Ilham Demir, Stephen L. Carlson and Massoud Rostam-Abadi, EE June 96, p532-

530

Field-Scale Application of In-Situ Cosolvent Flushing: Evaluation Approach, M. D. Annable, P. S. C. Rao, R. K. Sillan, K. Hatfield, W. D. Graham, A. L. Wood and C. G. Enfield, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p212-220.

Iron Filing Installation Cleans Contaminants, CE Nov. 96,

Numerical Simulation of DNAPL Emplacement and Redis-tribution in Heterogeneous Porous Media at the M Area of the Savannah River Site, Rex A. Hodges and Ron W. Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p619-627.

Wettability of NAPL-Contaminated Sands, Susan E. Pow-ers, William H. Anckner and Thomas F. Seacord, EE

Oct. 96, p889-896.

When Toxics Meet Metal, Virginia Fairweather, CE May 96, p44-48.

Sonar

A Marine Geophysical Investigation to Determine the Cause for Failure of the Yaquina Bay Jetty, Newport, Or-egon, Richard E. Sylwester, Jon L. Dasler and Terry C. Sullivan, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p42-55.

Visual Mosaicking of the Ocean Floor and its Relation to Three-Dimensional Occlusions, Sanjay Tiwari, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p29-35.

Comprehensive Fate Model for Metals in Municipal Wastewater Treatment, Wayne J. Parker, Hugh D. Monteith, John P. Bell, Henryk Melcer and P. Mac Berthouex, EE Sept./Oct. 94, p1266-1283.

Sept. Oct. 39, pt. 200-1203. Influence of Sorption Mechanisms on the Bioavailability of Aromatic Hydrocarbons in Soil. William D. Burgos and John T. Novak, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p670-680.

Microbiological Sorption and Transport: Field and Labora-tory Experiments, Larry E. Hersman, (High Level Radio-active Waste Management, Technical Program Commit-

tee, 1996), p27-29.

Soil Type Effect on NAPL Removal by Surfactant, Olubunmi M. Ogunsola and Mark A. Tumeo, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p281-291.

Sorption of Water in Mortars and Concrete, Nicos S. Martys and Chiara F. Ferraris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1129-1138.

Transport and Sorption of Organic Gases in Activated Carbon, Tsair-Fuh Lin, John C. Little and William W. Nazaroff, EE Mar. 96, p169-175.

Transport and Sorption of Water Vapor in Activated Carbon, Tsair-Fuh Lin and William W. Nazaroff, EE Mar. 96, p176-182.

Sorting routines

Changes of Sand Grain Distribution in the Surf Zone, Kazumasa Katoh and Shin-ichi Yanagishima, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p639-650.

Zeitier, ed., 1990), posy-tosu. Municipal Solid Waste Characterization in a Cold Remote Region, Abigail A. Ogbe and Christina Behr-Andres, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p780-791.

Sources

Construction Waste: Quantification and Source Evaluation, B. A. G. Bossink and H. J. H. Brouwers, CO Mar. 96, p55-60.

Source Apportionment Study of Nitrogen Species Measured in Southern California in 1987, Meng-Dawn Cheng, Ning Gao and Philip K. Hopke, EE Mar. 96, p183-190.

Value and Reliability of DNAPL-Source Location Programs: A Preliminary Framework, Travis C. McGrath, Robert B. Gilbert and Daene C. McKinney, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p187-198.

South Africa

The Engineering Profession as a Major Role Player in the New South African Political Order, Kevin Wall, El Apr. 96, p73-77.

The History of Coastal Engineering in South Africa, D. H. Swart, ed., (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p429-464.

South America

Climate Variability Impact on the Water Resources of Ancient Andean Civilizations, Kenneth R. Wright, John A. Dracup and Jonathan M. Kelly, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1840-1845.

The CSG 2000 Programme: Modernising Europe's Spaceport for the Next 20 Years, Juan de Dalmau, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p413-418.

Grants Aid South American Development, CE Dec. 96, p13.

South American Dam Failure Studied, CE Aug. 96, p18.

South Carolina

Natural Hazards Mitigation in South Carolina, Charles Lindbergh and Maurice R. Harlan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p86-87.

South Carolina Coastal Erosion Study: Inlet Morphodynamics and Sediment Transport, P. A. Work, W. E. Rogers and E. J. Hayter, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1047-1058.

South Carolina Department of Transportation's Statewide Program of Bridge Scour Evaluation, Randall D. Williamson, Dean D. Haffield and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chenchayy Bathala, ed., 1996), p72-735.

South Dakota

Artificial Recharge of a Buried Glacial Aquifer in South Dakota, Vernon R. Schaefer and Delvin E. DeBoer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p. 742-747.

Particulate Sampler to be Carried on a High Altitude Balloon, Christopher Benning and Jared Whitaker, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1334-1338.

Space colonies

BootStrapping Space Resource Utilization with Tethers, Regolith Rockets and Micro Rovers, Bruce A. Mackenzie, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p321-327.

Building Large Space Bases in Low Earth Orbit, J. Michael Snead, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p367-377.

Construction System for Lunar Base, Shinji Matsumoto, Nobuo Isome, Koji Oishi, Hiroshi Kanamori, Kenji Takagi, Yoshiro Kai, Michiya Suzuki and Satoru Suzuki, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p140-144.

Control Systems Governing Gravity-Dependent Plant Growth, C. Duran, D. Flores, J. D. Smith and G. W. Morgenthaler, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1095-1101.

Design and Performance Criteria for Inflatable Structures in Space, Marvin E. Criswell, Willy Z. Sadeh and Jenine Abarbanel, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1045-1051.

The Distinction between an Interplanetary Vehicle and a Mars Surface Habitat, Marc M. Cohen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p984-996.

Engineering, Construction, and Operations in Space, 2 vols, Stewart W. Johnson, ed., 1996, 0-7844-0177-2, 1365pp.

First Mars Outpost Architectural Study, Jun Okushi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p928-934.

Flywheels for Energy Storage in Space Using Superconducting Bearings, T. L. Wilson, W. K. Chu, K. Ma and H. Xia, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p355-359.

Incorporating Terrain Uncertainties in Autonomous Vehicle Path Planning, Kevin K. Gifford and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p15-21.

Inflatable Habitat Option for a Human Lunar Return Mission, Kriss J. Kennedy, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1076-1082.

Innovative Radiation Shields for Lunar Surface Operations, Milton Schwartz and Raymond S. Leonard, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p349-354.

Lunar Base Scenario for Middle School with RC Rover, Louise Fayette, Ruth M. Fruland and Carolyn Evans McDonald, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p317-322.

Lunar Settlement Foundation: A Private Community, Dallas G. Bienhoff, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p942-948.

Mechanical Properties of JSC-1 Lunar Regolith Simulant, J. Ledlie Klosky, Stein Sture, Hon-Yim Ko and Frank Barnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p680-688.

Microgravity's Effects on the Muscular System of the Human Body, Susie Newton, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1298-1302.

Plant Growth Experiments in Johnson Space Center's Advanced Life Support System Program, John E. Gruener, Douglas W. Ming, Daniel J. Barta and Donald L. Henninger, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1090-1094.

Process Research in Support of the Human Exploration and Development of Space: Issues in Program Development, Bradley M. Carpenter, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p509-515.

Protection of and from the Lunar Environment, Anthony M. Wachinski, Tony Rachwal and Colin Waters, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p668-672.

Remote Pipeline Routing with Application to Space Opera-tions, Sandra C. Feldman, Ramona E. Pelletier, Wm. Ed-ward Walser, James C. Smoot and Douglas Ahl, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p231-236.

Solar Power Satellites as an Alternative Energy Source, Wendy Shefelbine, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996).

p1307-1310.

Space Habitat Environmental Health Risk Assessment and Management, Gerald J. Smith and George W. Morgenthaler, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1008-1019.

Space Infrastructure Planning, J. Michael Snead, (Engi-neering, Construction, and Operations in Space, Stewart

W. Johnson, ed., 1996), p360-366.

Terraforming Mars, Felix Zamora, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p1311-1314.

Volcanic Glass — Oxygen Ore on the Moon, Carlton C. Allen, John M. Woodell and David S. McKay, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p756-761.

An AI Agent Construct for Space and Planetary Science Applications, Lee Plansky and Nancy Linarez-Royce, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p341-348.

Analysis of Alternative Governance Models for Space Business Parks, Charles J. Lauer, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p177-185.

Artificial Gravity, Zachary Zutavern, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1315-1318.

Combustion Processes and Applications in Reduced Gravi-ty, Howard D. Ross, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p527-532.

- Commercial Mining Activities for the Space Frontier, David M. Neil, Russell J. Miller, David S. McKay and Brad R. Blair, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p800-
- Continuing Data Needs for Lunar Radiation Protection, Richard R. Roll, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p646-
- Design of a Multi-Generational, Interstellar Ship, Divya Chander, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p311-320.
- Development of a Mobile Instrument Deployment Device (MIDD), Lutz Richter, Klaus Schilling, Marco C. Ber-nasconi, Christoph Jungius and César Garcia-Marirodriga, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p283-289.

Development Testing of the Mars Pathfinder Inflatable Landing System, Tommaso P. Rivellini, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1059-1068.

Discovery of Abundant, Accessible Hydrocarbons Nearly Everywhere in the Solar System, A. Zuppero, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p791-799.

The Distinction between an Interplanetary Vehicle and a Mars Surface Habitat, Marc M. Cohen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p984-996.

Dynamic Influence of Flexible Payloads on Space Shuttle RMS, Walter L. Peart, AS Apr. 96, p39-44.

Earth-Crossing Asteroids and Comets, Tyler Donnell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1278-1280.

The Economics of Space Solar Power, Carissa Bryce Chris-tensen, Douglas A. Comstock and John C. Mankins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p260-268.

Editorial, Manohar P. Kamat, AS July 96, p63.

Effects of Zero Gravity on Bones, Jon Capron, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1262-1264.

Engineering, Construction, and Operations in Space, 2 vols, Stewart W. Johnson, ed., 1996, 0-7844-0177-2, 1365pp.

Expedition Applications to Long Duration Space Missions, Gloria R. Leon and Victor S. Koscheyev, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p997-1001.

Fast and Robust Algorithm for General Inequality/Equality Constrained Minimum Time Problems, B. Driessen and N. Sadegh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1215-1224.

Faster, Cheaper, Better: Teleoperated Space Robots, Tom Billings, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p150-156.

First Mars Outpost Architectural Study, Jun Okushi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p928-934.
Flow Induced Charging of Liquids in Reduced Gravity,

Donald Pettit, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p545-

A Framing System for a Lunar/Martian Inflatable Structure, Jenine E. Abarbanel, Ted A. Bateman, Marvin E. Cris-well and Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1069-1075.

Government Actions to Enable Space Business Parks, Brent Sherwood, Charles J. Lauer and Joseph P. Hopkins, Jr., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p186-193.

The Great Technology Transfer, Tim Cassidy, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1265-1269.

Human Space Exploration: Justifications and U.S. Space Policy, Arthur M. Hingerty, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p126-132.

Investigation of On-Orbit Servicing Robot, T. Matsue and Y. Wakabayashi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p533-

Japanese Rocket Society's Space Tourism Study Program, Patrick Collins, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p399-

Long Term Scenarios for Europe in Space, Klaus Pseiner, Angelo Atzei and David Raitt, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p145-154.

Lunar Base Development Stages, Willy Z. Sadeh and Marvin E. Criswell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p912-

Market Value of Asteroidal Precious Metals in an Age of Diminishing Terrestrial Resources, Jeffrey S. Kargel, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p821-829.

Medical-Technical Problems of Human Protection, Victor S. Koscheyev, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1002-

Methods of Experimental Research of Asteroid Properties in Space Missions, D. V. Petrov, V. A. Simonenko and O. N. Shubin, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p68-73.

Minimum Weight of Control Devices with Bounded LQG Control, Alexander A. Bolonkin, Duane E. Veley and Narendra S. Khot, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1230-1236.

The Moon Within Our Grasp: A Strategy for Renewing Human Exploration of the Moon, Andrew Petro, (Engi-

Human Exploration of the Moon, Andrew Petro, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p133-139.
Nanotechnology and Orbital Debris, Hans-Joachim Blome and Thomas L. Wilson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), e328-333. p328-333.

- On Exploration and Usage of Near-Earth-Missing Objects, V. A. Simonenko, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p61-
- On the Process and Products of Project Space Vision, Pär Edin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p155-161.
- On-Board Neural Network Control of Kinetic Energy Projectiles for NEO Exploration, R. E. Vance, M. V. Spangler, Z. Qian, C. Cho and K. A. Prisbrey, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1183-1189.
- Optimized Input Shaping for a Single Flexible Robot Link, David G. Wilson, Dennis Stokes, Gregory Starr and Rush D. Robinett, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1225-1229.
- Pathfinder: Commercial Payload Service on the Russian Mir Space Station, Brent Sherwood and Thomas J. Walmsley, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p170-176.
- Planning an International Moon Mission: Lessons Learned, Joan Johnson-Freese, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p109-115.
- Plant Growth Experiments in Johnson Space Center's Advanced Life Support System Program, John E. Gruener, Douglas W. Ming, Daniel J. Barta and Donald L. Henninger, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1090-1094.
- A Preliminary Design of a Pilot Plant for the Production of Lunar Oxygen, W. E. F. L. Moulford, A. R. Martin, P. W. Cains, P. D. Martin and G. Tan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p762-768.
- Process Research in Support of the Human Exploration and Development of Space: Issues in Program Development, Bradley M. Carpenter, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),
- Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996, 0-7844-0178-0, 248pp.
- Rocket Experiments and Demonstrations for Microwave Power Transmission (MPT), Nobuyuki Kaya, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p280-286.
- Self Deployable Mechanism for Large Disk Antenna Using Centrifugal Force, Takanori Sato, Shinji Matsumoto, Haruyuki Namba, Kenji Takagi, Hisashi Tadokoro, Hiroshi Yamakawa, Takao Oura, Kenji Nozaki and Nobuyuki Kaya, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1155-
- Simulation and Visualization of Martian Rover, William Lincoln, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p143-149.
- Solar Power Satellites, Rebecca Kluck, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1281-1284.
- The Solar System Cruiser-Interstellar Precursor, Divya Chander, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p302-310.
- Space Applications of Surplus Ballistic Missiles, Matthew A. Bille, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p406-412.
- Space Debris, Trisha Chhabildas, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1270-1273.
- Space Debris Hazard to Defense Systems, Gregory H. Canavan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p20-25.
- The Space Exploration Initiative: Its Failure and Lessons for the Future, Matthew Fisk Marshall, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl 16-125.
- Space Sickness, Thienga Nguyen, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1303-1306.

- A Space Systems Testbed for Situated Agent Observability and Interaction, Sam Siewert and Gary Nutt, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p122-128.
- Student Guide for Space Conference Research Papers, Malva A. Knoll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1319-1326.
- Studies in Guidance, Navigation and Control for an Articulated-Body Mars Rover Testbed, Songjae Lee and Gordon K. Lee, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p157-163.
- Terraforming Mars, Felix Zamora, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1311-1314.
- Title: "Self-Constructing Space Systems", Daniele Bedini, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1032-1037.
- US Space Policy and the Use of Excess US Ballistic Missile Assets, Mike Trial, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p206-213.
- Fifteen Years of Commercial Space in Retrospect", M. Brian Barnett, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p162-169

Space frames

- Space frames
 Dynamic Stiffness Analysis of Lattice Structure, Eldad Levy and Moshe Eisenberger, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p526-533.
 Stability of Shear Deformable Thin-Walled Space Frames and Circular Arches, Sung-Pil Chang, Sung-Bo Kim and Moon-Young Kim, EM Sept. 96, p844-854.

- 21st Century Earth Observing Systems: Emerging Role for Spaceports, Stanley A. Morain, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p245-253.
- Acquisition of Subsurface Comet Samples, Richard Welch, Donald Sevilla, Don Noon and Albert Delgadillo, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p129-135.
- Air Force Planetary Defense System: Initial Field Test Re-sults, Grant Stokes, Robert Weber, Frank Shelly, David suits, Grant Stokes, Robert Weer, Frank Sneity, David Beatty, Herbert Viggh, Eugene Rork and Byron Hays, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p46-53. Air Force Planetary Defense Technology, J. Darrah, S. Worden and G. H. Stokes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,
- 1996), p32-45.
- Architectural Considerations in Design of Lunar-Based As-tronomical Observatories, Stewart W. Johnson, Koon Meng Chua, Milton Schwartz and Jack O. Burns, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p871-880.
- Astrophysical Cosmology Using a Lunar Ligo, Thomas L. Wilson, Hans-Joachim Blome and Norman LaFave, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p861-863.
- A Comparison of Alternative Methods for the Mars Sample companied to Ameniative Methods for the Mars Sample High Mission, Robert Zubrin, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p724-733.
- Discovery of Abundant, Accessible Hydrocarbons Nearly Everywhere in the Solar System, A. Zuppero, (Engineer-ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p791-799.
- Earth-Crossing Asteroids and Comets, Tyler Donnell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1278-1280.
- Guideline for Automatic Docking in Space, Samuel E. Moskowitz, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p164-170.
- HF Interference in Space from Terrestrial Sources, Marisa McCoy, John P. Basart and Monte Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p854-860.

Impact-Generated Atmospheric Plumes: The Threat to Sat-ellites in Low-Earth Orbit, M. B. Boslough and D. A. Crawford, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p88-94.

Issues of Landing on Near Earth Asteroids, D. J. Scheeres, S. J. Ostro and R. S. Hudson, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed.,

1996), p54-60.

Methods of Experimental Research of Asteroid Properties in Space Missions, D. V. Petrov, V. A. Simonenko and O. N. Shubin, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p68-73.

A Model of Meteoroid Atmospheric Entry with Implica-tions for the NEO Hazard and the Impact of Comet Shoe-maker-Levy 9 on Jupiter, D. A. Crawford and M. B. Boslough, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p81-87.

Nuclear Explosion Near Surface of Asteroids and Con-II. General Description of the Phenomenon, O. N. Shabin, V. Z. Nechai, V. N. Nogin, D. V. Petrov and V. A. Simonenko, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p74-80.

Observational Cosmology from the Moon, Thomas L. Wilson and Hans-Joachim Blome, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p864-870.

On Exploration and Usage of Near-Earth-Missing Objects, V. A. Simonenko, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p61-

Optimal Detection of Short-Warning Near-Earth Object Threats, Gregory H. Canavan, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p26-31.

ORDER: A Preliminary Concept for ORbital DEbris Removal, Brian A. Phail, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p334-340.

p. Sample Returns to Enable Asteroid Mining, Alan J. Willoughby, Alan L. Friedlander, Darla J. German, Mark K. Jacobs, Jeffrey A. George and Kurt J. Hack, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p. 840-846.

The Solar System Cruiser-Interstellar Precursor, Divya Chander, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p302-310.

Studying the Ozone Layer from Space, Emilia K. Arguello, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1259-1261.

Acoustic Efficiency Analysis Using Infrasound from NEOs, Douglas O. ReVelle and Rodney W. Whitaker, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p102-108.

Air Force Planetary Defense System: Initial Field Test Re-sults, Grant Stokes, Robert Weber, Frank Shelly, David Beatty, Herbert Viggh, Eugene Rork and Byron Hays, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p46-53. Control of Legged Robots, S. T. Venkataraman, (Robotics

for Challenging Environments, Laura A. Demsetz, ed., 1996), p100-106.

Interferometric Imaging for Deep Space Asset Monitoring, Gary C. Loos, Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p214-

A Model of Meteoroid Atmospheric Entry with Implica-tions for the NEO Hazard and the Impact of Comet Shoemaker-Levy 9 on Jupiter, D. A. Crawford and M. B. Boslough, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p81-87.

On Exploration and Usage of Near-Earth-Missing Objects, V. A. Simonenko, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p61-

Optimal Detection of Short-Warning Near-Earth Object Threats, Gregory H. Canavan, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p26-31.

Sizes and Masses of Satellite Observed Meteoroids, Z. Ceplecha, R. E. Spalding, C. Jacobs and E. Tagliaferri, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p95-101.

Space shuttle orbiter

Analysis of Alternative Governance Models for Space Business Parks, Charles J. Lauer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p177-185.

Building Large Space Bases in Low Earth Orbit, J. Michael Snead, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p367-377.

Design and Operation of the Sub-Orbital Lunar Explorer, Walter Collins, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p949-

Design of a Multi-Generational, Interstellar Ship, Divya Chander, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p311-320.

Dynamic Effects from the Space Shuttle Liftoff, Fady F. Barsourn and William F. Carroll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1190-1196.

Dynamic Influence of Flexible Payloads on Space Shuttle RMS, Walter L. Peart, AS Apr. 96, p39-44.

Flight Crew Equipment Development and Integration with the International Partners, Rod Jones, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p467-472.

High Frequency Access to Low Gravity Experimentation in Organic Crystal Growth from Solutions, Michael G, Sportiello, Paul Todd, Ching-Yuan Lee, Craig E. Kun-drot, Steve C. Schultz, Louis S. Stodieck and John M. Cassanto, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p378-384.

Johnson Space Center Crew Return Vehicle Activities, Charles H. Campbell, B. Kent Joosten and Robert E. Meyerson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p392-398.

The Moon Within Our Grasp: A Strategy for Renewing Human Exploration of the Moon, Andrew Petro, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p133-139.

A New Hydrogen Microsensor for Space Applications, Jessica Knoll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1285-1289.

in Space, Stewart W. Johnson, ed., 1996), p1283-1289. Pathfinder: Commercial Payload Service on the Russian Mir Space Station, Brent Sherwood and Thomas J. Walmsley, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p170-176. Space Shuttle Program-Defining a Needed Paradigm for Efficient Access to Space, Lyle M. Jenkins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p426-434.

The Surface Extreme Environment Dwelling System (SEEDS) for Mars, Kurt Anthony Micheels, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1020-1026.

US Space Policy and the Use of Excess US Ballistic Mis-sile Assets, Mike Trial, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p206-213.

Whose Fault Was It? Alice C. Dillard, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1274-1277.

Space stations

21st Century Earth Observing Systems: Emerging Role for Spaceports, Stanley A. Morain, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p245-253.

Analysis of Alternative Governance Models for Space Business Parks, Charles J. Lauer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p177-185.

Architecture on the Moon: The Importance of Human Factors Considerations in the Design of a Lunar Base, John Bergquist, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1038-1044. ASCE Members Get Involved at the Local Level as They Seek to Inspire Civil Engineers of the Future, NE Apr. 96, p8.

Behavior of Fresh Mortar in a Vacuum and Microstructure of Mortar Hardened in a Vacuum, L. J. Powers-Couche and T. D. Lin, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p608-

BootStrapping Space Resource Utilization with Tethers, Space, Stewart W. Johnson, ed., 1996), p321-327.

Building Large Space Bases in Low Earth Orbit, J. Michael Snead, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p367-377.

Carbon Reduction of Iron Oxides in Lunar Simulants, Scott Hayes, Heather Hamlett and Roberta Bustin, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p734-740.

Challenges in the Construction of a Lunar Base, Roy Sargent and Keith Hampson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p881-888.

Commercial Mining Activities for the Space Frontier, David M. Neil, Russell J. Miller, David S. McKay and Brad R. Blair, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p800-805

A Comparison of Alternative Methods for the Mars Sample Return Mission, Robert Zubrin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p724-733.

Comprehensive Modal Tests of a Space Truss Model for Damage Assessment, Cesar J. Carrasco, Roberto A. Osegueda, Carlos M. Ferregut, Brian Harms, David Meza and Mike Grygier, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1995; 414, 1447. 1996), p1141-1147.

Concept for a Permanent Lunar Utilities System, David G. Schrunk, Bonnie L. Cooper and Burt L. Sharpe, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p935-941.

A Concept of Driving on Orbital Station, M. Malenkov, V. Gorbunov, S. Vladykin, V. Zhivoglotov, R. Beglov and V. Syromyatnikov, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Conceptual Design of a Crater Lunar Base, Alice Eichold, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p920-927.

Concrete -- A Practical Construction Material for Mars, David S. McKay and Carlton C. Allen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), 9566-570.

Concrete Space Station Construction in Lunar Orbit, Don J. Wade. (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p578-584.

Considerations for Realistic Lunar Excavation, Michael J. Lally, Scott P. Mackey and Laurie R. Gaskins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p896-902.

Construction System for Lunar Base, Shinji Matsur Nobuo Isome, Koji Oishi, Hiroshi Kanamori, Kenji Takagi, Yoshiro Kai, Michiya Suzuki and Satoru Suzuki, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p140-144.

Continuing Data Needs for Lunar Radiation Protection, Richard R. Roll, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p646-

Crystal Growth in Microgravity, Grant Meyer, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1295-1297.

Design and Construction of Zero-Gravity Gymnasium, Patrick Collins, Sunao Kuwahara, Tsuyoshi Nishimura and Takashi Fukuoka, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p200-

Design and Performance Criteria for Inflatable Structures in Design and Performance Criteria for inflatable structures in Space, Marvin E. Criswell, Willy Z. Sadeh and Jenine Abarbanel, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1045-1051.
Design of a Multi-Generational, Interstellar Ship, Divya

Chander, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p311-320. Digital Image Analysis of Two-Dimensional Fluidized Beds at Lunar Gravity, D. J. Brueneman, L. L. Sorge, M. A. Gibson, C. W. Knudsen and H. Kanamori, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p769-775.

Distributed Control for Serial Assembly in Space, Frank McQuade and Colin R. McInnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1169-1175.

Effect of Fiber Waviness on the Buckling of Composite Plates, Raouf A. Raouf, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1102-1107.

The Effect of the Lunar Surface Environment upon Ma-chinery, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p639-645.

p039-043.
Engineering, Construction, and Operations in Space, 2 vols, Stewart W. Johnson, ed., 1996, 0-7844-0177-2, 1365pp.
Facilities for the Earth-Moon Test Range, Robert C. Wigand, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p956-962.

Space, Stewart W. Johnson, etc., 1990, p30-902.
Flight Crew Equipment Development and Integration with the International Partners, Rod Jones, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p467-472.
Fluidized Drilling for Lunar Mining Applications, Brad R.

Blair, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p813-820. Flywheels for Energy Storage in Space Using Superconducting Bearings, T. L. Wilson, W. K. Chu, K. Ma and

H. Xia, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p355-359.

Government Actions to Enable Space Business Parks,

Brent Sherwood, Charles J. Lauer and Joseph P. Hopkins, Jr., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p186-193

Heat of Hydration of Pure Cement Compounds with Steam, Wei-Ming Lin, T. D. Lin, Chao-Lung Hwang and Yaw-Nan Peng, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p585-591.

HPS: A Space Fission Power System Suitable for Near Term, Low-Cost Lunar and Planetary Bases, Michael G. Houts, David I. Poston and William A. Ranken, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p973-983.

uman Space Exploration: Justifications and U.S. Space Policy, Arthur M. Hingerty, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p126-132.

Improvements in Mining Technology, Jacques Nantel, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p806-812.

Innovative Radiation Shields for Lunar Surface Operations, Milton Schwartz and Raymond S. Leonard, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p349-354.

An Integrated Approach to Maintaining a Program Baseline on the International Space Station, Roy Patrick Norris and Larry D. Toups, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p450-457.

n Integrated Lunar/Martian-Engineered Closed/ Controlled Ecosystem, Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1083-1089. ternational Space Statics (1988).

International Space Station (ISS) Assembly Sequence Planning, R. E. Gates, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p435-442

International Space Station Payload Accommodations, Daniel W. Hartman, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

International Space Station Traffic Model Development, Clare T. Kingsford and Neil W. Lemmons, (Engineerin,

Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p443-449.

Investigation of On-Orbit Servicing Robot, T. Matsue and Y. Wakabayashi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p533-539. 539

Johnson Space Center Crew Return Vehicle Activities, Charles H. Campbell, B. Kent Joosten and Robert E. Meyerson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p392-398.

Location of a Lunar Base: A Site Selection Strategy, Law-Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p741-755.

Lunar Base Development Stages, Willy Z. Sadeh and Mar-vin E. Criswell, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p912-

Lunar Base Scenario for Middle School with RC Rover, Louise Fayette, Ruth M. Fruland and Carolyn Evans McDonald, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p317-322.

Lunar Concrete Made with the Dry-Mix/Steam-Injection Method, T. D. Lin, Liang Tseng and Sam Chou, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p592-599.

Lunar Excavating Research, Walter W. Boles and John F. Connolly, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p699-705.

Lunar Neighborhoods: Architecture for Extreme Environ-ments, Milton Schwartz, Jeffrey Schwartz, John Bergquist, Carsten Keller, Preston Kelsey and Todd Stringer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1027-1031.

Lunar Regolith, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p630-638.

Lunar Settlement Foundation: A Private Community, Dallas G. Bienhoff, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p942-948.

Lunar Textile Method for the Shield Wall on the Lunar Sur-face, Mikiya Okumura, Takao Ueno and Yasuhiro Ohashi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p889-895.

Mars Sample Return Using In-Situ Propellant Production, David I. Kaplan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p717-723

The Moon Within Our Grasp: A Strategy for Renewing Human Exploration of the Moon, Andrew Petro, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p133-139.

Optical Waveguide Solar Energy System for Lunar Materials Processing, T. Nakamura, J. A. Case and C. L. Senior, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p783-790.

Overview of International Space Station Extra Vehicular Robotics, Amin Rezapour, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p490-496.

Overview of International Space Station Extravehicular Ac-tivity System, Jeff Dutton, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p473-479.

Overview of the International Space Station Extra Vehicu-lar Robotics Verification, Corrie Hunt, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p502-508.

Overview of the ISS Large Manipulator Operations, Catherine D. Bole, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p497-

Pathfinder: Commercial Payload Service on the Russian Mir Space Station, Brent Sherwood and Thomas J. Walmsley, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl 70-176.

Planning an International Moon Mission: Lessons Learned, Joan Johnson-Freese, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pi09-115

Plant Growth Experiments in Johnson Space Center's Advanced Life Support System Program, John E. Gruener, Douglas W. Ming, Daniel J. Barta and Donald L. Henninger, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1090-1094.

Pore Structure Evolution and State of Pore Water in Hydrating Cement Paste at Cryogenic Temperatures, J-Y. Jehng, D. T. Sprague, S. Bhattacharja and W. P. Halperin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p600-607.

A Preliminary Design of a Pilot Plant for the Production of Lunar Oxygen, W. E. F. L. Moulford, A. R. Martin, P. W. Cains, P. D. Martin and G. Tan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p762-768.

Process Research in Support of the Human Exploration and Development of Space: Issues in Program Development, Bradley M. Carpenter, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p509-515.

Protection of and from the Lunar Environment, Anthony M. Wachinski, Tony Rachwal and Colin Waters, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p668-672.

Pulling Propellants Out of Thin Air: Demonstration of an End-to-End Mars In-Situ Propellant Production Unit, John F. Connolly and Robert M. Zubrin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p706-716.

The Ranger Telerobotic Flight Experiment: Mission, Technologies, and Programmatics, Joseph C. Parrish and David L. Akin, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p136-142.

REGA (Regolith Evolved Gas Analyzer), David S. McKay and Carlton C. Allen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Rocket Experiments and Demonstrations for Microwave Power Transmission (MPT), Nobuyuki Kaya, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p280-286.

Scale Effects of Shallow Foundations on Lunar Regolith, Steven W. Perkins and Craig R. Madson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p963-972.

Space Debris: A Growing Threat, Michelle Mancuso, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1290-1294.

The Space Exploration Initiative: Its Failure and Lessons for the Future, Matthew Fisk Marshall, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p116-125.

Space Habitat Environmental Health Risk Assessment and Management, Gerald J. Smith and George W. Morgenthaler, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1008-1019.

Space Infrastructure Planning, J. Michael Snead, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p360-366.

Space Station Module Wall Hole Size and Crack Length Following Orbital Debris Penetration at 6.5 km/s, Wil-liam P. Schonberg and Joel E. Williamsen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1-7.

Standpipe Solids Transfer Behavior in a Lunar Gravity Flu-idized Bed, Les L. Sorge, David J. Brueneman, J. Dale Ortego, Jr., Michael A. Gibson, Christian W. Knudsen, Hiroshi Kanamori and B. Kent Joosten, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p776-782.

Study on Lunar Cement Production Using Hokkaido Anorthite and Hokkaido Space Development Activities, T. Horiguchi, N. Saeki, T. Yoneda, T. Hoshi and T. D. Lin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p621-629. The Surface Extreme Environment Dwelling System (SEEDS) for Mars, Kurt Anthony Micheels, (Engineer-

(SEEDS) for Mars, Kurt Anthony Micheels, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1020-1026.
Technology for Mining of Building Materials at First Stages of Moon Development, Oleg V. Nagovicin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p830-839.
Title: "Self-Constructing Space Systems", Daniele Bedini, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1032-1037.
Ilse of Lunar Tyne Soil for Concrete Construction. Jav N.

Use of Lunar Type Soil for Concrete Construction, Jay N. Meegoda, Hsin-Yu Shan, Jing-Fu Huang, Jia-Wen Tseng and Su-Hwa Cheng, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996).

Use of Radio Frequency Spectrum in Lunar Environment, Shayla E. Davidson and Robert M. Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), 847-853. Using Ultra High Solar Flux in the Lunar Environment.

Production of Cement and Other Applications, Joseph J. O'Gallagher, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p571-577

Vibration Isolation for Space Station Micro-Gravity Using High Temperature Superconductors, W. K. Chu, K. Ma, H. Xia and T. L. Wilson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p540-544.

Vibratory Excavation and Anchoring Tools for the Lunar Surface, J. Ledlie Klosky, Stein Sture, Hon-Yim Ko and Frank Barnes, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p903-

The Water Customer in Space, Tony Rachwal, Colin Waters and Tony Wachinski, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p663-667.

World and Lunar Solar Power Systems Costs, David R. Criswell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p293-301.
World-Wide Command and Control: Operating the Interna-

tional Space Station, Michael J. See, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p458-466.

Space structures

Design of Large Space Systems for Packaging and Launch on Multiple, Heterogeneous Vehicles, Steven D. Jolly, AS Apr. 96, p45-51.

A Space Systems Testbed for Situated Agent Observability and Interaction, Sam Siewert and Gary Nutt, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p122-128.

Terrestrial Applications of a Composite Lattice Space

Structure, Arup K. Maji, Keith Donnelly and Michelle Salas, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1122-1126.

Comprehensive Modal Tests of a Space Truss Model for Damage Assessment, Cesar J. Carrasco, Roberto A. Osegueda, Carlos M. Ferregut, Brian Harms, David Meza and Mike Grygier, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1006;414,1147. 1996), p1141-1147.

Dome-Shaped Space Trusses Formed by Means of Postten-sioning, G. Dehdashti and L. C. Schmidt, ST Oct. 96, p1240-1245.

Editor's Note, David Darwin, ST Aug. 96, p843-844. Editor's Note, David Darwin, ST Oct. 96, p1127. Experimental Study of Behavior of New Space Truss Sys-tem, A. I. El-Sheikh and H. El-Bakry, ST Aug. 96, p845-853.

Large Deformation Analysis of Inelastic Space Truss Struc-tures, George E. Blandford, ST Apr. 96, p407-415.

Continuing Data Needs for Lunar Radiation Protection, Richard R. Roll, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p646-

Design and Operation of the Sub-Orbital Lunar Explorer, Walter Collins, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p949-

Design of a Multi-Generational, Interstellar Ship, Divya Chander, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p311-320.

Design of Large Space Systems for Packaging and Launch on Multiple, Heterogeneous Vehicles, Steven D. Jolly, AS Apr. 96, p45-51.

AS Apr. 30, pa.5-31.

Development of a Pressure Suit Simulation System for Neutral Buoyancy Operations, David L. Akin and Claudia U. Ranniger, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p552-

Development Testing of the Mars Pathfinder Inflatable Landing System, Tommaso P. Rivellini, (Engineering, Construction, and Operations in Space, Stewart W

Construction, and Operations in Space, Stewart W. Johnson, ed., 1996, p 1059-1068.

Discovery of Abundant, Accessible Hydrocarbons Nearly Everywhere in the Solar System, A. Zuppero, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p791-799.

Jonnison, ed., 1996, p.984-996.
The Distinction between an Interplanetary Vehicle and a Mars Surface Habitat, Marc M. Cohen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p.984-996.

The Educational Ozone Researcher: A University Satellite, Linden H. McClure and Ellen L. Riddle, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1327-1333.

Effects of Zero Gravity on Bones, Jon Capron, (Engineer-

ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1262-1264.

Faster, Cheaper, Better: Teleoperated Space Robots, Tom Billings, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p150-156.

A. Demociz, ed., 1990), p10-190.
Flight Crew Equipment Development and Integration with the International Partners, Rod Jones, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p467-472.
Flow Induced Charging of Liquids in Reduced Gravity, Donald Petiti, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p545-

Fluid Management in Space-Based Systems, Jack A. Salz-

Fluid Management in Space-Based Systems, Jack A. Salz-man, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p521-526.
A Framing System for a Lunar/Martian Inflatable Structure, Jenine E. Abarbanel, Ted A. Bateman, Marvin E. Cris-well and Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1006/51/1078.

1996), p1069-1075.

Health Monitoring Studies on Composite Structure for Aerospace Applications, George James, Dennis Roach, Bruce Hansche, Raul Meza and Nikki Robinson, (Engi-

Bruce Hansche, Raul Meza and Nikki Robinson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1127-1133.

Interferometric Imaging for Deep Space Asset Monitoring, Gary C. Loos, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p214-

Issues of Landing on Near Earth Asteroids, D. J. Scheeres, S. J. Ostro and R. S. Hudson, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p54-60.

Issues on Geomechanics, Nicholas C. Costes and Stein

Issues on Geometanics, Micholas C. Costes and serior Sture, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p516-520. Japanese Rocket Society's Space Tourism Study Program, Patrick Collins, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p399-

403. Johnson Space Center Crew Return Vehicle Activities, Charles H. Campbell, B. Kent Joosten and Robert E. Meyerson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p329-398. Location of a Lunar Base: A Site Selection Strategy, Lawrence A. Taylor and Dong-Hwa S. Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p741-755.

Medical-Technical Problems of Human Protection, Victor S. Koscheyev, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1002-

Minimum-Time Design of a Slewing Flexible Beam, Xiao-jian Liu and David W. Begg, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1205-1214.

A New Hydrogen Microsensor for Space Applications, Jessica Knoll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1285-1289.

ORDER: A Preliminary Concept for ORbital DEbris Removal, Brian A. Phail, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996).

Overview of International Space Station Extravehicular Ac-tivity System, Jeff Dutton, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

Random Field of Cumulative Damage by Space Debris Impact, A. Der Kiureghian, P. V. Geyskens and M. R. Khalessi, (Probabilisie Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p668-671.

The Ranger Telerobotic Flight Experiment: Mission, Technologies, and Programmatics, Joseph C. Parrish and David L. Akin, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p136-142.

Recent Progress in Thermally Induced Vibrations Research, John D. Johnston, Richard S. Foster, David L. Eby and Earl A. Thornton, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1134-

Sample Returns to Enable Asteroid Mining, Alan J. Willoughby, Alan L. Friedlander, Darla J. German, Mark K. Jacobs, Jeffrey A. George and Kurt J. Hack, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p840-846.

Shape Memory Release Device Experiment, Bernie F. Carpenter, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p76-79.

The Solar System Cruiser-Interstellar Precursor, Divya Chander, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p302-310.

Space Debris, Trisha Chhabildas, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1270-1273.

The Space Exploration Initiative: Its Failure and Lessons for the Future, Matthew Fisk Marshall, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p116-125.

Space Infrastructure Planning, J. Michael Snead, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p360-366.

Space Station Module Wall Hole Size and Crack Length Following Orbital Debris Penetration at 6.5 km/s, Wil-liam P. Schonberg and Joel E. Williamsen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl. 7.

Spaceborne Fourier Transform Hyperspectral Imager, Leonard John Otten, III, Andrew D. Meigs and R. Glenn Sellar, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p224-230.

Studying the Ozone Layer from Space, Emilia K. Arguello, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1259-1261.

Techniques to Obtain Orbital Debris Encounter Speeds in the Laboratory, Lalit C. Chhabildas, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p8-12.

The Water Customer in Space, Tony Rachwal, Colin Waters and Tony Wachinski, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p663-667.

World-Wide Command and Control: Operating the International Space Station, Michael J. See, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p458-466. Spacecraft launching sites

BootStrapping Space Resource Utilization with Tethers, Regolith Rockets and Micro Rovers, Bruce A. Mackenzie, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p321-327.

The CSG 2000 Programme: Modernising Europe's Spaceport for the Next 20 Years, Juan de Dalmau, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p413-418.

Human Space Exploration: Justifications and U.S. Space Policy, Arthur M. Hingerty, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p126-132.

International Space Station (ISS) Assembly Sequence Planning, R. E. Gates, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p435-

Launch Vibration Isolation System, Eugene R. Fosness, Rory R. Ninneman, Paul S. Wilke and Conor D. Johnson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p228-231.

The NASA Reusable Launch Vehicle Technology Program, Delma C. Freeman, Theodore A. Talay and Robert E. Austin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p385-391.

Sea Launch: Commercial Launch Competitiveness, Derek E. Lang, Darrel L. Choate and Marcus L. Nance, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p419-425.

Space Applications of Surplus Ballistic Missiles, Matthew A. Bille, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p406-412.

Space Shuttle Program-Defining a Needed Paradigm for Efficient Access to Space, Lyle M. Jenkins, (Engineer-ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p426-434.

US Space Policy and the Use of Excess US Ballistic Missile Assets, Mike Trial, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996). p206-213.

Spacing

Cross-Frame Spacing and Parametric Effects in Horizontally Curved I-Girder Bridges, James S. Davidson, Mark A. Keller and Chai H. Yoo, ST Sept. 96, p1089-1096.

From Natural Disaster to Human-Caused Disaster, Antoni Palau and Jorge Alcázar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3497.

History of Coastal Engineering in Spain, M. A. Losada, R. Medina, C. Vidal and I. J. Losada, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996),

p465-499.

System Integration in Traffic Management Centres, Jorge Navas, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p485-489.

Wave Induced Nearshore Circulation in the Ebro Delta, A. Sánchez-Arcilla, F. Collado, M. G. Coussirat and A. Ro-driguez, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p437-448.

The Effect of Moisture on Spalling of Normal and High Strength Concretes, N. Khoylou and G. L. England, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

Performance of Polyethylene Parting Strips in PCC Pave-ments, Samuel P. Lawrence, Awad S. Hanna and Jeffrey S. Russell, TE Mar./Apr. 96, p155-163.

Spatial analysis

Analyzing Spatial Variability of In Situ Soil Properties, Don J. DeGroot, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p210-238.

Comparison of Spatial Variability of Infiltration Properties at Two Sites in Konza Prairie of East-Central Kansas, F S. Govindaraju, J. K. Koelliker, M. K. Banks and A. P. Schwab, HE July 96, p131-138.

Earthquake-Induced Landsliding Analyzed and Predicted With a Geographic Information System, James P. McCalpin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p3-4

Effects of Spatially Variable Intake on Surface Irrigation Advance, Dani Or and Wynn R. Walker, IR Mar/Apr.

96, p122-130.

Flood Damage Estimates Using GIS Spatial Analysis, Craig R. Wilkening, (North American Water and Environment Congress & Destructive Water, Chenchayva

Bathala, ed., 1996), p3405-3410.

Bannan, ed., 1990, p. 3-03-740.
Geostatistical Assessment of Spatial Variability in Piezocone Tests, Yasser A. Hegazy, Mayne Paul W. and
Shahrokh Rouhani, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p254-268.

Influence of Spatial Variability of Soil Properties on Seismically Induced Soil Liquefaction, Radu Popescu, Jean H. Prevost and George Deodatis, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.

Roth, ed., 1996), p1098-1112.

Modeling the Impact of Uncertainty in Spatial Variability of Estuarine Boundary Conditions, B. H. Johnson and K. W. Kim, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2731-2736.

Multifactor Spatial Analysis for Landfill Siting, Jehng-Jung Kao and Hung-Yue Lin, EE Oct. 96, p902-908.

A Neural Network Approach for Site Characterization and Uncertainty Prediction, Yacoub M. Najjar and Imad A. Basheer, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p134-148.

Recent Developments in Stochastic Mechanics Relevant to Earthquake Engineering, M. Shinozuka, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p1-1.

Results of the Probabilistic Volcanic Hazard Analysis Project, Robert R. Youngs, Kevin J. Coppersmith and Roseanne C. Perman, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Spatial Spring Runoff Modeling in a River Basin for Pur-pose of Forecasting, M. Sosedko and V. Manukalo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Spatial Variability of Soil Parameters, Derin N. Ural, (Un-Spatial Variability of Soil Farameters, Definits, Canador-certainty in the Geologic Environment; from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p341-352.
Spatiotemporal Stochastic Open-Channel Flow. I: Model and Its Parameter Data, Timothy K. Gates and Muhammad A. Al-Zahrani, HY Nov. 96, p641-651.

Spatiotemporal Stochastic Open-Channel Flow. II: Simulation Experiments, Timothy K. Gates and Muhammad A. Al-Zahrani, HY Nov. 96, p652-661.

Stochastic BEM-Random Excitations and Time-Domain Analysis, Sunil Saigal and Igor Kaljević, EM Apr. 96, p342-349.

Accessible Information, William J. Douglas and Izak Maitin, CE June 96, p59-61.

CISC-Computer Integrated Spatial Control for Autonomous Trenching and Pipe-Laying, Xiaodong Huang and Leonhard E. Bernold, Analysis and Computation, Frank-lin Y. Cheng, ed., 1996), p502-509.

Common and Variable Characteristics in Spatially Recorded Seismic Ground Motions, Ouqi Zhang and Aspasia Zerva, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p628-631. Development of a Hydrologic Model with Both Spatially Distributed and Physically Based Capabilities, Dennis L. Johnson and Arthur C. Miller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3200-3205.

Editorial, Earl F. Burkholder, SU Nov. 96, p143-144.

Effects of Spatial Data Resolution and Subarea Size on a Distributed Runoff Model, Thomas A. Seybert and Chin Y. Kuo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2701-2706.

Every Road That Rises Must Converge on GIS, Eric

Rasmussen, ET Oct./Nov. 96, p8.

Extracting Watershed Characteristics from Spatial Digital Data Using GIS, A Case Study of the Great Miami River Data Using OIS, A Case Study of the Great Miami River Basin, Maged Hussein and Franklin W. Schwartz, (Com-puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p515-521.

Geographic Data Exchange Format in Taiwan, Wei-hsin Ho and Ge-wen Lee, SU Aug. 96, p114-131.

Historical Perspective of Spatial Flow Data Visualization Techniques in GIS, Young-Kyun Lee and Sang-Ki Hong, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p167-173.

Regional Flood Frequency with Hierarchical Region of Influence, Zolt Zrinji and Donald H. Burn, WR July/Aug.

96, p245-252.

Response of Long-Span Bridges to Spatially Varying Ground Motion, Ronald S. Harichandran, Ahmad Hawwari and Basheer N. Sweidan, ST May 96, p476-

Simplified Transformation between NAD27 and NAD83 in Southeastern Wisconsin, Kurt W. Bauer and Earl F. Burkholder, SU Feb. 96, p26-39.

Spatial Seismic Coefficients, Some Sensitivity Results, Zbigniew Zembaty, EM Apr. 96, p379-382.

Spatial Statistics for Rainfall Forecasts Assessment, Lynn E. Johnson and Billy Olson, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2897-2902.

Status Report - Task Committee on GIS Models and Dis-tributed Models of the Watershed, Rafael G. Quimpo, Paul A. DeBarry and E. James Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2915-2920.

Traffic Engineering Recurrent Spatial Knowledge Base: Design and Implementation, Pawan Lingras, CP Jan. 96, p50-59.

Visualization of Spatial and Geometric Databases for Construction Projects, M. R. Halfawy, F. C. Hadipriono, J. W. Duane and R. E. Larew, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p920-926.

Spatial distribution

Automated Tools for Spatially Distributed Rainfall/Runoff Modeling, E. James Nelson and Norman L. Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2903-2908.

Development of a Hydrologic Model with Both Spatially Distributed and Physically Based Capabilities, Dennis L. Johnson and Arthur C. Miller, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3200-3205.

Direct Measurement of Turbulence Structures in a Standard Jar Test Tank Using PIV System, Chen-Yu Cheng, Jo-seph F. Atkinson and Marcus I. Bursik, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3746-3751.

Estimation of High Spring Floods Causing Inundation in Non-Studied Rivers of the West Siberian Plain, E. A. Asabina, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3702-3703.

Incorporation of Time-Intensity and Spatial Variability Into Probable Maximum Precipitation (PMP) Estimates, Ana Paula Barros, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p64-65.

Runoff Computation Using Spatially Distributed Terrain Parameters, Francisco Olivera and David R. Maidment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3212-3217.

Simulation of Catchment Response Using RC Network, M. J. Abedini, W. T. Dickinson and R. P. Rudra, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3381-3386.

ASCE Geo-Institute Starts to Take Shape, NE Feb. 96, p2. ASCE's Two New Institutes Are Open for Business, NE Nov. 96, p1,4.

Civil Engineers Need to Stay Together, C. Gary Kellogg, CE Feb. 96, p6.

Small Firms, Big Challenges, Monica Maldonado, CE Feb. 96, p60-63.

Specific energy
Nonunique Water-Surface Profiles in Open Channels, Subhash C. Jain, HY Dec. 93, p1427-1434.

Bridge Design by the AASHTO LRFD Bridge Design Specifications, Dennis R. Mertz and John M. Kulicki, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1-8.

Bridge Rehabilitation Permits Higher Live Loads, Dennis W. Stolldorf, P.E. and Thomas A. Holm, P.E., (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p1082-1090.

pi082-1090.

Building Code Requirements for Masonry Structures (ACI 530-95/ASCE 5-95/TMS 402-95); Specification for Masonry Structures (ACI 530.1-95/ASCE 6-95/TMS 602-95); Commentary on Building Code Requirements for Masonry Structures (ACI 530-95/ASCE 5-95/TMS 402-95); Commentary on Specification for Masonry Structures (ACI 530.1-95/ASCE 6-95/TMS 602-95) (St No. 95-005, 95-006), Masonry Standards Joint Committee, (James Colville, chmn.), 1996, 0-7844-0115-2, 97pp.

(James Colville, chmn.), 1996, 0-7844-0115-2, 97pp.
Cross-Frame Diaphragms for Steel Girder Bridges Using
the AASHTO LRFD Bridge Design Specifications, Dennis R. Mertz, (Building an International Community of
Structural Engineers, S. K. Ghosh, ed. and Jamshid
Mohammadi, ed., 1996, p307-312.
Development of Column Curve for Steel Angles, Seshu
Madhava Rao Adluri and Murty K. S. Madugula, ST
Mar. 96, p318-325.

Mar. 96, p318-325.

Development of Design Factors for Redundant Concrete Bridges, Michel Ghosn, Youhong Hang and Fred Moses, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p716-719.

Earth Reinforcement and Soil Structures, Co-publisher: Thomas-Telford, ISBN: 0-7277-2525-4, Colin J. F. P. Jones, 1996, 0-7844-0194-2, 380pp.

Fatigue Evaluation of Bridges, George E. Tsiatas and Shane M. Palmquist, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p302-305.

Masonry Designers' Guide - A Comprehensive Design Tool, John H. Matthys, (Worldwide Advances in Struc-tural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p322-333.

McCaube, ed., 1970, p.222-332.
Material Properties, Specifications and Testing for Pavements in Cold Regions, Edwin J. Chamberlain, Vincent C. Janoo and Stephen A. Ketcham, Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p.289-318.

Practical Guide to Grouting of Underground Structures, Co-published in the UK by Thomas Telford Publications, Raymond W. Henn, 1996, 0-7844-0140-3, 198pp.

Proposed Prestressed Masonry Design Provisions, Matthew J. Scolforo, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p355-364.

Proposed Specification and Commentary for Composite Joists and Composite Trusses, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Apr. 96, p350-358.

Serviceability System Factor for Design of Wood Floors, K. J. Fridley, D. V. Rosowsky and P. Hong, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p792-797

Standard for Load and Resistance Factor Design (LRFD) for Engineered Wood Construction (AF&PA/ASCE 16-95), AE Sept. 96, p121.

Standard Specifications for Structural Concrete (ACI 301-96) by ACI Committee 301, AE Sept. 96, p120.

State is Project Owner, CE Apr. 96, p28.

Structural Design Guide to the AISC (LRFD) Specification for Buildings, 2nd Ed. by Edward S. Hoffman, Albert S. Gouwens, David P. Gustafson, and Paul F. Rice, AE Sept. 96, p121.

Update of Building Code Requirements for Masonry, 1992 to 1995 Editions, J. Gregg Borchelt, (Worldwide Advanc-es in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p334-344.

Use of Recycled Aggregates for Pavement, S. Abdol Chini, Timothy J. Sergenian and Jamshid M. Armaghani, (Ma-terials for the New Millennium, Ken P. Chong, ed., 1996), p154-162.

Identification of Wind Spectral Characteristics from Struc-ture Response, K. Pan, N. P. Jones and J. H. Ellis, (Prob-abilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p482-485.

Loading Spectra for Railway Bridges under Current Oper-ating Conditions, Daniel H. Tobias, Douglas A. Foutch

and John Choros, BE Nov. 96, p127-134

On Translation Processes and Upcrossing Probabilities, Mi-chael Macke and Christian Bucher, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p608-611

Verification of Site-Specific Live Load on Bridges, Sangjin Kim, Andrzej S. Nowak and Roger Till, (*Probabilistic* Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p214-217.

Analysis and Simulation of Road Profiles, V. Rouillard, M. A. Sek and T. Perry, TE May/June 96, p241-245.

Atmospheric Flow Indices and Interannual Great Salt Lake Variability, Young-Il Moon and Upmanu Lall, HE Apr. 96, p55-62.

Effects of Soil Nonhomogeneity on SASW Testing, Nenad Gucunski, Vahid Ganji and M. H. Maher, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1083-1097.

Many J. S. Roin, ed., 1970, pt063-1071. Evaluation and Validation of the Mild Slope Evolution Equation Model Using Field Data, Suzana llić and An-drew Chadwick, (*Coastal Dynamics* '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p149-160.

Inelastic Vibration Phase Theory for Seismic Pounding Mitigation, Kazuhiko Kasai, Anil R. Jagiasi and Van Jeng, ST Oct. 96, p1136-1146.

Inference of Dynamic Shear Modulus from Lotung Downhole Data, C.-Y. Chang, Chin Man Mok and H.-T.

Tang, GT Aug. 96, p657-665.

Looking for Evidence of Climatic Change in Streamflow Time Series, K. H. Hamed and A. R. Rao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1459-1464.

Multiscale Shore Variability at Two Coasts, Pierluigi Am-inti, Zbigniew Pruszak and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p617-628. Reliability of the SASW Method for Determination of the Shore Medites of Scill Korne E. Toroni and Descrip B.

Shear Modulus of Soils, Karen E. Tuomi and Dennis R. Hiltunen, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1225-1238.

Spaceborne Fourier Transform Hyperspectral Imager, Leonard John Otten, III, Andrew D. Meigs and R. Glenn Sellar, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p224-230.

Spectral Relative Motion of Two Structures due to Seismic Travel Waves, Van Jeng and Kazuhiko Kasai, ST Oct. 96, p1128-1135.

Spectral density function

System and Input Identification with Partially Correlated Load Processes, K. Pan, N. P. Jones and J. H. Ellis, (Probabilistic Mechanics & Structural Reliability, Dan Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p138-141.

Speed using Ground Penetrating Radar, Kenneth R. Maser, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p820-828.

Techniques to Obtain Orbital Debris Encounter Speeds in the Laboratory, Lalit C. Chhabildas, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p8-12.

Speed control

An Automatic System for the Definition of the Setting Rules for Speed Diagrams, Francesco Saverio Capaldo and Rodolfo Grossi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p193-197.

Speed reduction

Speed Is In Your Head, CE Sept. 96, p12.

Spheres

Experimental and Numerical Studies of Shear Layers in Granular Shear Cell, Jan-Olov Aidanpää, Hayley H. Shen and Ram B. Gupta, EM Mar. 96, p187-196.

Interparticle Contact Behavior and Wave Propagation, Giovanni Cascante and J. Carlos Santamarina, GT Oct. 96, p831-839.

Analysis of the Gasoline Spill at East Patchogue, New York, James W. Weaver, Joseph E. Haas and John T. Wilson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p707-718.

Application of the Hydrocarbon Spill Screening Model to Field Sites, James W. Weaver, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p788-

A Cost-Effective approach to In Situ Remediation of Soil and Groundwater at a Diesel Fuel Spill Site, David A. Nickerson and James N. Baker, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1379-1386.

New on the Web, CE Sept. 96, p11.

Secondary Containment Design Practices, Charles R. Taylor, Jr., (North American Water and Environment Conress & Destructive Water, Chenchayya Bathala, ed.,

1996), p547-552.

Source Characterization at Contaminated Sites, Sudhakar R. Kondisetty, Priyantha W. Jayawickrama and Kenneth A. Rainwater, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p927-943.

Dam Safety Policy for Spillway Design Floods, James R. Dubler and Neil S. Grigg, El Oct. 96, p163-169.

Design Guidelines for Spillway Gates, Chander K. Sehgal, HY Mar. 96, p155-165.

Earth Spillway Design Using SITES Software, Darrel M. Temple, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1930-1935.

Guist Creek Dam Spillway Upgrade: A Maze (Labyrinth) of Difficulties, David C. Froehlich, Michael A. Woolum and W. Keith Crim, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1918-1923.

Hydraulic Model Study of the Prado Dam Spillway, Chris D. Bahner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3800-3805.

Influence of Backwater on Headcut Advance, Kerry M. Robinson and Gregory J. Hanson, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p117-122.

Model Study of a Roller Compacted Concrete Stepped Spillway, Charles E. Rice and Kern C. Kadavy, HY June 96, p292-297.

90, p.32-231.
Pipe Plunge Pool Energy Dissipator, Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323.
Prediction of Cavitation Damage for Spillways, Wenping Lee and John A. Hoopes, HY Sept. 96, p481-488.
Regionalization of Annual Precipitation Maxima in Mon-

tana, Charles Parrett, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p57-58.

Risk Assessment of Rockfall Hazard at Horse Mesa Dam: A Case History, Peter M. Kandaris and Kenneth M. Euge, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1402-

Surface Oriented Fishway and Fish Guidance Curtain, Lynn A. Reese, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p165-170.

Bolted Field Splices for Steel Bridges, Firas Sheikh-lbrahim and Karl H. Frank, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, p290-297.

Economical Long-Span Spliced Bridges, Leo Spaans, (Building an International Community of Structural Enineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed.,

gineers, 5. 1996), p147-152.

Fatigue Crack Repair of Steel Beams with Tapered Cover Plate Details, Ahmed F. Hassan and Mark D. Bowman, ST Nov. 96, p1337-1346.

Analysis of Bond Stress Distributions in Pullout Speci-mens, Homayoun H. Abrishami and Denis Mitchell, ST Mar. 96, p255-261.

Compression Failure in Reinforced Concrete Columns and Size Effect, Zdeněk P. Bažant and Yuyin Xiang, (Worldwide Advances in Structural Concrete and Masonry, A E. Schultz, ed. and S. L. McCabe, ed., 1996), p443-451.

Concrete Shear Failure in Reinforced-Concrete Elements, Prodromos D. Zararis, ST Sept. 96, p1006-1015.

Geotechnical Study and Remediation Design for Coal Mine Spoil Instability in Discontinuous Permafrost—A Case Study, Andrew J. Hardy, Patrick G. Corser and Daniel C. Graham, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p712-723.

Settlement of Shallow Foundations on Uncontrolled Mine Spoil Fill, J. Richard Cheeks, CF Nov. 96, p143-151.

All-Around Arenas (Available only in Structures special issue), Lawrence G. Griffis, P.E., CE Sept. 96, p6A-11A. Unique Pile Combination Supports New Tennis Complex, CE Dec. 96, p10,12.

Spray nozzles

Sprinkler Performance as Function of Nozzle Geometrical Parameters, Jiusheng Li, IR July/Aug. 96, p244-247.

Development of a Robotic Bridge Painting System, Yong Bai and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p185-191.

Environments, Laura A. Demsetz, ed., 1996), p185-191.
New Alloy Prevents Corrosion, ET Oct./Nov. 96, p1,9.
Spray Freezing to Treat Oil Sands Tailings Pond Water, W.
Gao, D. C. Sego and D. W. Smith, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p60-70.

Spread foundations

Foundation Retrofit at Savoonga "A Retrospective Study G. Scott Crowther, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p278-

Bridge Corrosion Cost Model Implementation and Coating Maintenance Model Using Dynamic Programming, C. K. Tam and S. F. Stiemer, CF May 96, p57-66.

GIGO: Spreadsheet-Based Simulation for MSW Systems, Robert P. Anex, Renée A. Lawver, Jay R. Lund and George Tchobanoglous, EE Apr. 96, p259-262.

Practical Probabilistic Approach Using Spreadsheet, B. K. Low, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1284-

Parameter Models for Estimating In-Situ Tensile Force in Tie-Rods, Stefano Sorace, EM Sept. 96, p818-825.

Sprinkler irrigation

Sprinter III and Sprinter III and Sprinter III and Sprinter III and Sprinter III and Sprinter III and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1489-1494.

Irrigation Methods Used in California: Grower Survey, R. . Snyder, M. A. Plas and J. I. Grieshop, IR July/Aug. 96, p259-262.

Closure to Discussion of Environmental Engineering Forum: Backflow Prevention and Water Quality in Residential Sprinkler Systems, Thomas M. Walski, EE Jan. 96, p82.

iscussion of Environmental Engineering Forum: Backflow Prevention and Water Quality in Residential Sprinkler Systems (September/October 1993, Vol. 119, No. 5, by Thomas M. Walski (Environmental Engineer-ing Forum)), Frederick L. Hart, EE Jan. 96, p78-79. Discussion

Discussion of Environmental Engineering Forum: Backflow Prevention and Water Quality in Residential Sprinkler Systems (September/October 1993, Vol. 119, No. 5, by Thomas M. Walski (Environmental Engineering Forum)), Ralph E. Wilbur, EE Jan. 96, p80-82.

Sprinkler Performance as Function of Nozzle Geometrical Parameters, Jiusheng Li, IR July/Aug. 96, p244-247.

Application of Mathematical Models for Flood Forecasting in Sri Lanka, G. T. Dharmasena, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1549.

Behavior of Three-Span Braced Columns with Equal or Unequal Spans, Raymond H. Plaut and Yu-Wen Yang, ST June 95, p986-994.

Buckling Modes at Coincident Singularities of Stiffness Matrix, Igor Raskin and John Roorda, EM Aug. 96,

Design Relationship for Filters in Bed Protection, K. J. Bakker, H. J. Verheij and M. B. de Groot, HY Sept. 94, p1082-1088.

Dynamic Stability of Viscoelastic Structures under Sto-chastic Loading, S. T. Ariaratnam and G. Amaniampong, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p542-545

Elastic Response of Columns After Sudden Loss of Brac-ing, Raymond H. Plaut and Rae-Hak Yoo, EM Apr. 96, p383-384.

Elastic Stability of Composite Plates with Wavy Fibers, Raouf A. Raouf, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1167-1170.

European Progress on river Renaturalisation, Richard D. Hey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2595-2600

Geotechnical Study and Remediation Design for Coal Mine Spoil Instability in Discontinuous Permafrost—A Case Study, Andrew J. Hardy, Patrick G. Corser and Daniel C. Graham, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p712-723.

Hindsight on River Ice Jam Stability, Spyros Beltaos, CR

Sept. 96, p122-133.

Historical Development of Bridge Scour Evaluations, E. V. Richardson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3-27.

Improving Design in Composite Thin-Walled Columns, Luis A. Godoy and Leonel I. Almánzar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1155-1158.

Incipient Instability Criterion of Two Confined Superposed Fluids, Chin-Hwa Kong and I-Chung Liu, EM Feb. 95, p198-202.

Initiation of Bed Forms on a Flat Sand Bed, Stephen E. Coleman and Bruce W. Melville, HY June 96, p301-310. Localization of Inelastic Deformation in Elasto-Plastic Pore

Solids Saturated by Liquid, Igor A. Garagash, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p931-934. Looping Behavior and Strength of Prestressed Arches,

Zefang Xu and Amir Mirmiran, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p366-369.

Moment Lyapunov Exponent and Stability Index for Linear Stochastic Systems with Small Diffusion, Nikolai Mosh-chuk and Rafail Khasminskii, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p538-541.

NPC Integrator and Its Unconditional Stability for Response Analysis of Constrained Structures, David W. Begg and Xiaojian Liu, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

p1237-1244

On Moment Stability of Markov Dynamical Systems, Lambros Katafygiotis and Yevgeny Tsarkov, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p546-549

On the Almost-Surely Lyapunov Exponent of a Duffing-van der Pol Delay Oscillator, M. S. Fofana, (*Probabilis-*tic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p550-553

A Pore-Scale Study of the Stability of Nonaqueous Phase Liquid Ganglia under the Influence of Vibrations, Sunil Menon, Arun Pant and Lakshmi N. Reddi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: As-sessment and Remediation, Lakshmi N. Reddi, ed., 1996), p538-550.

Probabilistic Stability Robustness of Structural Systems, R. V. Field, Jr., P. G. Voulgaris and L. A. Bergman, EM

Oct. 96, p1012-1021.

Punching Shear Failure in Concrete Decks as Snap-Through Instability, Michael F. Petrou and Philip C. Per-dikaris, ST Sept. 96, p998-1005.

Stability of Beams in an Elastic Foundation, Fady F. Bar-soum and William F. Carroll, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1143-1146.

Stability of Bounded-Noise Excited System, Q. C. Li, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p128-131.

Stability of Shallow Shear Flows, Vincent H. Chu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1074-1077.

Stability of Shear Deformable Thin-Walled Space Frames and Circular Arches, Sung-Pil Chang, Sung-Bo Kim and Moon-Young Kim, EM Sept. 96, p844-854.

Stochastic Modeling of Imperfections in Beams, B. W. Yeigh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p676-679.

Systematic Analysis of Long-Term Fate of Disposed Dredged Material, Norman W. Scheffner, WW May/June 96, p127-133.

Training for Bridge Inspectors in Stream Stability and Scour, P. F. Lagasse and E. V. Richardson, (North Amer-ican Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p499-505.

Stability analysis

Stability analysis
Application of Numerical Limit Analyses for Shallow
Foundations on Clay, Andrew J. Whittle and Boonchai
Ukritchon, (Engineering Mechanics, Y. K. Lin and T. C.
Su, 1996), p132-135.
Centrifuge Modeling of Geotextile-Reinforced Cohesive
Soil Retaining Walls, A. Porbaha and D. J. Goodings,
GT Oct. 96, p840-848.

Column Design in Fire Exposed Steel Frames, Ricardo Ramos Cabeza, Ali Saffar, Robert W. Fitzgerald and Hossein Davoodi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p906-909.

Comparison and Evaluation of Different Riprap Stability Formulas Using Field Performance, Mahrez Ben Bel-fadhel, Guy Lefebvre and Karol Rohan, WW Jan/Feb.

90, p8-19. Computational Enclosures of Lyapunov Exponents, A. Ams and W. Wedig, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p820-823. Determination of Post-Liquefaction Strength: Steady State vs Residual Strength, S. Thevanayagam, C. C. Wang and K. Ravishankar, (Uncertainty in the Geologic Environment of These Parties (Charles D. Shecheffer). ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1210-1224.

Development and Testing of Riverbank-Stability Analysis, Stephen E. Darby and Colin R. Thorne, HY Aug. 96,

p443-454.

Efficient Monte Carlo Technique for Locating Critical Slip Surface, Venanzio R. Greco, GT July 96, p517-525.

Improved Frame Stability Analysis With Effective Lengths, Jostein Hellesland and Reidar Bjorhovde, ST Nov. 96, p1275-1283

Instability Analysis of an Inclined Tower in Waves, Subrata K. Chakrabarti, (Engineering Mechanics, Y. K. Lin and

T. C. Su, 1996), p836-839. Local Scour Downstream of Hydraulic Structures, Gijs J. C. M. Hoffmans and Krystian W. Pilarczyk, HY Apr. 95,

p326-340. Prefabricated Concrete Walls. Influence of Prestressload on Vertical Joints, J. P. Straman, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p147-153.

1990), p14-129.
Probabilistic Stability Analysis of Shallow Arches, R. P. Nordgren and K. S. Hussain, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p124-127.
Reliability Analysis for Deep-Seated Stability of Pile-Supported Structures, William M. Isenhower, (Probability Parks) listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p870-873. Reliability Assessment Methodology for Sliding Stability

of Gravity Structures, Bilal M. Ayyub and Ru-Jen Chao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

p858-861.

Using a Random Field Model, York Schorling and Christian Bucher, (Probabilistic Mechanics & Structural Reli-ability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996, p604-607.
Stability Analysis of Axisymmetric Thin Shells, Ashutosh Bagchi and V. Paramasivam, EM Mar. 96, p278-281.
Stability of a Steep Slope Supporting a Building, Stephen G. Wright and Frank G. Bryant, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth ed. 1996), p324-450. Roth, ed., 1996), p434-450.

Stabilization of a Creeping Slope Using Soil Nails, Peter R. Cali, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin,

ed., 1996), p109-121.

Subharmonic Edge Waves. Stability Analysis, Antonio Lechuga, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p281-292

and Ryszard B. Zeidier, ed., 1996), p.281-292.
Tubular Members. I: Subility Analysis and Preliminary
Results, Spyros A. Karamanos and John L. Tassoulas,
EM Jan. 96, p64-71.
Unified Formulation for Analysis of Slopes with General
Slip Surface, R. D. Espinoza, P. L. Bourdeau and B.
Muhunthan, GT July 94, p1185-1204.

Stabilization

Stabilization

AASHTO Layer Coefficients for Cement-Stabilized Soil

Bases, David N. Richardson, MT May 96, p83-87.

Acceleration of Landfill Stabilization Using Leachate Recycle, T. G. Townsend, W. L. Miller, Hyung-Jib Lee and J.

F. K. Earle, EE Apr. 96, p263-268.

Ber Time Stabilizer Company Bed CFE Jun 96, p23-24.

F. K. Earle, Ec. Apr. 90, 203-208.
Big Tires Stubilize a Canal Bed, CE Jan. 96, p22,24.
Corrosion Effects of Cement Stabilized Backfill on Galvanized Steel Reinforcement, S. N. Popova, B. N. Popov, R. E. White, M. F. Petrou and D. Morris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p988-306.

Effects of an Extended Set-Control Admixture on the Properties of Fresh and Hardened Concrete, Steven A. Ragan, (Materials for the New Millennium, Ken P. Chong, ed.,

1996), p1617-1626.

Field Evaluation of GEOSYNTHETICALLY STABI-LIZED PAVEMENTS, Imad L. Al-Qadi, Thomas L. Brandon and Salman A. Bhutta, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p328-337.

Liability to Asset: Beneficial Reuse of Stabilized Contaminated Soils, Michael F. Conway, (Engineered Contami-nated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p47-56. Mechanism of Bluff Body Aerodynamics and Its Stabiliza-

tion, Masaru Matsumoto and Fumitaka Yoshizumi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

p74-77.

Microstructural and Phase Characteristics of Phosphogyp-sum-Cement Mixtures, Amitava Roy, Ramesh Kal-vakaalva and Roger K. Seals, MT Feb. 96, p11-18.

Performance of Stabilized Base Course at DFW, William P. Performance of stabilized base Course at DFW, Whitain F. Grogan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p308-317. Resilient Modulus of Cement-Stabilized Phosphogypsum,

M. I. Pericleous and J. B. Metcalf, MT Feb. 96, p7 Robust Stabilization of Systems with Time Delays Mohammad Hosseini and Firdaus Udwadia, (Probabilistic Mechanics & Structural Reliability, Dan M. Frango-

pol, ed. and Mircea D. Grigoriu, ed., 1996), p438-441. Shakwak Highway Project—Construction Challenges, Robin Walsh, Donaldson MacLeod and Dennis Cook, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p640-651.

Stabilization/Solidification of Hazardous Wastes Using Fly Ash, Jafar Parsa, Stuart H. Munson-McGee and Robert

Steiner, EE Oct. 96, p935-940.

A Stabilized Formulation of the Navier-Stokes Equations Arif Masud, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1135-1138.

Study of Clay-Cement Slurries with Mechanical and Electromagnetic Waves, M. A. Fam and J. C. Santamarina, GT May 96, p365-373.

Waste Using Organic-Clay Complex, Irene M.-C. Lo, EE Sept. 96, p850-855.

Stack gases
Wind Tunnel Modeling of Atmospheric Dispersion in the Vicinity of Buildings, P. Saathoff, H. Wu and T. Stathopoulos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1131-1134.

Stadiums

Analysis and Design of the Ponce Coliseum in 1969 and 1996, Alex C. Scordelis, Pere Roca and Antonio R. Mari, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p278-286.

Derilled Shaft Load Testing Los Angeles Coliseum, Paul R. Schade and Barry J. Meyer, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p574-581.

Evaluation of Cracking of the Miami Marine Stadium Hy-perbolic Paraboloid Roof Structure, Michael L. Brainerd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1659-1668.

Seattle's Kingdome Receives Rigorous Seismic Study, CE Apr. 96, p12.

Unique Pile Combination Supports New Tennis Complex. CE Dec. 96, p10,12.

Waterproofing An Expanded Convention Center, CE Dec. 96, p89.

tainless steel

High-Temperature Properties of Stainless Steel for Building Structures, Y. Sakumoto, T. Nakazato and A. Matsuzaki, ST Apr. 96, p399-406.

Reliability of a Cast Duplex Stainless Steel Elbow by Using Probabilistic Fracture Mechanics, P. Hornet and P. Le Delliou, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p756-759.

Slowing Corrosion Damage in Concrete: The Use of Organic-Coated, Ceramic-Clad, Metallic-Clad and Solid Metallic Reinforcing Bars, David B. McDonald, Donald W. Pfeifer, Matthew R. Sherman and Gilbert T. Blake, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1266-1275.

Design Provisions for Stair Slabs in the Bangladesh Build-ing Code, I. Ahmed, A. Muqtadir and S. Ahmad, ST Mar. 96, p262-266.

Handrail Graspability, Donald O. Dusenberry and Howard Simpson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p466-469.

Standard deviation

Field Estimation of Standard Deviations for 3D Gaussian Model, An Jin and Shoou-Yuh Chang, EE July 96,

Uncertainty and Risk Analyses for FEMA Alluvial-Fan Method, Bing Zhao and Larry W. Mays, HY June 96, p325-332

Standard penetration tests
Influence of Hammer Type on SPT Results, Elliott E.
Drumright, Charles W. Pfingsten and Robert G. Lukas, GT July 96, p598-599.

Reconsideration of Initiation of Liquefaction in Sandy Soils, Catherine E. Fear and Edward C. McRoberts, GT Mar. 95, p249-261.

Seismic Liquefaction Potential Assessed by Neural Net-works, Anthony T. C. Goh, GT Sept. 94, p1467-1480.

Standardization

Architectural Office Standards and Practices: A Practical Users Guide by Larry D. Jenkins et al. Frederick S. Mer-ritt, AE Mar. 96, p41.

Geographic Data Exchange Format in Taiwan, Wei-hsin Ho and Ge-wen Lee, SU Aug. 96, p114-131. Industry Standards for Erosion Control Products - Future Tools for Civil Engineers, David T. Williams, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3349-3354.

Passenger Information Terminals: Towards Standardisa-tion, P. Papaioannou, S. Basbas and D. Panayotako-poulos, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p24-29. System Factors for Design of Wood Structural Assemblies, Partificate V. Denadead Bhillio, 1866, (Buildings on base

Bradford K. Douglas and Philip Line, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p798-803

Standards

Another Person Cures Galloping, Ray G. Barney, CE June 96, p27-28.

96, p27-28.
Bridge Design by the AASHTO LRFD Bridge Design Specifications, Dennis R. Mertz and John M. Kulicki, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1-8.
Building Code Requirements for Structural Concrete (ACI 318-95) and Commentary (ACI 318R-95) by ACI Committee 318, AE Sent. 96, p120.

comments (ACI 318R-95) by ACI Committee 318, AE Sept. 96, p120.

Comments Regarding the NAS Report on Yucca Mountain Standards, Chris Whipple, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p261-262.

Comparison of General vs. Multi Sector NPDES Storm Water Permits, William H. Espey, John Whitescarver and Michael Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

ment Congress & Destructive Water, Chenchayya Sathala, ed., 1996), p.2810-2814.

Connecting Random Acts of Quality: Global System Standard, William M. Hayden, Jr., ME May/June 96, p.34-44.

Construction Forum, SC Aug. 96, p69-70.

Earth Reinforcement and Soil Structures, Co-publisher: Thomas-Telford, ISBN: 0-7277-2525-4, Colin J. F. P. Jones, 1996, 0-7844-0194-2, 380pp.

Engineering Education: Paragon or Paradox? Robert D. Kersten, El Oct. 96, pl47-150.

Environmental Goal Needs Definition, David M. Herring, P.E., CE Dec. 96, p27-28.

Environmental Standards Digitized, CE Dec. 96, p20.

Ethics Not Dependent on Consequences, Robert F. Brown,

P.E., CE Nov. 96, p40-41.

An Expert System for Wind-Resistant Residential Construction, James R. McDonald, Douglas A. Smith and Kishor C. Mehta, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p315-316.

A Geologist Discovers ASCE Dinosaurs, Martin Kappeyne,

CE June 96, p26. Glazed Opening Designs for Windborne Debris Impact, Jo-

Glazed Opening Designs for Windborne Debris Impact, Joseph E. Minor, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p117-118.
Industry Standards for Erosion Control Products - Future Tools for Civil Engineers, David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayy Bathala, ed., 1996), p3349-3354.
Initial EPRI Reaction to the NAS Yucca Mountain Standards Recommendations, Iohn H. Kessler, (Hish Level Acts).

dards Recommendations, John H. Kessler, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p282-284.

Joint Effort by ASCE and FEMA to Develop Flood Hazard Mitigation Standards, Clifford E. Oliver and Harry B. Thomas, (Natural Disaster Reduction, George W. Hous-

ner, ed. and Riley M. Chung, ed., 1997), p337-338. Load Combinations and Load Factors for Construction,

David V. Rosowsky, CF Nov. 96, p175-181.

Making a Case for "Cost-Effective" Compliance, Dale T. Bignell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p305-307

Masonry Designers' Guide - A Comprehensive Design Tool, John H. Matthys, (Worldwide Advances in Struc-tural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996, p. 322-333. Measurement Comparisons Could Enhance Trade, ET

Mar./Apr. 96, p2.

Method for Uncoupling Load Factor Determination, Duane E. Castaneda, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p222-225.

Minimum Design Loads for Buildings and Other Struc-tures, Revision of ANSI/ASCE 7-93 (St No. 95-007), American Society Civil Engineers, of 0-7844-0092-X, 220pp.

NAS Recommendations and Current Legislative Proposals: Implications for U.S. NRC's Regulatory Program, J. P. Kotra, M. V. Federline, T. J. McCartin, N. A. Eisenberg and J. H. Austin, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p269-

The National Academy of Sciences Report and Environ-mental Radiation Standards for Yucca Mountain, Law-rence Weinstock and Raymond L. Clark, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p267-268.

National Research Council Report:"Technical Bases for Yucca Mountain Standards"—A State of Nevada View, Carl A. Johnson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p285-

A National Standard for Flood-Resistant Design and Construction, Christopher P. Jones, Vernon K. Hagen, Christopher S. Hanson, Thomas C. MacAllen, David Greenwood and Clifford E. Oliver, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p339-340.

New Version of Manual 45 Ready, CE Dec. 96, p70. No More Bullish Predictions, CE Dec. 96, p13-14. Potential Changes to Technical Issues in HLW Performance Assessment, N. A. Eisenberg and R. G. Wescott, (High Level Radioactive Waste Management, Technical

(High Levet Radioactive Waste Management, Technical Program Committee, 1996), p288-290.
Proposed Prestressed Masonry Design Provisions, Matthew J. Scolforo, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed.,

1996), p355-364.

Regulatory Perspective on NAS Recommendations for Yucca Mountain Standards, Stephan J. Brocoum, Miguel A. Lugo, Steven P. Nesbit, Paul M. Krishna and James A. Duguid, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p272-273

Risk Management Principles of Transportation Facility Design Engineering, Andrew G. Cooley, TE May/June 96,

p207-209

Rock Foundations, U.S. Army Corps of Engineers, 1996,

0-7844-0136-5, 130рр.

Safety Analysis Requirements for Robotic Systems in DOE Nuclear Facilities, W. H. McCulloch, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p235-240.

Selecting Design Conditions as Part of a Watershed Approach to Water Quality Control, David W. Dilks and Kathryn A. Sweet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1543-1548.

Standard for Load and Resistance Factor Design (LRFD) for Engineered Wood Construction (St No. 95-016), American Society of Civil Engineers and American For-est & Paper Association, 1996, 0-7844-0041-5, 125pp. Standard for Load and Resistance Factor Design (LRFD)

for Engineered Wood Construction (AF&PA/ASCE 16-95), AE Sept. 96, p121.

95), AE Sept. 96, p121.
Standard Specifications for Structural Concrete (ACI 301-96) by ACI Committee 301, AE Sept. 96, p120.
Standardizing Environmental Assessments: A Practical Perspective, J. R. Marsh, K. W. Green and T. Dong, EE Mar. 96, p222-226.
Studies in Guidance, Navigation and Control for an Articulated-Body Mars Rover Testbed, Songiae Lee and Gordon K. Lee. (Relactics for Challeneine Environments).

lated-Body Mars Rover Testbed, Songjae Lee and Gordon K. Lee, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p157-163.

System Integration in Traffic Management Centres, Jorge Navas, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p485-489.

What Is the Standard of Care? Eugene A. Miller, ME. New Tree 16 and 15 an

Nov./Dec. 96, p40-46.

Wind Protection Tie-Downs for Manufactured Homes, John E. Pearson, Anatol Longinow and Donald F.

Meinheit, SC Nov. 96, p126-140.
Wind-Tunnel Studies of Buildings and Structures, ASCE Aerospace Division Task Committee on Wind Tunnel Studies of Buildings and Structures, AS Jan. 96, p19-36. The Yucca Mountain Standard: How Lenient Should It Be?

Thomas H. Pigford, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p263-266.

Dynamic Processes on a Ridge and Runnel Beach, David Simmonds, George Voulgaris and David Huntley, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p868-878.

Spatial and Temporal Fluctuations of Nearshore Currents Induced by Directional Random Waves, Yoshimi Goda and Tetsuya Mizusawa, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p269-280

State agencies

An Irresistible Offer, Max D. Crumit, P.E., Wafic M. Arnoush, P.E. and Scott L. Montgomery, P.E., CE Aug. 96, p40-43

State government Ecosystem Management in the State of Florida, Ernest L. Barnett and Jim Lewis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3586-3591. Environmental Justice: An Issue for States, Linda K. Mu-rakami, Sia Davis and Deb Starkey, (High Level Radio-active Waste Management, Technical Program Commit-tee, 1996), p480-482.

The Watershed Approach: A Framework for Action, Louise P. Wise and Janet D. Pawlukiewicz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3574-3579.

Controlling Brazil's Pollution: Federal versus State Taxes and Fines, Antonio Estache and Kangbin Zheng, IS June

Developing Comprehensive State Ground-Water-Protection Programs, R. Gregory Bourne, Sonja Massey, Elizabeth Rolle and Bruce Meighen, WR July/Aug. 95, p294-301.

State Engineers as Policymakers: Apolitical Experts in a History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p123-135.

Statewide Programming: Implementing Transportation-Policy Objectives, Debbie A. Niemeier, Tracy L. Reed, G. Scott Rutherford and Pat Morin, IS Mar. 96, p30-39.

Transboundary Diversions, Water Law and Property Rights, George William Sherk, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3224-3229.

State-of-the-art reviews

Double-Layer Grids: Review of Dynamic Analysis Methods and Special Topics, Ramesh B. Malla and Reynaud L. Serrette, ST Aug. 96, p882-892.

Double-Layer Grids: Review of Static and Thermal Analysis Methods, Ramesh B. Malla and Reynaud L. Serrette, ST Aug. 96, p873-881.

Dynamic Response of Compliant Offshore Structures, R. Adrezin, P. Bar-Avi and H. Benaroya, AS Oct. 96,

Flow Propagation Description in Dynamic Network Load-ing Models, Vittorio Astarita, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Foundation Design Considerations for Construction on Marshlands, A. Rhett Whitlock and Shahzad S. Moosa, CF Feb. 96, p15-22.

Information Models for Integrated Building Design at the Preliminary Stage, Claude Bédard, (Analysis and Com-putation, Franklin Y. Cheng, ed., 1996), p246-252.

Mechanical Connections in Wood Structures (M&R No. 84), Task Committee on Fasteners of the Committee on Wood of the Structural Division of the American Society of Civil Engineers, (Lawrence A. Soltis, chmn.), 1996, 0-7844-0110-1, 245pp.

Reliability-Based Structural System Optimization: State of-the-Art versus State-of-the-Practice, Dan M. Frango-pol and Ross B. Corotis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p67-78.

Smart Materials and Structures: A Review, C. Shakeri, M. N. Noori and Z. Hou, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p863-876.

State of the Art: Limit Equilibrium and Finite-Element Analysis of Slopes, J. Michael Duncan, GT July 96, p577-596.

State-of-the-Art Review of Modeling Transport and Fate of Oil Spills, ASCE Task Committee on Modeling of Oil Spills of the Water Resources Engineering Division, HY Nov. 96, p594-609.

Surf-Zone Modeling, Ib A. Svendsen and Uday Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p13-32.

J. Lougheed and A. T. Papagiannakis, MT Aug. 96, p153-156. Viscosity Characteristics of Rubber-Modified Asphalts, T.

Wave Motion in Vegetated and Non-Vegetated Coastal Zones, Stanisłław R. Massel, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1-12.

Static loads

Influence of Imperfections on Nonlinear Dynamic Response of Trusses, Aslam Kassimali and Khalil Rabiei, Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p534-541.

Liquefaction and Postliquefaction Behavior of Sand, Y. P. Vaid and J. Thomas, GT Feb. 95, p163-173.

Performance Monitoring of Three Stress-Laminated Timber Bridges in Leon County, Nur Yazdani and Joy Orlando Kadnar, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-

madi, ed., 1996), p268-275.
Static Behavior of Noncomposite Concrete Bridge Decks
under Concentrated Loads, Michael F. Petrou, Philip C.
Perdikaris and Mingahu Duan, BE Nov. 96, p143-154.

Static structural analysis

Double-Layer Grids: Review of Static and Thermal Analysis Methods, Ramesh B. Malla and Revnaud L. Serrette. ST Aug. 96, p873-881.

Doubly Symmetric Tube Structures. I: Static Analysis, Hideo Takabatake, Hisao Mukai and Tadato Hirano, ST

July 93, p1981-2001.

Nonlinear Static and Dynamic Analysis from Research to Practice, Filip C. Filippou, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p31-42.

Frankin Y. Cheng, ed., 1990), p. 1-42. Simplified Analysis of Rectangular Plates with Stepped Thickness, Hideo Takabatake, Takayuki Imaizumi and Kunihiro Okatomi, ST Jan. 95, p.28-38.

Comparison of Static and Dynamic Test Results for Driven Steel Pipe Piles in Highly Saline Permafrost, Kelly S. Merrill and Richard E. Riker, (Cold Regions Engineer-ing: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p238-253.

Evaluation of Dynamic Strength of Concrete from Results of Static Tests, Iosif E. Shkolnik, EM Dec. 96, p1133-

1138

1138.
Long-Term Corrosion Behavior of Environmental Assessment Glass, W. L. Ebert and J. K. Bates, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p399-401.
Reliability of Jackets: Beyond-Static-Capacity, D. G. Schmucker and C. A. Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p578-581.

Earthquake Resistance Assessment of Some Selected Exist-ing Buildings, M. Nazih Eilouch and Taleb Omran, (Nat-ural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p145-146.

Parameter Estimation of Structures from Static Strain Measurements. I: Formulation, Masoud Sanayei and Mi-chael J. Saletnik, ST May 96, p555-562.

Parameter Estimation of Structures from Static Strain Measurements. II: Error Sensitivity Analysis, Masoud Sanayei and Michael J. Saletnik, ST May 96, p563-572. Static Stiffness of Unbounded Soil by Finite-Element Method, John P. Wolf and Chongmin Song, GT Apr. 96,

Insight into the Inelastic Response to a Fully Nonstationary Earthquake Ground Motion Model, Bor-Feng Peng and Joel P. Conte, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p269-272.

Stochastic Response of a Hysteretic System Under Nonstationary Excitations, Ismail I. Orabi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p392-395.

Crossing Rate Analysis of NonGaussian Response of Linear Systems, M. D. Pandey and S. T. Ariaratnam, EM June 96, p507-511.

Random Response to Periodic Excitation with Correlated Disturbances, Zhikun Hou, Yunshen Zhou, Mikhail F. Dimentherg and Mohammad Noori, EM Nov. 96, p1101-1108.

Statistical analysis

An Advanced Comprehensive Model for the Statistical Analysis of S-N Data, C. L. Shen, P. H. Wirsching and G. T. Cashman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p462-465.

Analysis and Simulation of Road Profiles, V. Rouillard, M. A. Sek and T. Perry, TE May/June 96, p241-245.

The Balanced Indigenous Population (BIP) and Statistical Process Control (SPC) in Marine Pollution Ecology, George Robertson, Mike Mengel, Don Maurer and Irwin Haydock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1431-1436.

Changes in Bacterial Aerosols with Height Above Aeration Tanks, Bernard Sawyer, K. C. Rao, Parnell O'Brien, Gil-bert Elenbogen, David R. Zenz and Cecil Lue-Hing, EE

May 96, p368-373.

Compression Strength of Pultruded Flat Sheet Material, J. T. Mottram, MT May 94, p185-200.

Detection of Outliers in Pearson Type III Data, Colleen S. Spencer and Richard H. McCuen, HE Jan. 96, p2-10.

Empirical Simulation Technique Based Storm Surge Frequency Analyses, Norman W. Scheffner, Leon E. Borgman and David J. Mark, WW Mar/Apr. 96, p93-101.

Flood Quantiles for Small Watersheds Using Peak Eleva-tion to Volume Method, Michael C. Morgan and Eric D. Loucks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p146-151.

Floodplain Mapping Using Continuous Hydrologic and Hydraulic Simulation Models, A. Allen Bradley, Paula J. Cooper, Kenneth W. Potter and Thomas Price, HE Apr. 96, p63-68.

Influence of Coatings on Bar-Concrete Bond, Protasio F. Castro, MT Nov. 96, p212-214.

Nonlinear Systems with Poisson White Noise, Mircea Grigoriu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p120-123.

A Probabilistic Formulation of Damage Detection, Loukas Papadopoulos and Ephrahim Garcia, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p350-353.

Probabilistic Solutions to Geotechnical Problems, Nagaratnam Sivakugan and Ali Al-Harthy, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p938-941.

Regionalization of Annual Precipitation Maxima in Mon-tana, Charles Parrett, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p57-58.

Relationship between Kelp Beds and Beach Width in Southern California, M. Hany S. Elwany and Reinhard E. Flick, WW Jan./Feb. 96, p34-37.

Spatial Statistics for Rainfall Forecasts Assessment, Lynn E. Johnson and Billy Olson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2897-2902.

Stabilization/Solidification of Hazardous Wastes Using Fly Ash, Jafar Parsa, Stuart H. Munson-McGee and Robert

Steiner, EE Oct. 96, p935-940.

Statistical Analyses of Acoustical Wave Velocity in Porous Seafloor, M. Badiey, A. H-D. Cheng and Y. Mu, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

Statistical Analysis of S-N Fatigue Data; Design Curve Based on Tolerance, C. L. Shen, P. H. Wirsching and G. T. Cashman, (Probabilistic Mechanics & Structural Reli-ability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p470-473.

Statistical Aspects of Size Effects in Quasibrittle Fracture, Zdeněk P. Bažant and Jaime Planas, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1179-1180.

Statistical Aspects of Toughness in Brittle Fracture, A. Chudnovsky and M. Gorelic, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p346-349.

Statistical Characteristics of Strength and Load Random Variables of Ship Structures, Khaled Atua, Ibrahim Assakkaf and Bilal M. Ayyub, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p106-109. Statistical Dynamics of Pipe-Line with One-Side Contact Supports Under Turbulence of Cross-Wind Loads, Anatoly I. Menyailov and Christian G. Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol

Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p986-989.

Statistical Implications of Methods of Finding Characteristic Strengths, Richard D. Hunt and Anthony H. Bryant, ST Feb. 96, p202-209.

ST Feb. 90, 2022-209.
Statistical Moments of Principal Stress-Related Quantities in Random Vibration Analysis, Ronald S. Harichandran and Mu-Tsang Chen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p962-965.

Statistical System Identification of Structures Using ARMA Models, Joel P. Conte and Satyendra Kumar, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p142-145.

Stochastic Response of Offshore Structures Excited by Drag Forces, Arvid Naess and Solomon C. S. Yim, EM May 96, p442-448.

Strategies for Achieving Excellence in Construction Safety Performance, Edward J. Jaselskis, Stuart D. Anderson and Jeffrey S. Russell, CO Mar. 96, p61-70.

Study on Fuzzy ANN and its Application in Runoff Fore-cast, Dunchun Wang and Jiqun Zhang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p456.

Business Degrees Three Times That of Engineering Degrees, ME July/Aug. 96, p5.

A Method for Extrapolation of Extreme Value Data, Arvid Naess, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p273-276.

Spatial Statistics for Rainfall Forecasts Assessment, Lynn E. Johnson and Billy Olson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2897-2902.

Comparison of Some Simulation Algorithms on Basis of Distribution, Marc P. Mignolet and Maruvada V. Harish, EM Feb. 96, p172-176.

Average and Peak Traffic Volumes: Neural Nets, Regression, Factor Approaches, Pawan Lingras and Mario Adamo, CP Oct. 96, p300-306.

Estimation of Annual Storm Runoff Coefficients by Continuous Simulation, Ashok Pandit and Ganesh Gopalakrish-nan, IR July/Aug. 96, p211-220. Evaluation of Logit and Probit Models in Mode-Choice Sit-uation, Ahmed Hamdy Ghareib, TE July/Aug. 96, p282-

290.
Non-Statistical Uncertainties in Liquefaction Risk Assessment, Khalid M. El Zahaby and M. S. Rahman, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1068-1082.
Response of an Oscillator with One-Sided Barrier under Non-White Random Excitation, G. Q. Cai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p112-115.
Statistical Model for Sand Compaction Under Cyclic Short

Mechanics, T. K. Lin and T. C. Su, 1990, p.112-113.
Statistical Model for Sand Compaction Under Cyclic Shear
Strain, R. Ghanem and M. El-Mestkawy, (Engineering
Mechanics, Y. K. Lin and T. C. Su, 1996), p722.
Statistics of Fractional Occupation Time for Nonlinear Stochastic Response, Armen Der Kiureghian and ChunChing Li, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p116-119.

Statistical sampling
Effect of Sampling Variability on Hindcast and Measured
Wave Heights, George Z. Forristall, John C. Heideman, Ian M. Leggett, Bram Roskam and Luc Vanderschuren, WW Sept./Oct. 96, p216-225.

Statistical Sample Size for Construction of Soil Liners, Craig H. Benson, Huaming Zhai and Salwa M. Rashad, GT Oct. 94, p1704-1724.

Statistics

68,000 New Jobs Projected for CEs over Next 10 Years, NE May 96, p5.

Addressing Uncertainty in Rock Properties through Geostatistical Simulation, Sean A. McKenna, Marc V. Cro-mer, Christopher A. Rautman and William P. Zelinski,

mer, Christopher A. Rautman and William P. Zelinski, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p297-311. Analyzing Spatial Variability of In Situ Soil Properties, Don J. DeGroot, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1006-5210, 238

1996), p.210-238. CDM-Based Approach to Stochastic Damage Growth, Baidurya Bhattacharya and Bruce Ellingwood, (*Probabi-listic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p772-775. Central Pacific Hurricanes-What Do We Know? Thomas A

Schroeder, (Natural Disaster Reduction, George Housner, ed. and Riley M. Chung, ed., 1997), p291-292.

Estimation of Driven Pile Resistance at an Overconsolidated Clay Site Using Geostatistical Methods, Gil L. Yoon and Michael W. O'Neill, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p950-953.

Estimation of Turning Movement Proportions from Partial Sets of Traffic Counts at Intersections, Gary A. Davis and Chang-Jen Lan, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p628-632

First Interactive Drought Atlas Released, CE Oct. 96, p17,19

60 February 19 ed., 1996), p254-268.

A Geostatistically-Based Method to Assess Potential Hazardous Waste Sites Using Hard and Soft Data, Morris M. Dirnberger and Richard W. Stephenson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p826-847.

Looking for Evidence of Climatic Change in Streamflow Time Series, K. H. Hamed and A. R. Rao, (North Ameri can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1459-1464.

Method for Uncoupling Load Factor Determination, Duane E. Castaneda, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

Itability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p222-225.
Neptune-An Integrated Approach to Determining NW European Coastal Extremes, Jerzy Graff and Witold Cieślikiewicz, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1035-1046.
On Quantifying Inherent Soil Variability, Kok Kwang
Phoen and First H. Wilshaw, (Hoestraints in the Graff

Phoon and Fred H. Kulhawy, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p326-340.

Roth, ed., 1996), p326-340.
Probabilistic Mechanics & Structural Reliability, Dan M.
Frangopol, ed. and Mircea D. Grigoriu, ed., 1996, 0-7844-0184-5, 1025pp.
The Reliability of Soil Classification Derived from Cone Penetration Test, Zhongjie Zhang and Mehmet T.
Tumay, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P.
Nelson, ed. and Mary J. S. Roth, ed., 1996), p383-408 408

SFE-Based Structural Reliability Analysis, Jun Zhang and Bruce Ellingwood, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-

goriu, ed., 1996), p170-173. Statistical Aspects of Damages Due to the Great Hanshin Earthquake, Hitoshi Seya and Michio Sugimoto, (Proba bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p186-189.

Statistical Seismic Responses of Structures using Response Spectrum Matching Technique, Ruichong Zhang and Masanobu Shinozuka, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p527-530.

Analytical Solutions of Seepage Into Ditches From Ponded Fields, Gautam Barua and K. N. Tiwari, IR Nov/Dec. 95, p396-404.

Buckle Propagation: Steady-State Finite-Element Analysis, André C. Nogueira and John L. Tassoulas, EM Sept. 94, p1931-1944.

Collapse of Saturated Soil Due to Reduction in Confinement, Scott A. Anderson and Michael F. Riemer, GT Feb. 95, p216-220.

Design Criteria for Pseudoductile Fiber-Reinforced Composites, Christopher K. Y. Leung, EM Jan. 96, p10-18.

How Input Active Biomass Affects Sludge Age and Proc-ess Stability, Bruce E. Rittmann, EE Jan. 96, p4-8. Hydraulic Residence Time of CSTRs under Unsteady

Condition, Jian Peng, EE Nov./Dec. 94, p1446-1458.

Condition, Jian Peng, EE Nov /Dec. 94, p1446-1458. Steady-State Thermal Bending of Thick Rectangular Plates, Isamu A. Okumura, EM June 96, p512-529. Strain Localization and Undrained Steady State of Sand, Richard J. Finno, Wendell W. Harris, Michael A. Moo-ney and Gioacchino Viggiani, GT June 96, p462-473. Unsaturated Zone Flow Modeling for GWTT-95, Clifford K. Ho, Susan J. Altman, Sean A. McKenna and Bill W. Arnold (High Level Redisocribe Watter Management)

Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p184-186.

Steady state models

Editor's Note, Thomas L. Theis, EE Feb. 96, p91. Use of Fluorspar in Water Fluoridation, Ching-Gang Peng. Jian Qi and Alan J. Rubin, EE Feb. 96, p132-140.

Steam distribution

Heat of Hydration of Pure Cement Compounds with Steam, Wei-Ming Lin, T. D. Lin, Chao-Lung Hwang and Yaw-

Wei-Ming Lin, T. D. Lin, Chao-Lung Hwang and Taw-Nan Peng, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p585-591.
Lunar Concrete Made with the Dry-Mix/Steam-Injection Method, T. D. Lin, Liang Tseng and Sam Chou, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p592-599.

Steam stripping

Editor's Note, Thomas L. Theis, EE Sept. 96, p778.

Niche for Steam Stripping in Treating Dilute SOC-Contaminated Waters, Bruce I. Dvorak, Desmond F. Lawler and Gerald E. Speitel, Jr., EE Sept. 96, p871-874.

Steel

Steet Algebraic Methods For Creep Analysis of Continuous Composite Beams, Luigino Dezi, Graziano Leoni and Angelo Marcello Tarantino, ST Apr. 96, p423-430.
Alluring Approach, James D. Lockwood, P.E. and John R. Hillman, P.E., CE Nov. 96, p68-71.

Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

Comparative Analysis of Bridge Superstructure Deteriora-tion, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136.

Composite Action of Foamed and Lightweight Aggregate Concrete, Yasser M. Hunaiti, MT Aug. 96, p111-113. Concrete Penetration by Eroding Projectiles: Experiments and Analysis, Vladimir M. Gold, George C. Vradis and James C. Pearson, EM Feb. 96, p145-152.

Corrosion and Hydrogen Permeation Inhibition by Thin Layer Za-Ni Alloy Electrodeposition, D. H. Coleman, B. N. Popov and R. E. White, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1281-1287.

Corrosion Effects of Cement Stabilized Backfill on Galvanized Steel Reinforcement, S. N. Popova, B. N. Popov, R. E. White, M. F. Petrou and D. Morris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p988-

Cyclic Tests of Concrete-Filled Steel Box Columns, Hanbin Ge and Tsutomu Usami, ST Oct. 96, p1169-1177.

Damage Evaluation in Steel Box Columns by Cyclic Load-ing Tests, Satish Kumar and Tsutomu Usami, ST June 96, p626-634.

Damage Evaluation in Steel Box Columns by Pseudody-namic Tests, Tsutomu Usami and Satish Kumar, ST June 96, p635-642

po, po3-042.
 pegradation of Reinforced Concrete Structures Under Aggressive Conditions, Michael P. Enright, Dan M. Frangopol and George Hearn, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p978-987.
 Development of Column Curve for Steel Angles, Seshu Madhava Rao Adluri and Murty K. S. Madugula, ST Mar 20 2 318 2328.

Mar. 96, p318-325.

Effective Length Factor for Columns in Unbraced Frames, Lian Duan and Wai-Fah Chen, ST Jan. 89, p149-165.

Fabrication and Testing of High Performance Steel I-Girders Research in Progress, William Wright, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1571-1578.

Fatigue Failures of Hexa'lliptical Steel Davit Arms Induced by Acolian Vibrations at Resonant Conditions, Markus Ostendorp, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p874-877.
Fatigue-Load Models for Girder Bridges, Jeffrey A. Laman

and Andrzej S. Nowak, ST July 96, p726-733

Finite Element Analysis of Longitudinally Stiffened Cylinders in Bending, Q. Chen, A. E. Elwi and G. L. Kulak, EM Nov. 96, p1060-1068.

Flexural Buckling of Steel Angles: Experimental Investiga-tion, Seshu Madhava Rao Adluri and Murty K. S. Ma-dugula, ST Mar. 96, p309-317.

Flexure for Polymer Concrete Using PET Waste, K. S. Re-beiz and D. W. Fowler, P.E., (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1037-1044.

Girder Moments in Continuous Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE Feb. 96, p37-45. Ground Improvement Salvation, Peter J. Nicholson, CE

May 96, p6.
Impacts of Cathodic Protection on Waste Package Performance, Joel E. Atkins, Joon H. Lee and Robert W. Andrews. (High Level Radioactive Waste Management, Technical Program Committee, 1996), p459-461

Inhibiting Action of Calcium Nitrite on Carbon Steel Rebars, M. Ramasubramanian, B. N. Popov and R. E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1007-1016.

Local Damage Assessment of Metal Barriers under Turbine Missile Impacts, Amde M. Amde, Amir Mirmiran and Thomas A. Walter, ST Jan. 96, p99-108.

Mathematical Modeling of Electrochemical Steel Corrosion in Concrete, G. Balabanić, N. Bićanić and A. Dureković, EM Dec. 96, p1113-1122.

Mean Stress Effects in Fatigue of Welded Steel Joints, Shahram Sarkani and David P. Kihl, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p50-53.

Mechanical Properties of Reinforcing and Prestressing Steels after Heating, I. Cabrita Neves, João Paulo C. Ro-drigues and António de Pádua Loureiro, MT Nov. 96,

Microbiological Influenced Corrosion (MIC) of Carbon Steel Utilized in the Construction of Nuclear Waste Canisters, Dave Bergman, Pati Castro, Beth Pitonzo, Penny Amy and Denny Jones, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Nonlinear Behavior of Composite Columns Under Varying Load Histories, A. Dall' Asta, EM Aug. 96, p743-752. Nonstructural Evaluation of Competing Bridge Materials, Robert L. Smith and Robert J. Bush, MT May 96, p88-

Notes on Prestressed Structures, Morris Schupack, CE Nov.

On Estimating the Effect of Passivating Inhibitors on the Time for Corrosion Initiation of Steel in Concrete, A. A. Sagüés, S. C. Kranc and R. G. Powers, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1522-1530.

On the Use of Fiber Reinforced Composites for Infrastruc-

h the Ose of Freeh Reinforced Composites for Infrastruc-ture Renewal— A Systems Approach, Vistasp M. Kar-bhari, Frieder Seible and Gilbert A. Hegemier, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1091-1100.

Optimal Design of Steel Transmission Poles, Fatma Y. Kocer and Jasbir S. Arora, ST Nov. 96, p1347-1356.

Optimization of a 550-/690-MPa High-Performance Bridge Steel, A. B. Magee, J. H. Gross and R. D. Stout, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1561-1570.

Parameter Study of an Internal Timber Tension Connection,

Parameter Study of an Internal Timber Tension Connection, Stephen F. Duff, R. Gary Black, Stephen A. Mahin and Marcial Blondet, ST Apr. 96, p446-452.

Permanent Deformation and Fatigue Characteristics of SMA Mixtures, Louay N. Mohammad and Harold R. Paul, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p622-630.

Physical Tests and Analyses of Composite Steel-Concrete Beam-Columns, S. Ali Mirza, Ville Hyttinen and Esko

Hyttinen, ST Nov. 96, p1317-1326. Radical Rebar Forges Ahead, Eric Rasmussen, ET June/ July 96, p1,8.

Rehab by Helicopter, Hans H. Torabi, Harold B. Tennat, A John Burnell and Thomas C. Benson, Jr., CE Jan. 96,

Representation of Concrete-Filled Steel Tube Cross-Section Strength, Jerome F. Hajjar and Brett C. Gourley, ST Nov. 96, p1327-1336.

Resonance Induced Steel Cross-Arm Fatigue Failures, Markus Ostendorp, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p983-986.

Savannah River Recycles Metals, Saves Money, CE Oct.

Scismic Analysis and Retrofit Design of the Anheuser-Busch Bevo Building in St. Louis, Missouri, Nathan C. Gould and Christopher I. Deneff, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p381-388.

Softening-Induced Dynamic Localization Instability: Seismic Damage in Frames, Zdeněk P. Bažant and Milan Jirásek, EM Dec. 96, p1149-1158.

Static Behavior of Noncomposite Concrete Bridge Decks under Concentrated Loads, Michael F. Petrou, Philip C. Perdikaris and Mingzhu Duan, BE Nov. 96, p143-154.

Storm-Water Treatment Goes Underground, Brian Roberts, CE July 96, p56-57.

Studies on Galvanized Carbon Steel in Ca(OH)₂ Solutions, Bala S. Haran, Branko N. Popov and Ralph E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p997-1006.

Translucent Structural Beacon, Drew A. Norman, CE Feb. 96, p50-52.

Turnback Project Moves Ahead, David A. Sutter, James P. Connolly and Ching Wu, CE Jan. 96, p36-39.

Ultimate Strength of Steel Outstands in Compression, Han-bin Ge and Tsutomu Usami, ST May 96, p573-578.

Water Vapor Effects on the Corrosion of Steel, John C. Estill and Gregory E. Gdowski, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p457-458.

Wind-Induced Fatigue Loading and Damage to Hip and Gable Roof Claddings, Y. L. Xu, ST Dec. 95, p1475-

Fatigue Crack Repair of Steel Beams with Tapered Cover Plate Details, Ahmed F. Hassan and Mark D. Bowman,

ST Nov. 96, p1337-1346.

High Performance Concrete Applications in Bridge Struc-tures in Virginia, Celik Ozyildirim, Jose Gomez and M. Elnahal, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p153-163.

Rehabilitation of Steel Beams Using Composite Materials, William Edberg, Dennis Mertz and John Gillespie, Jr., (Materials for the New Millennium, Ken P. Chong, ed.,

1996), p502-508.

Column Design in Fire Exposed Steel Frames, Ricardo Ramos Cabeza, Ali Saffar, Robert W. Fitzgerald and Hossein Davoodi, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p906-909.

Fire Reliability at Earthquake Occasions, Mamoru Kohno, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p198-201.

Fire Resistance of Circular Steel Columns Filled with Fiber-Reinforced Concrete, V. K. R. Kodur and T. T.

Lie, ST July 96, p776-782.

Fire Resistance of Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie and V. K. R. Kodur, ST Jan. 96, p30-36.

Structural Fire Resistance - Past, Present and Future, T. T. Lie and V. K. R. Kodur, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p345-351.

Steel construction

Connection of a Steel Cap Girder to a Concrete Pier, Joseph M. Ales, Jr. and Joseph A. Yura, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p475-482

A Decision Support Tool for the Steel Building Industry, Gregory P. Pasley and W. M. Kim Roddis, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p725-731.

nowsky, ed., 1920, practice.
Finite Element Computer Models for Analysis of Cold-Formed Steel Members, K. S. Sivakumaran and Nabil Abdel-Rahman, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p690-696.

Status of Electronic Data Interchange for Steel Structures, D. W. McConnell and J. A. Bohinsky, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p389-396.

Utilizing Information Technologies to Better Educate Engineers of Tomorrow, Abbas Aminmansour, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p965-971.

Orthotropic Steel Decks Are Viable Bridge Option, CE Nov. 96, p19-20.

Biaxial Low-Cycle Fatigue Behavior of Steel Fiber-Reinforced Concrete, Li Fang and Christian Meyer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p436-445.

Design and Construction of a Bonded Fiber Concrete Overlay of CRCP, Hadi H. Shirazi, Masood Rasoulian and Bill King, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1647-1658.

A Fracture Mechanics-Based Design Method for SFRC Tunnel Linings, Pruettha Nanakorn and Hideyuki Horii, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p819-828.

Influence of Steel Fibers on Design Stress-Strain Curve for High-Strength Concrete, L. Taerwe and A. Van Gysel,

EM Aug. 96, p695-704.

Influence of the Yield Strength of Steel Fibres on the Toughness of Fibre Reinforced High Strength Concrete, Lucie Vandewalle, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p496-505.

Some Phenomenological Aspects of High Performance Concretes, and their Consequences for Numerical Analysis, Ravindra Gettu, Ignacio Carol and Pere C. Prat, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

'Super-Element' to Represent the Behavior of Architectural Stud Partition Walls, Vicki L. Vance, H. Allison Smith and Luciana R. Barroso, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1106-1109.

Analytical Modeling of Composite Reinforced Concrete-Steel Systems, Joseph M. Bracci, Sashi K. Kunnath and Ali O. Atahan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p379-380.

Application of Structural Optimization to Practical Tall Steel Building Design, Chun-Man Chan and Joohyuk Park, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p123-134.

Column Design in Fire Exposed Steel Frames, Ricardo Ramos Cabeza, Ali Saffar, Robert W. Fitzgerald and Hossein Davoodi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p906-909.

Dynamic Analysis of Tall Building Using Reduced-Order Continuum Model, Michael J. Chajes, Liyang Zhang and James T. Kirby, ST Nov. 96, p1284-1291.

Editor's Note, David Darwin, ST Nov. 96, p1257.

Experimental Results for Seismic Resistant Steel Moment Frame Connections, Charles W. Roeder and Douglas A.

Foutch, ST June 96, p581-588.

Ground Motion Estimation and Nonlinear Seismic Analysis, David B. McCallen and Lawrence J. Hutchings, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p416-427.

ousner, "Father of Earthquake Engineering," Leads ASCE's Disaster Mitigation Conference, NE Sept. 96,

Implications of Measured Near-Field Ground Motion on Structural Response, Wilfred D. Iwan, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1213-1220.

Inelastic Behavior of Steel Frames with Added Viscoelastic Dampers, K. C. Chang, S. J. Chen and M. L. Lai, ST Oct. 96, p1178-1186.

The Kobe Earthquake: Performance of Engineered Buildings, David R. Bonneville, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p917-925.

Lateral Strength of Brick Cladded Frames, Stephen P. Schneider and Stephen J. Favieri, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p112-122.

Modeling for Moment-Rotation Characteristics for End-Plate Connections, Y. J. Shi, S. L. Chan and Y. L. Wong, ST Nov. 96, p1300-1306.

More Research Needed for Steel Moment Frames, Garry D. Myers, CE July 96, p29,31.

Nonlinear Analysis and Design Issues for PR Frames, Ar-vind V. Goverdhan, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p55-66.

Practical Advanced Analysis for Braced Steel Frame Design, Seung-Eock Kim and Wai-Fah Chen, ST Nov. 96,

p1266-1274. Practical Advanced Analysis for Steel Frame Design, Seung-Eock Kim and Wai-Fah Chen, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p19-30.

Practical Advanced Analysis for Unbraced Steel Frame De-sign, Seung-Eock Kim and Wai-Fah Chen, ST Nov. 96, p1259-1263.

A Program for the Reduction of Seismic Hazards Posed by Welded Steel Moment Frame Structures, Stephen A. Mahin, Ronald O. Hamburger and James O. Malley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p157-158.

Public Policy and Building Safety, Marjorie Greene and Chris D. Poland, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p155-

156

Quartic Formulation for Elastic Beam-Columns Subject to Thermal Effects, B. A. Izzuddin, EM Sept. 96, p861-871.

Refined Second-Order Analysis of Frames with Members under Lateral and Axial Loads, Z. H. Zhou and S. L. Chan, ST May 96, p548-554.

Rock 'N' Roll in Cleveland, Rita Robison, CE Feb. 96,

Seismic Design Doubles Lateral Resistance (Available only in Structures special issue), James O. Malley, CE Sept. 96, p14A-16A.

Seismic Solutions for Steel Frame Buildings, Virginia Fairweather, CE Mar. 96, p40-43.

Shear Resistance of Gypsum-Sheathed Light-Gauge Steel Stud Walls, Reynaud Serrette and Kehinde Ogunfunmi, ST Apr. 96, p383-389.

Spotlight on Steel Moment Frames, W. F. Chen and E. Yamaguchi, CE Mar. 96, p44-46.

Steel Moment Frames with Welded Connections, Helmut Krawinkler, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1115-1122.

Tall Buildings Triumph, CE June 96, p21-22.

Uniqueness in Analysis of Semirigid Frames, S. T. Ariarat-nam and L. Xu, ST Jan. 96, p110-111.

Updates on Steel Moment Frames, David Bonowitz, CE Aug. 96, p30.

Weld Performs Under Earthquake Conditions, CE Aug. 96. p16.

Welded Steel Moment Frame Joint Testing Programs, Thomas A. Sabol and Michael D. Engelhardt, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1228-1235.

Steel making

ASTM A913/A913M: The Perfect Steel for Seismic Design, J. C. Gérardy, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p558-565.

Development of High Performance Steels for Commercial and Military Applications, Eric M. Focht and Thomas W. Montemarano, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p91-99.

Steel pipe piles

Comparison of Static and Dynamic Test Results for Driven Steel Pipe Piles in Highly Saline Permafrost, Kelly S. Merrill and Richard E. Riker, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p238-253.

Crossing Fault Lines with Large Diameter Water Pipelines in the Houston Area, John M. Olden, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p155-162.

Cyclic Analysis of Concrete-Filled Tubes and Design of Composite Frames, Jerome F. Hajjar, Brett C. Gourley and Katherine A. Stillwell, (Analysis and Computation,

Franklin Y. Cheng, ed., 1996), p43-54.

Design and Construction of Large Diameter High Pressure Gas Transmission River Crossing for San Diego Gas and Electric Using Directional Boring, Jey K. Jeyapalan and Robert Dalby, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p379-386.

Design of a 610-mm Water Pipeline Across Providence Harbor, David E. Hairston, Pasquale DeLise and William Skerpan, Jr., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p387-394.

Investigation of Pipeline Buckle Failure in a Horizontally Directionally Drilled Installation, Hugh W. O'Donnell, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p163-172.

Optimal Pipeline Sizing Technique, Helmi M. Hathoot, Ahmed I. Al-Amoud and Fawzi S. Mohammad, TE May/

June 96, p254-257.

Protective Film Helps Landfills Make Energy, CE Nov. 96,

PVC Lined Steel Pipe Bridges for Gravity Sewers, Andrew E. Romer, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p441-448.

Rehab by Helicopter, Hans H. Torabi, Harold B. Tennat, A. John Burnell and Thomas C. Benson, Jr., CE Jan. 96,

Retrofit of Black Butte Hydroelectric Project Penstock, George A. Inverso, John A. Schwartz, Stephen M. Hart, Erik Bodholt and Billy Ferguson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p469-476.

Smithfield Interceptor Force Main River Crossings, Fredrick M. Muncy, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p173-179.

Steel Water Pipe for Exposed and Buried Crossings, George Ruchti and Robert Card, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p105-111.

Structural Aspects of Pipeline Crossings, R. C. Prevost, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p449-456.

Water Pipeline Crossings of the Pitt and Fraser Rivers, Tim R. Jervis and Jim V. Young, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p202-213.

Another Person Cures Galloping, Ray G. Barney, CE June 96, p27-28.

Boston's Third Harbor Tunnel (Available only in Focus on Geo/Environmental Special Issue), Axel J. Pollak and V. Peter Lalas, CE Mar. 96, p3A-6A.

Copper Precipitation Hardened, High Strength, Weldable Steel, Semyon Vaynman, Morris E. Fine, Gautam Ghosh and Shrikant P. Bhat, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1551-1560.

Geometric and Material Nonlinearities in Steel Plates, P. Roca, E. Mirambell and J. Costa, ST Dec. 96, p1427-

Strengthening Steel Composite Beams with CFRP Laminates, Rajan Sen, Larry Liby, Gray Mullins and Ken Spillett, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1601-1607.

Stress-Strain Behavior of High-Performance 70W Bridge Steel, E. M. Focht and S. J. Manganello, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1540-

Ultimate Compressive Strength of Orthogonally Stiffened Steel Plates, Ichizou Mikami and Kazuhisa Niwa, ST June 96, p674-682.

Steel structures

3D Simulation of End-Plate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94,

Application of Structural Optimization to Practical Tall Steel Building Design, Chun-Man Chan and Joohyuk Park, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p123-134.

Assessing Corrosion on Steel Structures Using Corrosion Coulometer, Richard D. Granata, James C. Wilson and John W. Fisher, IS Sept. 96, p139-144.

ASTM A913/A913M: The Perfect Steel for Seismic Design, J. C. Gérardy, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p558-565.

Bare Bones Buildings, William Baker, Hal Iyengar, Robert Sinn and Ronald Johnson, CE Nov. 96, p42-45.

Coating of Steel Structures in Cold Regions, Yuji Nakamu-ra, Taiichi Inaba and Akihiro Tamada, (Cold Regions Engineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p173-184.

Collapse Analysis of Steel Frame Structures Under Earth-quake Loading, Scott C. Martin and Roberto Villaverde, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p370-373.

Compendium of Design Office Problems-Volume II, Committee on Design of Steel Building Structures of the Committee on Metals, Structural Division, ST Feb. 96,

Decision Support Environment for Structural Steel, Gregory P. Pasley and W. M. Kim Roddis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p371-382.

Ductile Steel Beam-to-Column Connections for Seismic Resistance, Sheng-Jin Chen, C. H. Yeh and J. M. Chu, ST Nov. 96, p1292-1299.

Editor's Note, David Darwin, ST Apr. 96, p349.

Editor's Note, David Darwin, ST Aug. 96, p843-844.

Editor's Note, David Darwin, ST Nov. 96, p1257.

Effect of Sidewalks and Railings on Wheel Load Distribu-tion in Steel Girder Bridges, K. M. Tarhini, M. Mabsout and M. Kobrosly, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p881-886.

Failure of a Stiffened Seat Bracket Connection, David L. Weaver, Jason S. Yates and Randall W. Poston, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

Forum, Stan Rolfe and John Barsom, ST Nov. 96, p1258.

Full-Scale Fatigue Test of the Williamsburg Bridge Ortho-tropic Deck, Mark R. Kaczinski, Frank E. Stokes, Peter Lugger and John W. Fisher, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p329-336.

Geometric and Material Nonlinearities in Steel Plates, P. Roca, E. Mirambell and J. Costa, ST Dec. 96, p1427-

1436

Grout Repair of Dent-Damaged Steel Marine Tubulars, James Ricles and Troy Gillum, WW May/June 96,

In-Plane Inelastic Buckling and Strengths of Steel Arches, Yong-Lin Pi and N. S. Trahair, ST July 96, p734-747.

Incorporating Damage Control in Structural Design, Dan M. Frangopol, Marek Klisinski and Kai-Yung Lin, Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p598-605.

Inelastic Local and Lateral Buckling in Design Codes, Alan R. Kemp, ST Apr. 96, p374-382.

Measurement of Applied Stress in Steel Bridges, E. A. Mandracchia, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1118-1121. More Research Needed for Steel Moment Frames, Garry D.

Myers, CE July 96, p29,31.

Nailed Tubular Connections under Axial Loading, Jeffrey A. Packer, ST Aug. 96, p867-872.

New Guidelines for Fatigue Design of HSS Connections, A. M. van Wingerde, J. A. Packer and J. Wardenier, ST Feb. 96, p125-132.

Orthotropic Steel Deck for the Williamsburg Bridge Reconstruction, R. B. Gajer, J. Patel and D. Khazem, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

A Refined Numerical Approach for the Limit-Load Analysis of 3-D Steel Rod Structures, Norbert Gebbeken, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Reliability Framework for Managing Risk of Aging Struc-tures, Bruce Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p590-597.

Resistance Factors for High Strength Blind Bolts, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p784-787.

Revised Rule for Concept of Strong-Column Weak-Girder Design, Han-Seon Lee, ST Apr. 96, p359-364

Seismic Behavior of Older Steel Structures, Charles W. Roeder, Brett Knechtel, Eric Thomas, Anne Vaneaton, Roberto T. Leon and F. Robert Preece, ST Apr. 96,

Shaking Table Tests of Rigid, Semirigid, and Flexible Steel Frames, Marwan N. Nader and Abolhassan Astaneh-Asl, ST June 96, p589-596.

Status of Electronic Data Interchange for Steel Structures, D. W. McConnell and J. A. Bohinsky, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p389-396. Steel Connections Need More Research, A. Plumier, CE

Sept. 96, p35.

Steel Tops Off Chicago Orchestra Hall, CE Dec. 96, p17. Structural Design Guide to the AISC (LRFD) Specification for Buildings, 2nd Ed. by Edward S. Hoffman, Albert S. Gouwens, David P. Gustafson, and Paul F. Rice, AE Sept. 96, p121.

Thermal Response of Bare Steel Roof Assemblies to Fire Environments in Aerosol Storage Facilities, S. P. Hunt, J. L. Scheffey and R. G. Gewain, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p365-372.

Towards a Probabilistic Model for Marine Corrosion of Steel, Robert E. Melchers, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p660-663

Very Low Cycle Failure Process of Steel Angle Members, Yeon-Soo Park, Satoshi Iwai, Hiroyuki Kameda and Taijiro Nonaka, ST Feb. 96, p133-141

Willie B in the Doghouse, CE June 96, p14,16.

Wind-Induced Failures of Steel Roof Decks, Víctor Figueroa Díaz, Ali Saffar, Samuel I. Díaz Santiago and Bernardo Deschapelles, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p894-897.

Finite Element Analysis of Longitudinally Stiffened Cylinders in Bending, Q. Chen, A. E. Elwi and G. L. Kulak, EM Nov. 96, p1060-1068.

Probability Based Design Requirements for Unstiffened Panels in Ship Structures, Bilal M. Ayyub, Gregory J. White, Alaa E. Mansour and Paul H. Wirsching, (*Proba-*bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p102-105.

hear Stiffness D_Q, for C-Core Sandwich Panels, T. C. Fung, K. H. Tan and T. S. Lok, ST Aug. 96, p958-966.

Stiffening

Analysis of Deep Excavation with Column Type of Ground Improvement in Soft Clay, Chang-Yu Ou, Tzong-Shiann Wu and Hsii-Sheng Hsieh, GT Sept. 96, p709-716.

Free Vibration of Stiffened Composite Laminates, Meiwen Guo and Issam E. Harik, (Engineering Mechanics, Y. K.

Lin and T. C. Su, 1996), p1163-1166.

Probability-Based Design Requirements for Longitudinally Stiffened Panels in Ship Structures, G. J. White, B. M. Ayyub, A. E. Mansour and P. H. Wirsching, (Probabilis-tic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p110-113.

Ultimate Compressive Strength of Orthogonally Stiffened Steel Plates, Ichizou Mikami and Kazuhisa Niwa, ST

June 96, p674-682.

Analysis of the Nonlinear Hysteretic Response of an RC Building, Sarwidi and Apostolos S. Papageorgiou, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1099-1106.

Capacity and Stiffness of Bridge Abutments During Earth-quakes, Rakesh K. Goel, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p239-240.

Computer Modelling for a Discrete Particle System, Kofi

B. Acheampong, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p731-734. Constitutive and Structural Behavior of Siliceous High-Strength Concretes After a Thermal Cycle at High Temperature, Roberto Felicetti and Pietro G. Gambarova, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p583-592.

Damage Mechanics Model for Evaluation of Bridge Deterioration, Roberto Lopez-Anido, Hota V. S. GangaRao and Raimondo Luciano, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p458-461.

Design of Microtunneling and Jacking Pipe, Alan Atalah, (Pipeline Crossings 1996, Lawrence F. Catalano, ed.,

1996), p395-402.

1990, 1993—1990, Political State Load Testing Los Angeles Coliseum, Paul R. Schade and Barry J. Meyer. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p574–581.

Dynamic Sub-Structure Method in Time Domain Using Analytical Representation of Dynamic Stiffness of Soil, Nagayuki Yoshida, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p184-187.

Effective Length Factor for Columns in Unbraced Frames, Lian Duan and Wai-Fah Chen, ST Jan. 89, p149-165. Effective Stiffness Model for Reinforced Concrete Slabs,

Maria Anna Polak, ST Sept. 96, p1025-1030.

Effects of Pier and Foundation Stiffness for Bridges Sub-jected to Nonstationary Seismic Input, Gongkang Fu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p708-711.

prob-11.
Evaluation of a 47-Story Building Subjected to Hurricane Alicia. Lawrence G. Griffis. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, p960-965.

Hybrid Inverse Mode Problems for FEM-Shear Models, Izuru Takewaki and Tsuneyoshi Nakamura, EM Aug. 95, p873-880.

Identification of Structural Damage, S. Hassiotis and K. M. Grigoriadis, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1107-1114.

Influence of Support Stiffness for Cantilever Beams Subjected to Modulated Filtered White Noise, Gongkang Fu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Inverse Damping Perturbation for Stiffness Design of Shear Buildings, Tsuneyoshi Nakamura and Masaaki Tsuji, ST June 96, p617-625.

June 90, po17-025.

Lateral Strength of Brick Cladded Frames, Stephen P. Schneider and Stephen J. Favieri, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p112-122.

LATWAK: Impact Test to Obtain Pile Lateral Static Stiffness, Jean-Louis Briaud and Marc Ballouz, GT June

96, p437-444.

Micromechanical Model for Asphalt Materials, C. A. Plaxico, W. Uddin and R. M. Hackett, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p761-770.

Micromechanian, Achi F. Chong, ed., 1990), p701-770. Micromechanics of Damage in Random Composites, M. Ostoja-Starzewski, A. Al-Ostaz, I. Jasiuk and K. Alzebdeh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed., and Mircea D. Grigoriu, ed., 1996), p362-363.

A New Element Flexibility Based FEM for Stochastic Structures, Yongjian Ren and Isaac Elishakoff, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p918-921.

Nonlinear Pounding of Bridges in Earthquakes, Xian Ma and Chris P. Pantelides, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1180-1187.

A Probabilistic Formulation of Damage Detection, Loukas Probabilistic Formulation of Daniage Detection, Contral Papadopoulos and Ephrahim Garcia, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p350-353.

Probabilistic Modeling of Metal Plate Connections, Robert N. Emerson and Kenneth J. Fridley, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p330-333.

A Procedure for Evaluating Reflective Cracking, Shakir R. Shatnawi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1429-1438.

Rate and Creep Effect on the Stiffness of Soils, Diego C. F. Lo Presti, Michele Jamiolkowski, Oronzo Pallara and Antonio Cavallaro, (Measuring and Modeling Time De-pendent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p166-180.

Rehabilitation of Masonry Buildings per the ATC-33 Guidelines, Daniel P. Abrams, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), pl 131-1138.

Reliability Design of Laminated Plate for Buckling, Nozo-mu Kogiso, Shaowen Shao and Yoshisada Murotsu, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p627-634.

Rigidities of One-Dimensional Laminates of Composite Materials, Shuguang Li, EM Apr. 96, p371-374.

Seismic Response Assessment of Active-Controlled Multi-Story Buildings with Soil-Foundation Influence, F. Y. Cheng, S. Suthiwong and P. Tian, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1155-1163.

Semicontinuous Mathematical Model for Bending of Multi-layered Wire Strands, Claude Jolicoeur and Alain Cardou, EM July 96, p643-650.

Shear Stiffness D_Q, for C-Core Sandwich Panels, T. C. Fung, K. H. Tan and T. S. Lok, ST Aug. 96, p958-966. Stiffness Formulation for Nonprismatic Beam Elements, Arturo Tena-Colunga, ST Dec. 96, p1484-1489.

Stiffness Reductions of Flexible Pavements due to Cumulative Fatigue Damage, A. C. Collop and D. Cebon, TE Mar/Apr. 96, p131-139.

Structural Behavior of End-Plate Bolted Connections to Stiffened Columns, Mohammed R. Bahaari and Archibald N. Sherbourne, ST Aug. 96, p926-935.

Ultimate Strength of Underwater Pipe-Soil Systems, Mehdi S. Zarghamee, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p230-236.

Variational Principles Developed for and Applied to Analysis of Stochastic Beams, I. Elishakoff, Y. J. Ren and M. Shinozuka, EM June 96, p559-565.

"Banding" Timber Crossties Using Composite Fabrics for Improving Their Performance, S. S. Sonti and H. V. S. GangaRao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), pl.449-1457.

Analysis of Effect of Dead Loads on Natural Frequencies of Beams Using Finite-Element Techniques, Shi-Jun Zhou and Xi Zhu, ST May 96, p512-516.

Buckling Modes at Coincident Singularities of Stiffness Matrix, Igor Raskin and John Roorda, EM Aug. 96, p804-806.

Dynamic Stiffness Analysis of Lattice Structure, Eldad Levy and Moshe Eisenberger, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p526-533.

EBEF Method for Distortional Analysis of Steel Box Gird-er Bridges, Yao T. Hsu, C. C. Fu and David R. Schelling, ST Mar. 95, p557-566.

Exact Stiffnesses for Tapered Members, Husain Jubran Al-Gahtani, ST Oct. 96, p1234-1239.

Random Elastic Response Characteristics of Bar Structures by Monte Carlo Simulation, Michael Koutsoukis and Ed-mund S. Melerski, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p812-815.

Static Stiffness of Unbounded Soil by Finite-Element Method, John P. Wolf and Chongmin Song, GT Apr. 96,

p267-273.

Stilling basins

Dispersive-Flow Energy Dissipator, Shou Long Yang, HY Dec. 94, p1401-1408.

Incipient Jump Conditions for Flows over a Vertical Sill, Iwao Ohtsu, Youichi Yasuda and Hideki Hashiba, HY Aug. 96, p465-469.

Model Study of a Roller Compacted Concrete Stepped Spillway, Charles E. Rice and Kern C. Kadavy, HY June 96, p292-297.

Pipe Plunge Pool Energy Dissipator, Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323.

Study of Hydraulic Jump Lengths on Inclined Channel Beds, Tiao J. Chang, Cheng F. Li and Hong Y. Sun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4064-4071.

Application of Discrete Event Methodologies to Urban Multimodal Transportation Systems, Angela Di Febbraro and Simona Sacone, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p154-158.

Application of the Infinite Element Method to Solution of the Fokker-Planck Equation, W. Yi, S. F. Wojtkiewicz, L. A. Bergman and B. F. Spencer, Jr., (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p685-688.

chanics, Y. K. Lin and T. C. Su, 1970, post-osos.
A Comparison of Geological and Stochastic Approaches to Characterization of Heterogeneity and their Effects on Simulations of Pump-and-Treat Systems, Peter E. Riemersma, Jean M. Bahr and Mary P. Anderson, Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1003-1018.

Comparison of Stochastic Programming and Robust Opti-mization Models for Groundwater Plume Containment, David W. Watkins, Jr. and Daene C. McKinney, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p612-617.

Construction of Performance Contours on the Storage-Yield Plane of a Within-Year Reservoir System, K Sudhir and K. Srinivasan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2951-2957.

Estimation of the Potential Benefits from an ATT System Using a Multiple User Class Stochastic User Equilibrium Assignment Model, M. J. Maher and P. C. Hughes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p700-704.

Generation of Ground Motion Time Histories as Non-Stationary Vector Processes: Response Spectrum Com-patible Seismograms, George Deodatis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p616-619.

Health Risk Sensitivity to Variable and Uncertain Parame ters, Reed M. Maxwell and Susan D. Pelmulder, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1285-1290.

Identification of a General Linear Model for Reservoir Inflows Forecasting, J. Ribeiro, J. Rousselle, J. D. Salas and H. Ta Trung, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2354-2359.

Mitigation of Flood Hazard on Alluvial Fans, Julianne J. Miller and Richard H. French, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2324-2329.

Modeling and Solving Water Resources Engineering De-sign Problems as Stochastic Programs to Account for an Uncertain Future, D. S. Yakowitz, W. Elshorbagy and K. Lansey, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p106-117.

Modelling of Randomly Meandering Fatigue Crack Growth, Kazimierz Sobczyk and Jerzy Trebicki, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Monotonic Loading of Brittle Materials: A Stochastic Dam-age Model, David J. Kirkner, B. F. Spencer, Jr. and Satish Kandarpa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p354-357

Optimization of Groundwater Remediation with DES, Jac-Heung Yoon and Christine A. Shoemaker, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p622-627.

Probabilistic Fracture Mechanics of Nuclear Pressure Vessels, M. A. Khaleel and F. A. Simonen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p54-57

Random Response to Periodic Excitation with Correlated Disturbances, Zhikun Hou, Yunshen Zhou, Mikhail F. Dimentherg and Mohammad Noori, EM Nov. 96, p1101-1108.

Re-Assessment of Concrete Bridges, P. Thoft-Christensen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p613-620.

Recent Developments in Stochastic Mechanics Relevant to Earthquake Engineering, M. Shinozuka, (*Probabilistic* Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p1-1.

Reliability of Remediation Designs in Presence of Model-ing Error, Changqing Zhen and James G. Uber, WR July/Aug. 96, p253-261.

Reliability Tester for Water-Distribution Networks, D. Khomsi, G. A. Walters, A. R. D. Thorley and D. Ouazar, CP Jan. 96, p10-19.

Reliability-Based STructural Optimization-Software Development, M. Gasser and G. I. Schuëller, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p531-534.

SAMS: Software for Simulating Streamflow Series, J. D. Salas, N. Saada, D. Frevert and W. Lane, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3387-3392.

SpatioTemporal Stochastic Open-Dhannel Flow, Timothy K. Gates and Muhammad A. Al-Zahrani, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p346-351.

Statistical Sample Size for Construction of Soil Liners, Craig H. Benson, Huaming Zhai and Salwa M. Rashad,

GT Oct. 94, p1704-1724.

Statistics of Free Surface Flow through Stochastic Earth Dam, Gordon A. Fenton and D. V. Griffiths, GT June 96, p427-436.

Stochastic Damage Model for Brittle Materials Subjected to Monotonic Loading, S. Kandarpa, D. J. Kirkner and B. F. Spencer, Jr., EM Aug. 96, p788-795.

Stochastic Finite Element Analysis for Multiphase Flow in Random Porous Media, S. Dham and R. Ghanem, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environent: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p661-669.

A Stochastic Model for Elastic-Plastic Fracture of Cracked Pipes, Sharif Rahman, (Probabilistic Mechanics Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p764-767.

Stochastic Modeling of Imperfections in Beams, B. W. Yeigh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p676-679.

Stochastic Modelling of River Geometry, J. Dalsgaard Sørensen and K. Schaarup-Jensen, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p898-901.

Stochastic Models for Chloride-Initiated Corrosion in Reinforced Concrete, Svend Engelund and John D. Sørensen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Stochastic Parallel-Brittle Networks for Modeling Materials, D. A. Gasparini, P. Bonacuse, L. Powers and A. Romeo, EM Feb. 96, p130-137.

Streamflow Forecasting for Han River Basin, Korea, Haitham M. Awwad, Juan B. Valdés and Pedro J. Restrepo, WR Sept./Oct. 94, p651-673.

Uncertainty Measures in Reliability Assessment of Ship Structures, Bilal M. Ayyub and Kwan-Ling Lai, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p621-626

Water Distribution Network Reliability: Stochastic Simula-tion, Shu-li Yang, Nien-Sheng Hsu, Peter W. F. Louie and William W-G. Yeh, IS June 96, p65-72.

Application of Chaotic Dynamics to Stochastic Resonance, Marek Franaszek and Emil Simiu, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p86-89.

Approximated Correlations Response of Nonlinear Systems Under Normal White Noise Inputs, M. Di Paola and G. Falsone, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p926-929.

An Approximation Method for Estimating Extremes of Narrow-Band Non-Gaussian Random Vibration, Arvid Naess and Tor Espen Hagen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p90-93.

Approximations for Elasto-Plastic Oscillations with Gaussian White Noise Excitation, Roger Pettersson, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p506-509.

Asymptotic Approximation of Reliability Integrals for Un-certain Systems, C. Papadimitriou, J. L. Beck and L. S. Katafygiotis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p574-577.

Bed-Load Transport. II: Stochastic Characteristics,
Chunhong Hu and Yujia Hui, HY May 96, p255-261.

Calibration and Simulation of Non-Gaussian Translation Processes, M. Grigoriu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p804-807.

A CDM-Based Approach to Stochastic Damage Growth, Baidurya Bhattacharya and Bruce Ellingwood, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p772-775.

Choice of Input Fields in Stochastic Finite Elements, Ove Ditlevsen and Niels Jacob Tarp-Johansen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol,

ed. and Mircea D. Grigoriu, ed., 1996), p820-837.

Comparison of Some Simulation Algorithms on Basis of Distribution, Marc P. Mignolet and Maruvada V. Harish,

EM Feb. 96, p172-176.

Computational Enclosures of Lyapunov Exponents, A. Ams and W. Wedig, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p820-823.

Control of Mega-Sub Building Against Wind Loads, Winston Chai and Maria Q. Feng, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p486-489.

Damage Estimation Using Substructural Identification in Time Domain, Chung-Bang Yun and Hyeong-Jin Lee, (Probabilistic Mechanics & Structural Reliability, Dan Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p846-849

Decay of Residual Stress in Stochastic Fatigue, Loren D. Lutes and Shahram Sarkani, ST Jan. 96, p92-98.

Design Synthesis: Transcending to Stochastic Realm Part 3: Optimization, Jean M. Parks, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p130-133.

DRACULA - Microscopic, Day-to-Day Dynamic Modelling of Traffic Assignment and Simulation, Ronghui Liu, Direk Van Viet and David Walling, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p444–448.

Dynamics of Multi-DOF Stochastic Nonlinear Systems, Timothy M. Whalen, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p82-85.

Equivalence between Kriging and CPDF Methods for Con-ditional Simulation, Masanobu Shinozuka and Ruichong Zhang, EM June 96, p530-538.

First Passage Time of Nonlinear Ship Rolling in Nonsta-tionary Random Seas, C. W. S. To and Z. Chen, (*Proba-*bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p250-253.

Hybrid Stochastic Finite Elements and Generalized Monte Carlo Simulation, R. Ghanem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and

Mircea D. Grigoriu, ed., 1996), p182-185.

Shear Frames Subject to Earthquakes, H. Uğur Köylüöğü, Şeren R. K. Nielsen and Ahmet Ş. Çakmak, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), e766-721. p768-771.

Identification of Conditional Stochastic Gaussian Field, Masaru Hoshiya and Ikumasa Yoshida, EM Feb. 96,

p101-108.

Improvement of Road Network Reliability under Different Route Choice Principles, Shinji Nakagawa, Hiroshi Wakabayashi and Yasunori lida, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p594-598.

Mathematical Techniques & Software for Stochastic Design Optimization, Jean M. Parks and Chun Li, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p118-121.

Melnikov Processes and Noise-Induced Exits from a Well, Emil Simiu and Michael R. Frey, EM Mar. 96, p263-270.

A Melnikov Theoretic Bound on Probability of Escape from a Potential Well, Michael R. Frey, (Probabilistic Mechanics & Structural Reliability, Dan M. Franspool, ed. and Mircea D. Grigoriu, ed., 1996), p510-513.

A Method for Extrapolation of Extreme Value Data, Arvid Naess, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p273-276.

Method of Non-Linear Stochastic Dynamics - A Compara-tive Discussion, G. I. Schuëller and H. J. Pradlwarter, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996). p966-969

Moment Equations for Linear Systems Subjected to Polynomials of Filtered Poisson Processes, M. Grigoriu and F. Waisman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p262-265.

Moment Lyapunov Exponent and Stability Index for Linear Stochastic Systems with Small Diffusion, Nikolai Moshchuk and Rafail Khasminskii, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p538-541.

Multiscale Shore Variability at Two Coasts, Pierluigi Aminti, Zbigniew Pruszak and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p617-628.

A New Element Flexibility Based FEM for Stochastic Structures, Yongjian Ren and Isaac Elishakoff, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p918-921.

A New Method for Efficient Reliability-Based Design Optimization, Y.-T. Wu and W. Wang, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p274-277.

Nonlinear Rocking Motions. I: Chaos under Noisy Periodic Excitations, H. Lin and S. C. S. Yim, EM Aug. 96, p719-727.

Nonlinear Rocking Motions. II: Overturning under Random Excitations, H. Lin and S. C. S. Yim, EM Aug. 96,

Observation and Conditional Stochastic FEM, M. Hoshiya and I. Yoshida, (*Probabilistic Mechanics & Structural* Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p178-181.

On Moment Stability of Markov Dynamical Systems, Lambros Katafygiotis and Yevgeny Tsarkov, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p546-549.

On the Almost-Surely Lyapunov Exponent of a Duffing-van der Pol Delay Oscillator, M. S. Fofana, (*Probabilis*tic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p550-553.

On the Development of a Selective Algorithm in Advanced Monte Carlo Simulation, Helmut J. Pradlwarter, Napat Harnpornchai and Gerhart I. Schuëller, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p14-17.

On Translation Processes and Upcrossing Probabilities, Mi-chael Macke and Christian Bucher, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p608-611.

An Overview of Techniques for Analyzing a System Mod-elled as a Duffing Oscillator Driven by Deterministic and Stochastic Excitations, M. A. Tognarelli and A. Kareem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

A Probabilistic Formulation of Damage Detection, Loukas Papadopoulos and Ephrahim Garcia, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p350-353.

Probabilistic Simulation of Geologic Waste Disposal Facilities Using the Repository Integration Program (RIP), Ian Miller and Rick Kossik, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p944-964.

Probability Density Function of Linear Systems Subjected to a Random Stream of Poisson Pulses, G. Muscolino and G. Ricciardi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p388-391.

Random Fields and Airplane Loads, Ludomir M. Laudan-ski, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p684-687.

Random Vibration of Mechanical and Structural Systems by T. T. Soong and Mircea Grigoriu, Dan M. Frangopol, EM Feb. 96, p184.

Emireo. 90, printions of an Isochronous SDOF Bilinear Sys-tem with Secondary Structure, Mikhail Dimentberg and Philip Muller, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p958-961.

tic Finite Elements, C. E. Brenner and C. Bucher, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p596-599. Reliability Analysis of Nonlinear Structures Using Stochas-

Reliability Procedures as a Design Tool for Structures and Mechanical Components, G. I. Schuëller, M. Gasser, J. Hartl and G. Lener, (Probabilistic Mechanics & Struc tural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p800-803.
Reservoir Targets for Urban Water Supply Systems, B. J. C. Perera and Gary P. Codner, WR July/Aug. 96, p270-

Resonances in Nonlinear Stochastic Systems, Agnessa Kovaleva, (Probabilistic Mechanics & Structural Reliabiliry, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p736-739.

Response of an Oscillator with One-Sided Barrier under Non-White Random Excitation, G. Q. Cai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p112-115.
Response of Pile Embedded in Stochastic Ground Media,

Makoto Suzuki and Tsuyoshi Takada, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p612-615.

and Mircea D. Grigoriu, ed., 1996), pol.2-013.
Response Spectral Densities of Stochastically Excited Nonlinear Systems, G. Q. Cai and Y. K. Lin, (Probabilistic
Mechanics & Structural Reliability, Dan M. Frangopol,
ed. and Mircea D. Grigoriu, ed., 1996), p732-735.
Response Statistics of Moored Floating Structures Subjected to General Nonlinear Random Wave Forces, Shunji

ed to General Nominear Kanuom ware Forkes, simple Kato and Takashi Okasaki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p158-161. Role of Moment Exponent in Stochastic Bifurcation, S. T.

Ariaratnam, (Probabilistic Mechanics & Structural Reli-ability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p554-557.

The Role of Petri Nets Modelling in the Safety Assessment Process for Guided Transport Systems, G. Cosulich, P. Firpo, S. Savio and G. Sciutto, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p558-562.

SFE-Based Structural Reliability Analysis, Jun Zhang and Bruce Ellingwood, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p170-173.

Simulation of Ergodic Multivariate Stochastic Processes, George Deodatis, EM Aug. 96, p778-787. Simulation of Multi-Dimensional, Multi-Variate, Non-Gaussian, Homogeneous Stochastic Fields with Applica-

tions to Soil Liquefaction, Radu Popescu, George Deo-datis and Jean H. Prevost, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p808-811. Slowly-varying Components of Hydrodynamic Field at the Wall of Benghuyater of Gender North Pope Biog. Wilde

Wall of Breakwater of Gdańsk North Port, Piotr Wilde and Eugeniusz Sobierajski, (*Coastal Dynamics* '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p69-80.

Some Recent Advances in Stochastic Structural Dynamics, Y. K. Lin, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p396-421.

Spatiotemporal Stochastic Open-Channel Flow. I: Model and Its Parameter Data, Timothy K. Gates and Muhammad A. Al-Zahrani, HY Nov. 96, p641-651.

Spatiotemporal Stochastic Open-Channel Flow. II: Simula-Spatiotemporal Stochastic Open-Channel Flow. II: Simulation Experiments, Timothy K. Gates and Muhammad A. Al-Zahrani, HY Nov. 96, p652-661.
Stability of Bounded-Noise Excited System, Q. C. Li, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p128-131.

Statistical Dynamics of Pipe-Line with One-Side Contact Supports Under Turbulence of Cross-Wind Loads, Ana-toly I. Menyailov and Christian G. Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Franappol, ed. and Mircea D. Grigoriu, ed., 1996), p986-989.

Statistics of Fractional Occupation Time for Nonlinear Sto-chastic Response, Armen Der Kiureghian and Chun-Ching Li, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), pl 16-119.

Stochastic Analysis for Movement of Fine Particles in Porous Media, Rao S. Govindaraju, HE Oct. 96, p161-168.

Stochastic Determination of Wave Heights for Flood Con-Ochashe Determination of wave rieignis for Flood Con-trol Channels, Scott E. Stonestreet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4058-4063.

Stochastic Dynamics of Non-Linear Systems Excited by Parametric Delta Correlated Processes, Mario Di Paola and Antonina Pirrotta, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p930-933.

Stochastic Finite Element Method in Geomechanics, Gabriel Auvinet, Amine Bouayed, Sandra Orlandi and Arturo López, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1239-

Stochastic Finite-Element Analysis of Soil Layers with Random Interface, R. Ghanem and W. Brzakala, EM

Apr. 96, p361-369.

Stochastic Integral/Calculus for Non-Gaussian Delta-Correlated Processes, Sau-Lon James Hu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p246-249

Stochastic Linearization of a Boolean Hysteresis Model, S. Dobson, M. Noori, Z. Hou and M. Dimentberg, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Stochastic Prediction and Control of Uncertain Nonlinear Dynamical Systems, R. Ghanem and M. Grigoriu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Stochastic Response of a Hysteretic System Under Nonstationary Excitations, Ismail I. Orabi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p392-395.

Stochastic Response of Systems with Linear Hysteretic Damping, B. F. Spencer, Jr. and L. A. Bergman, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996). p677-680.

Stochastic Snow Load Process Model from Daily Climatological Data, Kenneth J. Fridley, (Probabilistic Mechan-ics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p210-213.

Stochastics of Sediment Transport, Shore Evolution and Their Input, Rafall Ostrowski, Zbigniew Pruszak, Grzegorz Rożyński and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p963-974.

Strongly Nonlinear Stochastic Response of a System with Random Initial Imperfections, Jiří Náprstek, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p740-743.

System Dynamics and Modified Cumulant Neglect Closure Schemes, H. Uğur Köylüoğlu and Søren R. K. Nielsen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p380-383

Time-Delay Linear Systems with Gaussian White Noise Input, M. Grigoriu, T. T. Soong and A. Reinhorn, (Prob-abilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p422-425.

Uncertainties in Characterising Soil Properties, Suzanne Lacasse and Farrokh Nadim, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p49-75.

Variability Response Functions for Plane Elasticity Prob-lems with Multiple Stochastic Material/Geometric Properties, Lori Graham and George Deodatis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p174-177.

Variability Response Functions for Random Eigenvalue Problems, George Deodatis and Lori Graham, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p681-684.

Variational Principles Developed for and Applied to Analysis of Stochastic Beams, I. Elishakoff, Y. J. Ren and M. Shinozuka, EM June 96, p559-565.

Stockpiling

Safety Analysis Requirements for Robotic Systems in DOE Nuclear Facilities, W. H. McCulloch, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p235-240.

Behavior of Crumb Rubber Modified Hot Mix Asphalt, Anil Misra, H. P. Niu and Yi-Herng Lee, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p144-

ynamic Response of Hagia Sophia, A. S. Cakmak, C. L. Mullen and M. N. Natsis, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p200-210.

Laboratory Study of Large Stone Asphalt Paving Mixtures, Joe W. Button, W. W. Crockford and E. G. Fernando, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p603-611.

ASR Case Study - City of Salem, Oregon, Joe Glicker and Paul Eckley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2679-2684.

Maximized Detention Volume Determined by Runoff Cap-ture Ratio, James C. Y. Guo and Ben Urbonas, WR Jan./ Feb. 96, p33-39.

Modified Janssen Theory for Flexible Circular Bins, Y. T. Feng and Y. L. Hua, ST Apr. 96, p454-456.

Volumetric Leaky-Aquifer Theory and Type Straight Lines, Zekai Şen, HY May 96, p272-280.

Storage coefficient

Using Cavity Well to Determine Aquifer Thickness and Constants, Mohammad Saleem, IR May/June 94, p504-

Storage facilities

Containing Spills and Fire, William E. Wiley, CE Mar. 96, p53-55.

Probability Based Estimation of Expected Annual Benefits, Eric D. Loucks, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p298-303.

Thermal Response of Bare Steel Roof Assemblies to Fire Environments in Aerosol Storage Pacilities, S. P. Hunt, J. L. Scheffey and R. G. Gewain, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p365-372.

Aquifer Transmissivity Computations Based on Data from Pump-and-Treat Facilities, Walter Z. Tang, Dean F. Ra-deloff and Vassilios A. Tsihrintzis, (North American Water and Environment Congress & Destructive Water. Chenchayya Bathala, ed., 1996), p1273-1278.

Design of Runoff Recycling Irrigation System for Rice Cultivation, R. C. Srivastava, IR Nov./Dec. 96, p331-335.

Laterally Excited Flexible Tanks with Nonuniform Density Liquid, Yu Tang, EM Oct. 96, p948-956.

Mixing in Distribution System Storage Tanks: Its Effect on Water Quality, Robert M. Clark, Farzaneh Abdesaken, Paul F. Boulos and Russell E. Mau, EE Sept. 96, p814-

Seismic Isolation of Industrial Tanks, Victor A. Zayas and Stanley S. Low, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1205-1212. Sensitivity Study of Waste Rollover Using Probabilistic Fi-nite Element Analysis, Arshad Alfoqaha, William Cofer and M. A. Khaleel, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p914-917

Storm drainage

Storm Drainage GIS, Modeling, and Master Planning for the City of Berkeley, H. Yee, J. Egeberg and D. Akagi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4239-4244.

Storm drains

Hollyhills Drain Relief for 1920's Drainage System, T. Scott Schales and Glen Drogin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4251-4256.

Storm runoff

Assessing Water Quality Impacts of Stormwater Runoff, G. Fred Lee and Anne Jones-Lee, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3103-3108.

Controlling the Impacts of Development on Storm Water Quality through Proper Site Planning and Design, Jill C. Bicknell and Lisa Horowitz McCann, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3097-3102.

County-Wide Drainage Study Using GIS, J. J. DeVries and T. V. Hromadka, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3623-3628.

Design and Implementation of On-Farm Surface Drainage Projects in the Humid Tropics of Mexico, John C. Tiedeman and Rodolfo Namuche Vargas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2480-2485.

Development of the San Joaquin County Hydrology Manual, T. V. Hromadka, J. J. DeVries, M. Callahan and J. Pulver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2078-2083.

Direct Sizing of Small Stormwater Pump Stations, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2072-2077.

Effective Subsurface Retention/Detention Systems, James E. Milligan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2276-2281.

Estimation of Annual Storm Runoff Coefficients by Contin-uous Simulation, Ashok Pandit and Ganesh Gopalakrish-nan, IR July/Aug. 96, p211-220.

Maximized Detention Volume Determined by Runoff Cap-ture Ratio, James C. Y. Guo and Ben Urbonas, WR Jan./ Feb. 96, p33-39.

Rational-Method Equation and HEC TD-15, T. V. Hromad-ka, II and R. J. Whitley, IR Jan/Feb. 96, p15-18. Storm-Water Treatment Goes Underground, Brian Roberts,

CE July 96, p56-57.

Water Quality Enhancement Using Subsurface Detention, Brian C. Roberts, (North American Water and Environ ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3338-3342.

Water Quality Mitigation for the San Joaquin Hills Trans-portation Corridor, Stanley D. Polasik, John H. Knutson and James H. Lenhart, (North American Water and Envient Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3109-3114.

Best Management Practices and Community Education, Richard Boon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2648-2653.

A GIS Sewer Database for a University Campus, D. J. Schuller, D. I. Pusey and A. R. Rao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1765-1770.

A Stormwater Management Plan, Diana Harvey, (North American Water and Environment Congress & Destru tive Water, Chenchayya Bathala, ed., 1996), p2060-2065. Swirl Technology: Enhancement of Design, Evaluation, and Application, Richard Field and Thomas P. O'Connor, EE Aug. 96, p741-748.

Storm surges

The Caribbean Disaster Mitigation Project: Introducing Disaster Mitigation in Highly Vulnerable Small Islands, Keith B. Ford and Jan C. Vermeiren, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p29-30.

Coastal Flood Hazard Analysis Using Digital Photogrammetry, Margery Overton, Cheryl Petrina and John Fisher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p187-188.

Empirical Simulation Technique Based Storm Surge Frequency Analyses, Norman W. Scheffner, Leon E. Borgman and David J. Mark, WW Mar./Apr. 96, p93-101.

GIS Application for Miami Transportation System Hurri-cane Emergency Preparedness, Kangming Xu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p107-108.

Hurricane-Induced Storm Surge Analysis for the City of New Orleans, LA, David J. Mark and Norman W. Scheffner, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p343-344.

Managing the Impacts of Storm Surges on Victoria Island, Lagos, Nigeria, Peter Chigozie Nwilo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3496.

Chenchayya Bathata, ed., 1999), p3496.

A Multi-Objective Analysis for Cyclone Shelter Planning in Bangladesh, Jahir U. Chowdhury, Rezaur Rahman, Fazlul Karim and David W. Watkins, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p213-214.

Practical Modeling of Hurricane Surface Wind Fields, Edward F. Thompson and Vincent J. Cardone, WW July/Aug. 96, p195-205.

A Rapid Barrier Island Hazard Mappine Technique et a.

Aug. 96, p195-205.
A Rapid Barrier Island Hazard Mapping Technique as a Basis for Property Damage Risk Assessment and Mitigation, David M. Bush, William J. Neal and Orrin H. Pilkey, (Watural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p185-186.
Simulation of Dune and Nourished Berm Erosion During Storm Surges, Jürgen Newe and Hans-H. Dette, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zaidge ad 1996). 9850-861

Zeidler, ed., 1996), p850-861.

Storm Surge Frequency Computations for Long Island, NY: A Comparison of Methodologies, Norman W. Scheffner and H. Lee Butler, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p80-

Storm-Surge Flooding in Chittagong City and Associated Risk, M. Mozzammel Hoque, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p3701.
Two Dimensional Modeling of the Mobile River Delta and the Mobile Bay System, Conor C. Shea, Charles D. Powell and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3662-3667.

'A Comprehensive Strategy for Mitigation', R. T. Severn, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p13-14.

Acquisition and Use of Coastal-Storm Related Data for Zoning Purposes, Andrew W. Garcia, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p393-394.

Beach and Nearshore Profile Evolution at Different Temp ral Scales: The Case of Duck, North Carolina, U.S.A. Michele Capobianco, Rina Basana and Riccardo Pesaresi, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p629-638.

California Probable Maximum Precipitation, John L. Vogel, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p55-56.

Changes of Sand Grain Distribution in the Surf Zone, Kazumasa Katoh and Shin-ichi Yanagishima, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p639-650. Corps' Shoreline Work Assessed, CE Oct. 96, p11.

The Danger to Satellites from Meteor Storms—A Case Study of the Leonids, P. Brown, J. Jones and M. Beech, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p13-19.

Education: Pathway to Mitigation, James W. Russell, (Nat-ural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p35-36.

Effects of Hurricane Luis on Structures in Antigua, Tony Gibbs, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p295-296.

Effects of Non-Structural Elements on the Acceleration Re-sponse of Tall Multi-Story Buildings Under Wind Exciapone of rail multi-story buildings Under Wind Exci-tation, Cindy X. Qiu, (*Probabilistic Mechanics & Struc-*tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p974-977.

Flash Floods and Their Control in the Indian Arid Zone, K. D. Sharma, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2539.

Flooding in Southeastern United States From Tropical Storm Alberto, July 1994, T. C. Stamey, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p245-246.

The Great Lakes Storm Damage Reporting System, David Wallin and P. S. Chawla, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p183-184.

Investigation of Some Heavy Flood Hazards in Small Al-pine Catchments in Austria, A. Watzinger, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p715.

A Look at Technological Risk and Uncertainties in Flood Disaster Reduction, Shou-shan Fan and Nicholas C. Matalas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p253-255.

Mitigation of Windstorm Disasters, Kishor C. Mehta and Ernst W. Kiesling, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p205-

Mobile Bay Scour Analysis for Mobile and Baldwin Counties, Alabama, Bryan Hancock, Charles D. Powell and Conor Shea, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p719-728.

Natural Hazard Zonation, Walter W. Hays, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p361-362.

Neptune—An Integrated Approach to Determining NW Eu-ropean Coastal Extremes, Jerzy Graff and Witold Cieślikiewicz, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1035-1046.

Ponding Study of January 1993 Storm Event within Airport Industrial Park, Oceanside, California, George Hsu and Yen-Hsu Chen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2282-2287.

Regionalization of Annual Precipitation Maxima in Montana, Charles Parrett, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p57-58.

Reproducibility of Beach Profiles and Sand Ripples Generated by Huge Waves, Masahiro Ito, Hiroshi Murakami and Takeshi Ito, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p698-708.

Storm-Driven Trajectories of Rain near Balconies on Tall Building, Fillmer W. Ruegg, AE Sept. 96, p100-106.

Tornadoes and Severe Storms in Russia, Nikolay A. Popov, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p133-134.

A Windstorm Damage Model for the Identification of Insurance and Reinsurance Risk, Brian E. Lee and David R. Whiting, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p197-198.

Best Management Practices and Community Education, Richard Boon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2648-2653. Coastal Ocean Model Performance in Eastern Australia, William L. Peirson and Ian P. King, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p632-643.

Comparison of General vs. Multi Sector NPDES Storm Water Permits, William H. Espey, John Whitescarver and Michael Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2810-2814.

Culvert Composite Sampler: A Cost-Effective Storm-Water Monitoring Device, Stephen J. Dowling and Brian W. Mar, WR July/Aug. 96, p280-286.

Diffusion Wave Modeling of Distributed Catchment Dy-namics, Stefano Orlandini and Renzo Rosso, HE July 96,

p103-113

Feasibility of Modeling Phosphorus Dynamics in Stormwater Wetlands, Karina T. Lopez Ivich, William James, Iso-bel W. Heathcote and John Fitzgibbon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p524-529.

Sediment Removal from Stormwater Runoff, Ashok Pandit and Ganesh Gopalakrishnan, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2439-2444.

Storm Water General Industrial Permit Non-Filers Identification and Outreach, L. Donald Duke and Y. Jae Chung, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2619-2624.

Storm-Water Utility User Fee Credits, Andrew J. Reese,

WR Jan./Feb. 96, p49-56.

Survey of Storm-Water Utilities Available, Robert B. Benson, CE July 96, p29.

son, C. July 30, p.52.
Water Quality Modeling of the Rouge River Watershed,
Philip N. Brink, Gary Mercer and Richard Wagner,
(North American Water and Environment Congress &
Destructive Water, Chenchayya Bathala, ed., 1996), p2415-2420.

A California Handbook for Developing an Industrial/ Commercial Storm Water Inspection Program, Jill C. Bicknell, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2625-2630.

Coping with EPA's Storm Water Permit for Hazardous Waste Facilities, Industrial Landfills, Wastewater Treatment Plants, and Recyclers, James P. Amick, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2631-2635.

A Decision Making Approach for Stormwater Management Measures—A Case Example in the City of Waukesha, Wisconsin, James A. Bachhuber, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3981-3986.

Direct Sizing of Small Stormwater Pump Stations, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2072-2077.

Effective Subsurface Retention/Detention Systems, James E. Milligan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2276-2281.

An Experimental Study on the Use of Constructed Wet-lands for Stormwater Management, Shih-long Liao, Shaw L. Yu and Stephen J. Long, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2462-2467.

Financing the Future of Storm Water, Patrick S. Collins, CE Mar. 96, p64-66.

From Sediment to Solid, James R. Donnelly and William C.

Webster, CE May 96, p41-43.

GIS Applications in Modern Stormwater Management, Charles G. Boehm, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3633-3638.

in, ed., 1990, possission, integrating Drainage, Water Quality, Wetlands, and Habitat in a Planned Community Development, Michael R. Galuzzi and John M. Pflaum, UP Sept. 96, p101-108.

Los Angeles County Department of Public Works Storm Water Quality Assessments, Los Angeles, California, Novin Rashedi and David Liu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3993-3997. Los Angeles River as a Water Source for a Freshwater Res-

ervoir, Philip O. Lowe and Novin Rashedi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3987-3992. Maximized Detention Volume Determined by Runoff Cap-

ture Ratio, James C. Y. Guo and Ben Urbonas, WR Jan./ Feb. 96, p33-39.

Optimal Estimation of Storage-Release Alternatives for Storm-Water Detention Systems, Rafael Segarra-García and Mohammad El Basha-Rivera, WR Nov./Dec. 96, p428-436.

Rainfall-Runoff Modeling for Watershed Stormwater Management, Yuan Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2066-2071.

Results of a GIS/HEC-1 Interface Module, Paul A. DeBarry, (North American Water and Environment Congress Destructive Water, Chenchayya Bathala, ed., 1996),

p3194-3199.

p5194-3199.
Risk Analysis for Urban Stormwater Quality Management, James P. Heaney, Leonard Wright and Samsuhadi, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p219-248.
Roanoke Valley Flood Hazard Mittigation, Edward G. Beadenkopf, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed. 1996), p1076-1079.

ed., 1996), p1976-1977. The Sawmill Creek Watershed Restoration Project, Larry Lubbers, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2873-2878.

Searching for Optimal Combinations of Stormwater Detenand Environment Congress & Destructive Water, Chen-chaya Bathala, ed., 1996), p2264-2269.

Storm-Water Management Implementation through Modeling and GIS, Uzair M. Shamsi, WR Mar/Apr. 96, p114-127.

Storm-Water Treatment Goes Underground, Brian Roberts, CE July 96, p56-57.

Stormwater Management for San Joaquin Hills Transporta-tion Corridor, Orange County, California, Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2826-2830.

A Stormwater Management Plan, Diana Harvey, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2060-2065. Stormwater Management Plan Updated for Climate System

Changes, Yuan Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1846-1851.

Testing and Effectiveness of a New Urban BMP Stormcep-tor **, Vincent H. Berg and Graham J. Bryant, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1864-1869.

The Treatment Train Detention Concept, Charles G. Boehm, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2270-2275.

Washington State's Stormwater Management Program, Shari Scaftlein, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p4245-4250. Water Quality Enhancement Using Subsurface Detention, Brian C. Roberts, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3338-3342.

An Analysis of Strong-Discontinuities in Inelastic Solids with Applications to the Finite Element Simulation of Strain Localization Problems, F. Armero and K. Gariki-pati, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p136-139. Analytical and Measured Strains in Sunshine Skyway dge. II, Mohsen A. Shahawy and M. Arockiasamy, BE May 96, p87-97.

Anelastic Strain Recovery of Deep Cores with Presence of Pore Pressure, Y. Abousleiman and A. H-D. Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p935-938.

Bicycle-Wheel Spoke Patterns and Spoke Fatigue, Henri P. Gavin, EM Aug. 96, p736-742.

Characterization of Pultruded FRP Wide-Flange Beams, Julio F. Davalos, Pizhong Qiao and Hani A. Salim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p223-232.

A Computer Controlled Filament Winding Technique for Manufacturing Cement Based Cross-Ply Laminaies, B. Mobasher and A. Pivacek, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p1347-1356.

Critical State Model at Finite Strains, Ronaldo I. Borja and Claudio Tamagnini, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p148-151.

Detecting Damage in Highway Bridges from Vehicle Induced Girder Strains, Leon L-Y Lai, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1122-1125.

Dynamic Properties of Cohesive Soils Treated with Lime, K. Fahoum, M. S. Aggour and F. Amini, GT May 96,

Elastic Properties of Soils, Pierre-Yves Hicher, GT Aug. 96, p641-648.

Issues of Uncertainty Regarding Localized Strains in Gran-ular Soils, M. A. Mooney, R. J. Finno, G. Viggiani and W. W. Harris, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p312-325.

Mechanical Properties of Reinforcing and Prestressing Steels after Heating, I. Cabrita Neves, João Paulo C. Ro-drigues and António de Pádua Loureiro, MT Nov. 96,

Prediction of Concrete Cracking Under Coupled Shrinkage and Creep Conditions, Wei Yang, Kejin Wang and Surendra P. Shah, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p564-573.

Salt-Saturated Concrete Strength and Permeability, T. W. Pfeifle, F. D. Hansen and M. K. Knowles, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p173-

Small-Strain Response of Random Arrays of Spheres Using Discrete Element Method, Tang-Tat Ng and Emmanuel Petrakis, EM Mar. 96, p239-244.

Strain Level and Uncertainty of Liquefaction Related Index Tests, D. Roy, R. G. Campanella, P. M. Byrne and J. M. O. Hughes, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1149-1162.

Strain Localization and Undrained Steady State of Sand, Richard J. Finno, Wendell W. Harris, Michael A. Moo-ney and Gioacchino Viggiani, GT June 96, p462-473.

Structural Aspects of Pipeline Crossings, R. C. Prevost, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p449-456.

Strain distribution

Experimental Measurement of Strain Gradient Effects in Granular Materials, Matthew R. Kuhn, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p881-885.

Nonlinear Behavior of RC Cooling Towers and Its Effects on Strains, Stresses, Reinforcement and Cracks, Udo
Wittek and Anmin Ji, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p287-297.

Complex Crack Interaction in Composite Plate, Wieslaw K. Binienda, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p408-411.

Extension and Compression of Elastomeric Butt Joint Seals, Stephen A. Ketcham, Jan M. Niemiec and Grego-ry B. McKenna, EM July 96, p669-677.

Strain gages
Field Evaluation of GEOSYNTHETICALLY STABI-

Field Evaluation of GEOSYNTHETICALLY STABI-LIZED PAVEMENTS, Imad L. Al-Qadi, Thomas L. Brandon and Salman A. Bhutta, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p328-337. Investigation of Bridge Floor-Truss Behavior in Tied-Arch Span, Thomas E. Cousins, J. Michael Stallings and Brad-

ley P. Christopher, CF May 96, p79-86.

Measurement of Applied Stress in Steel Bridges, E. Mandracchia, (Engineering Mechanics, Y. K. Lin and T.

C. Su, 1996), p1118-1121.

Probabilistic Framework to Detect and to Identify Anomalies in Structures, Nabil Fares and Roula Maloof, (Prob abilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p910-913.

Strain hardening

perimental Measurement of Strain Gradient Effects in Granular Materials, Matthew R. Kuhn, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p881-885. Experimental Measu

Strength and Ductility of Rectangular Concrete Columns: A Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Mar. 96, p267-274.

Strain measurement

Analytical and Measured Strains in Sunshine Skyway Bridge. II, Mohsen A. Shahawy and M. Arockiasamy,

Bridge, II, Monsen A. Shanawy and M. Arockiasamy, BE May 96, p87-97.
Evaluation of Service Load Behavior of Small Bridges Using Strain Measurement, Ben T. Yen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p667-

Lateral Distribution Factor from Bridge Field Testing, Chung C. Fu, Maged Elhelbawey, M. A. Sahin and David R. Schelling, ST Sept. 96, p1106-1109.

Optical Fiber Sensors for Advanced Civil Structures, Marten J. de Vries, Stephen H. Poland, Jennifer L. Grace, Vivek Arya, Kent A. Murphy and Richard O. Claus, (En-gineering Mechanics, Y. K. Lin and T. C. Su, 1996),

rameter Estimation of Structures from Static Strain Measurements. I: Formulation, Masoud Sanayei and Mi-

chael J. Saletnik, ST May 96, p555-562. Parameter Estimation of Structures from Static Strain Measurements. II: Error Sensitivity Analysis, Masoud Sanayei and Michael J. Saletnik, ST May 96, p563-572.

Saving Scotland's Busiest Bridge, Rita Robison, CE Jan. 96, p48-51.

Simultaneous Measurement of Strain and Temperature Using Fiber Grating Sensors, Faramarz Farahi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Structural Sensing with Fiber Optic Systems, Raymond M. Measures, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p224-227.

Strain rate Compressibility of Clays: Fundamental and Practical As-pects, S. Leroueil, GT July 96, p534-543. Drained Creep Behavior of Marine Clays, Armand J. Silva and Horst G. Brandes, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p228-242.

Importance of Strain Rate and Temperature Effects in Geotechnical Engineering, Serge Leroueil and Maria Esther Soares Marques, (Measuring and Modeling Time De-pendent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p1-60.

Rate and Creep Effect on the Stiffness of Soils, Diego C. F. Lo Presti, Michele Jamiolkowski, Oronzo Pallara and Antonio Cavallaro, (Meassring and Modeling Time De-pendent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p166-180. Rate-dependent Deformation of Structured Natural Clays,

Kenichi Soga and James K. Mitchell, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p243-

257

Rate-Dependent Undrained Shear Behavior of Saturated Clay, Thomas C. Sheahan, Charles C. Ladd and John T. Germaine, GT Feb. 96, p99-108. Rate-Sensitive Micromechanical Damage Model for Brittle Solid, Dipankar Chandra and Theodor Krauthammer, EM May 96, p412-422.

Strain Rate and Preshear Effects in Cyclic Resistance of Soft Clay, G. Lefebvre and P. Pfendler, GT Jan. 96.

676

Strain Rate and Structuring Effects on the Compressibility of a Young Clay, Serge Leroueil, Didier Perret and Jacques Locat, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p137-150.

Strain Rate Effects on Stress-Strain Behaviour of Clay as train Rate Effects on Sucess-vatan Behaviour of Clay as Observed in Monotonic and Cyclic Triaxial Tests, Satoru Shibuya, Toshiyuki Mitachi, Akihiko Hosomi and Seong Chun Hwang, (Measuring and Modeling Time Depend-ent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p214-227.

Strain softening
Constitutive Relationships of Mortar-Aggregate Interfaces
in High Performance Concrete, Oral Büyüköztürk and Brian Hearing, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p452-461.

McCabe, ed., 1996), p452-461.
Embedded Crack Approach to Regularize Finite Element Solutions of Concrete Structures, E. Pramono, J. C. Mould, Jr. and H. S. Levine, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p554-558.
Finite Element Analysis of Discontinuities in Concrete, Hong D. Kang and Kaspar J. Willam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1054-1057.
Strength and Ductility of Rectangular Concrete Columns: A

Strength and Ductility of Rectangular Concrete Columns: A Plasticity Approach, A. I. Karabinis and P. D. Kiousis. ST Mar. 96, p267-274.

Strategic planning

Strategic planning Analysis of Changes in Airport Ground Access Mode Use, Geoffrey D. Gosling, (Meeting the Challenge: Rebuild-ing Inner City Airports, Prianka Seneviratne, ed., 1996),

ASCE Leaders Field Questions on "Institutes, Academies' to Emerge in Restructured Society, NE Apr. 96, p1,5. ASCE Planning Group Recommends Funding Shift in FY 97 Budget, NE July 96, p1,6.

ASCE President Talks about 'Extraordinary Happenings' in 1996; Ask Members' Help in Effecting Major Changes, NE Apr. 96, p2. ASCE's New Paradigm, Delon Hampton, P.E., CE July 96,

ASCE's Strategic Plan in Action: The Civil Engineering

Research Foundation, NE Oct. 96, p7. ASCE's Strategic Plan: Almost Everything You Need to Know about ASCE's Proposed 'Institutes' and 'Academ-

ies', NE Mar. 96, p3-4. ASCE's Two New Institutes Are Open for Business, NE

Nov. 96, p1,4.

COMPASS—New Paradigm for Project Cost Control Strategy and Planning, Makarand Hastak, Daniel W. Halpin and Jorge Vanegas, CO Sept. 96, p254-264. A Concept in Networking, Kevin A. Taylor, ME Nov/Dec.

96, p9-10.

Continuous Excellence: Building Effective Organizations,

Mel Hensey, 1995, 0-7844-0013-X, 105pp.

Economic Risk Analysis as a Research Directing Paradigm. Ken Young, Stuart Stein, David Pearson and Roy Trent, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2775-2780.

Ed Groff: A "Muddy Boots" President, Virginia Fairweath-er, CE Dec. 96, p66-68. Editorial, EE Jan. 96, p1-2.

Going Global: A CEO's Perspective, Vincent A. Rocco, ME Mar./Apr. 96, p21-24.

Grassroots Grants to Aid Sections, Branches Make an Impact at Local Level, NE Nov. 96, pl.

How Strategies Happen: A Decision-Making Framework, Karen Lee Hansen and C. B. Tatum, ME Jan./Feb. 96, p40-48.

Management Buys Back HDR From French Parent, CE Nov. 96, p27.

A New Strategic Management of Pumping Station in Sewer Systems, David Tsoi and Tsun-Hou Kuan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2486-2491.

Water, Chenchaya Bannan, ed., 1996, perspectives of Rebuilding Inner City Airports in the Emerging Post-Soviet Environment, V. L. Khazanet, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Senevirature, ed., 1996), p34-44.

San Diego Is Scene of Society's 1995 Convention, CE Jan. 96, p67-69.

Searching for a Successful Strategy? Mel Hensey, ME Sept./Oct. 96, p6-7.

Society's Board of Direction Approves FY 1997 Budget; ASCE Now Poised to Move Ahead on Strategic Plan, NE Sept. 96, p1,5.

Strategic Planning in Construction Companies, Abraham Warszawski, CO June 96, p133-140.

The Strategic/Master Plan at Boeing Field: A Means of Optimizing Airport Utilization at an Inner City Airport, Julie Rodwell, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p12-23.

Strategies for Remediation Managers, Gary Dunbar and Scot Foster, CE June 96, p53-55.

Study Released on New Planning Technique, ME Jan./Feb. 96, p7-8.

Suggested Name Change for ASCE, Carl H. Carpenter, P.E., CE Oct. 96, p31.

The 'Structure' of Restructuring, NE Feb. 96, p4,5.

Stratification

Comparison of Near-Field Dilutions Derived from In Situ Measurements and Simulated Dilutions at the Sand Island Sewage Outfall Plume, HI, A. A. Petrenko, B. H. Jones, T. D. Dickey and P. J. W. Roberts, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3886-3891.

Maler, A.Berchayya Bannan, ed., 1990, p.3800-3991. Lake Number: A Long-Term Lake Water Quality Predictor, Midhat Hondzo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1990, p.3176-3187.

Modeling of Stratified Urban Trip Distribution, V. Thamizh Arasan, M. Wermuth and B. S. Srinivas, TE Sept./Oct. 96, p342-349.

Modeling the Periodic Stratification and Gravitational Circulation in San Francisco Bay, California, Ralph T. Cheng and Vincenzo Casulli, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p240-254.

Selective Withdrawal through Intake Fitted with a Collar, James J. Sharp, T. M. Parchure and Z. R. Guo, HY Dec.

96, p683-686

Sensitivity Study of Waste Rollover Using Probabilistic Finite Element Analysis, Arshad Alfoqaha, William Cofer and M. A. Khaleel, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p914-917.

Three-Dimensional Modeling of Wind-Driven Upwelling of Anoxic Bottom Water 'A-oshio' in Tokyo Bay, Keiji Nakatsuji, Jong Sung Yoon and Koji Muraoka, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and

Ralph T. Cheng, 1996), p618-631.

Stratified flow

Numerical Model for Sea Outfall Hydraulics, Zhen-Ren Guo and James J. Sharp, HY Feb. 96, p82-89.

Turbulence Measurements in Saline Gravity Current Fronts, Jeffrey D. Parsons and Marcelo H. García, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p914-917.

Stratigraphy

The Application of Time Domain Electromagnetics to a Regional Groundwater Investigation in Western Washington, Rory Retzlaff and Robert H. Anderson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p27-41.

Borehole UE-25 ONC #1 Drilling at Yucca Mountain, Nevada, Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

p166-167.

Computational Tools for Subsurface Conceptualization, Earl V. Edris and Eileen Poeter, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2577-2582.

стилуя ванива, еd., 1990), p2577-2582.
Significance of Geologic Features on the Contaminant Migration from Landfill Sites, Rao Nivargikar and Thomas Voss, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p988-993.

Stream channels

Retrofitting an Urban Watershed for Improved Water Quality, David Ennis, Michael Clar, Candace Szabad and Chien Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4202-4207.

Scour Study for Bridge Design on Temecula Creek, Howard H. Chang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1162-1166.

Simulation of Channel Changes Induced by a Reservoir, Howard H. Chang. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2109-2113.

Stream Instability in Loess Base Channels, Jon A. Zellars, Rollin H. Hotchkiss and Thomas Franti, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3369-3374.

Tributary No. 9 Restoration, Maryland State Highway Administration, James W. Gracie, Robert Shreeve and Linda Kelbaugh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3539-3544.

Utilizing Geomorphic Analogs for Design of Natural Stream Channels, Scott Gillilan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2799-2804.

Stream erosion

Field Measurements of Streambed Scour at Bridge Piers in Ohio, K. Scott Jackson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3033-3042.

Scour Processes Observed in Field Data, Mark N. Landers and David S. Mueller, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3052-3061.

Scour-hole Dimensions at Selected Bridge Piers in New York, Gerard K. Butch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3043-3051.

Stream function

Characteristics in Evaluating Stream Functions in Ground-Water Flow, G. B. Matanga, HE Jan. 96, p49-53.

Stream improvement

Design Guidance - Instream and Bank Restoration Structures, J. Craig Fischenich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3079-3084.

Quail Creek: A Case Study of Restoration Using Native Materials, James W. Gracie, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2891-2896.

Reduction of Sediment Loads in DEC Streams, Chester C. Watson, Tom Pokrefke and Daniel Gessler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2885-2890.

Restoration Design for Urban Streams: Anacostia River Basin, Maryland, Meg Burns, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4198-4201.

Streambed armoring

Streambed Armoring, C. O. Chin, B. W. Melville and A. J. Raudkivi, HY Aug. 94, p899-918.

Streamheds

Fish Passage Pool Bedding Analysis, Louis S. Coletta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3818-3823.

Laboratory Evaluation of a Conductivity Probe for Scour Monitoring, David S. Mueller and Mark N. Landers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Modeling Sediment in Gravel-Bedded Streams Using HEC-6, Robert N. Havis, Carlos V. Alonso and John G. King, HY Oct. 96, p559-564.

Catastrophic Riverine Flooding: Rapid Evaluation with a Robust Numerical Model, David C. Froehlich and Michael A. Ports, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p225-226.

The Effect of Climatic Change on Hydrologic Variables, Jason R. Westmacott and Donald H. Burn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1465-1470.

Fish Passage Pool Bedding Analysis, Louis S. Coletta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Looking for Evidence of Climatic Change in Streamflow Time Series, K. H. Hamed and A. R. Rao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1459-1464.

A Method to Study Suspended Sediment Induced Flow Characteristics Changes, D. Zhou and C. Mendoza, (North American Water and Environment Congress & Destructive Water, Chenchayya Buthala, ed., 1996), p1447-1452.

Methods for Measuring Discharge under Ice Cover, John F. Walker, HY Nov. 94, p1327-1336.

Pollutant Transport Across Porous Stream Beds, C. Mendoza and D. Zhou, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1581-1586.

Probability Distribution of Annual Maximum, Mean, and Minimum Streamflows in the United States, Richard M. Vogel and Ian Wilson, HE Apr. 96, p69-76.

SAMS: Software for Simulating Streamflow Series, J. D. Salas, N. Saada, D. Frevert and W. Lane, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3387-3392.

The Sawmill Creek Watershed Restoration Project, Larry Lubbers, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p2873-2878.

Transferable Discharge Permits as a Function of Fluctuat-ing Stream Conditions, Norman J. Dudley, Michelle Coelli and John J. Pigram, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p272-

Uncertainty Analysis of Reservoir Sedimentation, Hyun Suk Shin and Jose D. Salas, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2294-2299.

Vulnerability of Water Resources to Global Climate Change in the Agricultural Midwest- Ecological, Economic, and Regulatory Aspects, J. Wayland Eheart and Edwin E. Herricks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2145-2150.

Streamflow forecasting

Streamflow Forecasting for Han River Basin, Korea, Haitham M. Awwad, Juan B. Valdés and Pedro J. Restrepo,

WR Sept./Oct. 94, p651-673.

Streamflows Prediction Models for the Colombian Generareamnows Prediction Models for the Effect, Oscar J. Mesa, Ricardo A. Smith, Pedro J. Restrepo, José E. Salazar, (North American) Luis F. Carvajal and Juan D. Velásquez, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1477-1482.

A Verification System for Probabilistic Hydrograph Fore-casts, Edwin Weiles and Momcilo Markus, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p223-224.

Streamflow records

678

Expected Moments Alogrithms for Flood Frequency Analysis, William L. Lane and Timothy A. Cohn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2185-2190.

Identifying Trends from Streamflow Records-A Case Study, Joseph A. Van Mullem, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1675-1680.

Urbanization and Hydrologic Consequences in Simi Valley, California, M. Ali Tabidian, James M. Evensen, Jr., Don D. Adelman and Steve Elliott, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3332-3337.

The Use of Hydrologic Budget Techniques in Assessing Site Suitability for Wetland Creation, William R. Arcieri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Streams

Analysis of Bank Stabilization in Steep Complex Streams Using A Two-Dimensional Model, Raymond Walton, Wilfredo A. Moneda and Jeffrey B. Bradley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p352-357.

Conomic Efficiency of Regulations for Allocation and Control of Surface Water Withdrawals in Humid Regions, J. Wayland Eheart and Kenneth W. Harrison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Effect of Grade Control Structures on DEC Streams, R. L. Bingner, E. J. Langendoon, L. Li and C. V. Alonso, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p280-285.

Features of a Chevron Weir Rock Ramp, R. J. Wittler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Grade Control Structures for Pipeline Crossings in the Arid Southwest, Martin J. Teal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p830-835.

Historical Development of Bridge Scour Evaluations, E. V. Richardson, (North American Water and Environment Congress & Destructive Water, Chenchayva Bathala,

ed., 1996), p3-27.

Management of Stream-Aquifer Systems in the 21st Century, Babs Makinde-Odusola, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2787-2792.

Periodic Variation in Karst Stream Losses, C. Warren Campbell, Mohamed Abd El Latif and Larry Foster, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Siting Low Profile Grade Control Structures for the Muddy Creek Demonstration Stream Restoration Research Project, R. J. Wittler, D. R. Eby, S. D. Keeney, C. C. Watson and S. R. Abt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p105-110.

Siting of Grade Control Structures, Chester C. Watson, John Smith and David S. Biedenharn, (North American Water and Environment Congress & Destructive Water,

Chenchayya Bathala, ed., 1996), p286-291.

Stream-Aquifer Interaction Model with Diffusive Wave Routing, Samuel P. Perkins and Antonis D. Koussis, HY Apr. 96, p210-218.

Telesleeve Crossing, David E. Comfort and Paul F. Lucas, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p139-146.

Training for Bridge Inspectors in Stream Stability and Scour, P. F. Lagasse and E. V. Richardson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p499-505.

Evaluation of a Real-Time Expert System for Surface Street Traffic Management and Control, Stephen G. Ritchie, Filippo Logi, Seungmin Kang and Craig Rindt, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p276-280.

Analysis of Behavior of Sand Surrounding Pile Tips, P. Simonini, GT Nov. 96, p897-905.

Simonini, Ol Nov. 30, po97-205.
Artificial Neural Networks and Durability of Sphinx Limestone, Jayanta K. Bandyopadhyay, Srinivas S. Yerrapragada and K. Lal Gauri, MT Aug. 95, p174-177.
Assessing the Significance of Subgrade Variability on Test Section Performance, Maureen A. Kestler, (Uncertainty) in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p685-694.

Calculations Substitute for Actual Knowledge, Robert E.

Bigham, CE Jan. 96, p29.

Concrete Beams and Slabs Retrofitted with CFRP Laminates, M. Arockiasamy, Ahmed Amer and M. Shahawy, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996).

Evaluation of Dynamic Strength of Concrete from Results of Static Tests, Iosif E. Shkolnik, EM Dec. 96, p1133-

Externally Bonded Carbon Fiber for Strengthening Concrete, Jay Thomas, Thomas Kline, Peter Emmons and Howard Kliger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p924-931.

High-Performance Concrete in Bridge Structures in Virginia, Celik Ozyildirim and Jose Gomez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1357-1366.

High-Temperature Properties of Stainless Steel for Build-ing Structures, Y. Sakumoto, T. Nakazato and A. Matsuzaki, ST Apr. 96, p399-406.

In-Plane Inelastic Buckling and Strengths of Steel Arches, Yong-Lin Pi and N. S. Trahair, ST July 96, p734-747. Investigation of Lignite-Based Bottom Ash for Structural Concrete, Nader Ghafoori and Jeffrey Bucholc, MT Aug. 96, p128-137.

20, p126-137.
Load Testing and Strength Evaluation of a Non-Composite Steel Plate Girder Bridge, Y. Edward Zhou, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p884-

Looping Behavior and Strength of Prestressed Arches, Zefang Xu and Amir Mirmiran, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p366-369.

No-Fines Concrete Pavements, Nader Ghafoori and Shivaji Dutta, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1637-1646.

Non-Accelerated Creep-Rupture of Fiber-Reinforced-Plastics in a Concrete Environment, Andrew Hundley and Charles Dolan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p519-526.

A Parametric Study of Strength of Tubular Multiplanar KK-Joints, M. M. K. Lee and S. R. Wilmshurst, ST Aug.

96, p893-904.

Physical Tests and Analyses of Composite Steel-Concrete Beam-Columns, S. Ali Mirza, Ville Hyttinen and Esko Hyttinen, ST Nov. 96, p1317-1326.

Practical Advanced Analysis for Steel Frame Design, Seung-Eock Kim and Wai-Fah Chen, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p19-30. Radical Rebar Forges Ahead, Eric Rasmussen, ET June/

July 96, p1,8.

Rhabilitation of Masonry Buildings per the ATC-33 Guidelines, Daniel P. Abrams, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1131-1138.

Repetitive Member Adjustment for Wood Structural Design, Ron Wolfe and Steve Cramer, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p804-811.

Representation of Concrete-Filled Steel Tube Cross-Section Strength, Jerome F. Hajjar and Brett C. Gourley, ST Nov. 96, p1327-1336.

Riddle of the Riverbed, Kenneth D. Walsh, Robert E.

Kiddie of the Kryerbed, Kennen D. Wash, Robert Schock and Steven A. Jimenez, CE June 96, p64-67.
Salt-Saturated Concrete Strength and Permeability, T. W. Pfeifle, F. D. Hansen and M. K. Knowles, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p173-

Simple Formula for Eccentric Bolted Connection Design, Thomas W. Hartmann and Janelle K. Rohrbaugh, SC Feb. 96, p40-46.

Statistical Implications of Methods of Finding Characteristic Strengths, Richard D. Hunt and Anthony H. Bryant, ST Feb. 96, p202-209.

Strength and Ductility of Rectangular Concrete Columns: A Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Mar. 96, p267-274.

Strength Properties of Polyester Mortar Using PET and Fly Ash Wastes, Karim S. Rebeiz, Julia W. Rosett and An-drew P. Craft, EY Apr. 96, p10-20.

Structural Behavior of End-Plate Bolted Connections to Stiffened Columns, Mohammed R. Bahaari and Archibald N. Sherbourne, ST Aug. 96, p926-935.

System Factors Using First-Order Reliability Methods, William M. Bulleit and Weifeng Liu, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p786-

Thermal-Sprayed Zinc Anodes for Cathodic Protection of Reinforced Concrete Structures, B. S. Covino, Jr., S. D. Cramer, G. R. Holcomb, S. J. Bullard, G. E. McGill and C. B. Cryer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1512-1521.

Citonig, etc., 1970), p1312-1321. Toning Asphalt, ET Aug./Sept. 96, p1,7. Volume and Stress Heterogeneity Effects in Fiber-Reinforced Composites, François Hild and Pascal Feil-lard, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1026-1029.

Analysis of Rainfall-Induced Debris Flows, Scott A. Anderson and Nicholas Sitar, GT July 95, p544-552.

Assessment of Remaining Fatigue Life of Existing Railway Riveted Bridges, Luo Weiwen and Jamshid Mohammadi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p42-45

Cellular Rigid Pavement, John K. Bright and John R. Mays, TE Sept./Oct. 96, p381-387.

Comparison of ASD and LRFD Design of an Office Building Supported by Arches, King-le Chang and Shuang Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p550-557.

A Comparison of Seismic Design Using ASD and LRFD, Jeffrey R. Soulages, Jon A. Heintz and James O. Malley, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p542-549.

Designers Use Analysis Software for Planned Zimbabwe Dam, CE Feb. 96, p83.

An Effective Characteristic Method for Plastic Plane Stress Problems, Zongda Yan and Xiaoming Bu, EM June 96,

Preconsolidated Compacted Clay under Plane Strain Compression, Hoe I. Ling and Fumio Tatsuoka, (Meas-Effects of uring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p151-165.

Evaluation and Rehabilitation of Victoria Bridge, G. Oommen, A. Lim and S. Tselios, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p207-214.

Explicit Stresses under Rectangular Footings, R. Irles and F. Irles, GT Feb. 94, p444-450.

A Family of Invariant Stress Surfaces, Steen Krenk, EM Mar. 96, p201-208.

Fatigue Reliability Analysis Based on Time Dependent First Passage, C.-J. Kuo and P. H. Wirsching, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p466-469.

Fatigue Testing of Anchor Bolts, James P. Van Dien, Mark R. Kaczinski and Robert J. Dexter, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p337-344.

Finite-Element Analysis of Temperature Effects on Plain-Jointed Concrete Pavements, Eyad Masad, Ramzi Taha and Balasingam Muhunthan, TE Sept./Oct. 96, p388-398.

A Fracture Mechanics-Based Design Method for SFRC Tunnel Linings, Pruettha Nanakorn and Hideyuki Horii, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p819-828.

Frequency Distributions and Bayesian Techniques for Esti-mating Performance in Composite Materials, John Miller and José Gomez, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p492-501.

Ground Response of Circular Tunnel in Poorly Consolidat-ed Rock, Yarlong Wang, GT Sept. 96, p703-708.

Mean Stress Effects in Fatigue of Welded Steel Joints, Shahram Sarkani and David P. Kihl, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p50-53.

Measures of Exceedance by Random Fields for Ocean Stress and Environmental Application, M. R. Leadbetter and Holger Rootzén, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p258-261.

New Trends in Biomechanics, Y. C. Fung, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1-15.

Plane Solutions of Interface Cracks in Anisotropic Dissimilar Media, Chien-Ching Ma and Jyi-Jiin Luo, EM Jan. 96, p30-38.

Semianalytical Solutions to Griffith Fracture Under Varia-ble Pressure, Albert T. Yeung, EM June 96, p580-584.

Statistical Analysis of S-N Fatigue Data: Design Curve Based on Tolerance, C. L. Shen, P. H. Wirsching and G. T. Cashman, (*Probabilistic Mechanics & Structural Reli-ability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p470-473.

Statistical Moments of Principal Stress-Related Quantities in Random Vibration Analysis, Ronald S. Harichandran and Mu-Tsang Chen, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p962-965.

Stress and Temperature Effects on Silt Frost Heave, Seyed these and temperature Enters on Shi Frost Freave, seyeu
M. Marandi, Douglas I. Stewart and Terrence W.
Cousens, (Cold Regions Engineering: The Cold Regions
Infrastructure—An International Imperative for the 21st
Century, Robert F. Carlson, ed., 1996), p23-34.

Structural Aspects of Pipeline Crossings, R. C. Prevost, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p449-456.

Transition from Brittle to Quasi-Brittle Behavior in Fiber Reinforced Brittle Matrix Composites, Claudia P. Oster-tag, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1219-1227.

Variability Response Functions for Plane Elasticity Prob-lems with Multiple Stochastic Material/Geometric Prop-erties, Lori Graham and George Deodatis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p174-177.

Active Vibration Control of Machine Foundation, Mohamed Abdel-Rohman and Hasan Al-Sanad, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p566-573.

Dan Pletta, Prominent Engineering Educator, Dies at 92, NE Oct. 96, p6.

Implicit Integration Procedures and Consistent Tangent Or erators for Bounding Surface Plasticity Models, P. Rahulkumar and S. Saigal, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p140-143.

Improved Analysis Techniques for the Capacity and Fa-tigue Assessment of TPG Railway Bridges, Terrence W. Philbrick, Jr. and Scott D. Schiff, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p199-206.

On the Response of Transmission Structures to High Winds, Acir Mércio Loredo-Souza and Alan Garnett Davenport, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p272-273.

Prefabricated Concrete Walls. Influence of Prestressload on Vertical Joints, J. P. Straman, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p147-153.

Stress concentration

Localized Load Effects in High-Order Bending of Sandwich Panels with Flexible Core, Y. Frostig and M. Bar-uch, EM Nov. 96, p1069-1076.

Stress cycle

Uniaxial Compression Behavior of Small Blocks of Welded Tuff, Stephen C. Blair and Patricia A. Berge, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p409-411.

Stress distribution

Analysis of Bond Stress Distributions in Pullout Specimens, Homayoun H. Abrishami and Denis Mitchell, ST Mar. 96, p255-261.

Analysis of Branch Crack in Compression, Chiheb Chaker and Michel Barquins, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p366-374.

Dynamic Fatigue of High-Rise Natural Draught Cooling Towers, Wilfried B. Krätzig, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p298-309.

Effect of Transition Zone on the Pre-Peak Mechanical Behavior of Mortar, G. Ramesh, E. D. Sotelino and W. F. Chen, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1238-1245.

Nonlinear Behavior of RC Cooling Towers and Its Effects on Strains, Stresses, Reinforcement and Cracks, Udo Wittek and Anmin Ji, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p287-297.

Photoelastic Determination of Contact Stresses of Foundations, G. U. Müller, GT Aug. 96, p692-696.

Shear Lag in Shear/Core Walls, A. K. H. Kwan, ST Sept. 96, p1097-1104.

Stress history

An Advanced Comprehensive Model for the Statistical Analysis of S-N Data, C. L. Shen, P. H. Wirsching and G. T. Cashman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p462-465.

Stress intensity factor

Assessing Bridge Cracks, ET Mar./Apr. 96, p2.

Buckeye Water Transmission Main Keswick Dam Crossing, D. Todd Kotey, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p194-201.

Calculation of Stress Intensity Factors Using Finite Elements and the Compliance Approach, Hisham Abdel-Fattah and Sameer A. Hamoush, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p154-159.

Rate-Sensitive Micromechanical Damage Model for Brittle Solid, Dipankar Chandra and Theodor Krauthammer, EM May 96, p412-422.

Anclastic Strain Recovery of Deep Cores with Presence of Pore Pressure, Y. Abousleiman and A. H-D. Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p935-938.

Determining Bridge Inspection Requirements for Fatigue Damage Using Reliability, Theodore Hopwood, II, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p454-457.

Fatigue Evaluation of Highway Bridges Using Ultrasonic Stress Measurements, Samer H. Petro, Udaya B. Halabe, Paul Fuchs, Powsiri Klinkhachorn and Hota V. S. GangaRao, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p876-883.

A Proposed Poroelastic Model for Hydraulic Fracturing Breakdown Pressure in Porous Rocks, Xiaofeng Huang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Saving Scotland's Busiest Bridge, Rita Robison, CE Jan. 96, p48-51.

Stress Due to Alkali-Silica Reactions in Mortars, C. F. Ferraris, E. J. Garboczi, F. L. Davis and J. R. Clifton, (Mate rials for the New Millennium, Ken P. Chong, ed., 1996), p1379-1387.

Stress strain characteristics

A Boolean Material Property Database, S. Dobson, M. Noori and A. Crespo, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p673-676.

Micromechanical Modelling for Granular Materials, Ching S. Chang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p551-554.

Modeling Stress-Strain Response of Clay Using Neural Nets, Yacoub M. Najjar, Imad A. Basheer and Hossam A. Ali, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p697-700.

MRI Studies of Direct Shear Tests on Round Particles, Tang-Tat Ng, Marlene Kelley and James Sampson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p572-575.

Analytical Model for Shear Critical Reinforced-Concrete Members, W. Chung and S. H. Ahmad, ST June 95,

Average Stress-Strain Relationships of Rebars in RC Panels, Abdeldjelil Belarbi and Amlan K. Sengupta, (En-gineering Mechanics, Y. K. Lin and T. C. Su, 1996), p743-746.

Dynamic Properties of Piedmont Residual Soils, Roy H. Borden, Lisheng Shao and Ayushman Gupta, GT Oct. 96, p813-821.

Experimental Observation of Microstructural Behavior of Concrete, Ahmed M. Farahat, Masashi Kawakami and Tada-aki Tanabe, MT May 95, p87-95.

Microplane Model for Concrete: I: Stress-Strain Bounda-ries and Finite Strain, Zdeněk P. Bažant, Yuyin Xiang and Pere C. Prat, EM Mar. 96, p245-254.

Microplane Model for Concrete: II: Data Delocalization and Verification, Zdenek P. Bažant, Yuyin Xiang, Mark D. Adley, Pere C. Prat and Stephen A. Akers, EM Mar. 96, p255-262.

New Damage Variable in Failure Analysis of Concrete, Woon-Kwong Yip, MT Nov. 96, p184-188.

Shock Waves in Curved Synthetic Cables, A. A. Tjavaras and M. S. Triantafyllou, EM Apr. 96, p308-315.

Stress-Strain Behavior of High-Performance 70W Bridge Steel, E. M. Focht and S. J. Manganello, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1540-

Stress-Strain Relationship of High-Strength Concrete in Compression, T. H. Wee, M. S. Chin and M. A. Mansur, MT May 96, p70-76.

Very Low Cycle Failure Process of Steel Angle Members, Yeon-Soo Park, Satoshi Iwai, Hiroyuki Kameda and Taijiro Nonaka, ST Feb. 96, p133-141.

Stress strain relations, soils

Down-Hole Collapse Test System, Sandra L. Houston, His-ham H. H. Mahmoud and William N. Houston, GT Apr. 95, p341-349.

Drained Sand Behavior in Axisymmetric Tests at High Pressures, Jerry A. Yamamuro and Poul V. Lade, GT Feb. 96, p109-119.

One-Dimensional Compression of Sands at High Pressures, Jerry A. Yamamuro, Paul A. Bopp and Poul V. Lade, GT Feb. 96, p147-154.

Significance of Particle Crushing in Granular Materials, Poul V. Lade, Jerry A. Yamamuro and Paul A. Bopp, GT Apr. 96, p309-316.

Strain Rate Effects on Stress-Strain Behaviour of Clay as rain kate Entets on Stress-Strain Behaviour of Clay as Observed in Monotonic and Cyclic Triaxial Tests, Satoru Shibuya, Toshiyuki Mitachi, Akihiko Hosomi and Seong Chun Hwang, (Measuring and Modeling Time Depend-ent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p214-227.

Stress-Strain Modeling of Sands Using Artificial Neural Networks, G. W. Ellis, C. Yao, R. Zhao and D. Penuma-du, GT May 95, p429-435.

Undrained Sand Behavior in Axisymmetric Tests at High Pressures, Poul V. Lade and Jerry A. Yamamuro, GT Feb. 96, p120-129.

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Condition Assessment of Marine Timber Piles Using Stress Wave Method, Shunyi Chen and Y. Richard Kim, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p853-860.

Evaluation of Microcrack Damage Growth and Healing of Asphalt Concrete Pavements Using Stress Wave Method, Yongon Kim and Y. Richard Kim, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p612-615.

Tracing Initiation and Propagation of Cracks in Composite Slabs, Yiching Lin, J. Y. Richard Yen and Chen-Fung Chen, ST July 96, p756-761.

Stress-strain curves

Constitutive Driver for Cohesive-Frictional Materials, K. Willam and M.-M. Iordache, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p751-760.

Influence of Steel Fibers on Design Stress-Strain Curve for High-Strength Concrete, L. Taerwe and A. Van Gysel, EM Aug. 96, p695-704.

Stress-Strain Relationship of High-Strength Concrete in Compression, T. H. Wee, M. S. Chin and M. A. Mansur, MT May 96, p70-76.

Dust-Free Chemical Stripper Puts Old Paint Out to Pasture, CE May 96, p84.

Performance of Polyethylene Parting Strips in PCC Pave-ments, Samuel P. Lawrence, Awad S. Hanna and Jeffrey S. Russell, TE Mar./Apr. 96, p155-163.

Structural analysis

Analysis and Computation, Franklin Y. Cheng, ed., 1996, 0-7844-0163-2, 522pp.

Analysis Requirements for Performance-Based Design of Beam-Column Joints, John F. Bonacci, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p257-265.

The Applicability of Neural Network Systems for Structur-al Damage Diagnosis, Chatmongkol Peetathawatchai and Jerome J. Connor, Jr., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p68-71.

Architectural Anatomy: Interdisciplinary Multimedia Tools for Building Analysis and Design, Anthony Webster, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p753-759.

Choice of Input Fields in Stochastic Finite Elements, Ove Ditlevsen and Niels Jacob Tarp-Johansen, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p820-837.

Computer Applications to Improve Efficiency of Structural Analysis and Design, J. A. Bohinsky and J. P. Lee, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p383-388.

Computer Model Aids Seismic Improvements, CE Mar. 96, p12.

Condition Assessment for Bridge Management, A. Emin Aktan, Daniel N. Farhey, David L. Brown, Vikram Dalal, Arthur J. Helmicki, Victor J. Hunt and Stuart J. Shelley, IS Sept. 96, p108-117.

Development of a Wireless Global Bridge Evaluation and Monitoring System (WGBEMS), Kenneth Maser, Robert Egri, Abba Lichtenstein and Steven Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p734A Domain Specific Equation Solver for Bridge Analysis, Gary Consolazio, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

p321-327

p221-221. Effect of Sidewalks and Railings on Wheel Load Distribu-tion in Steel Girder Bridges, K. M. Tarhini, M. Mabsout and M. Kobrosly, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p881-886.

Examples of Structural Identification from Measured Earthquake Response: Buildings, Bridges, and Dams, G. L. Fenves, E. Safak and M. Raghavendrachar, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p659-

Finite Element Analysis of Precast Concrete Box Culverts, K. M. Tarhini, G. R. Frederick and M. Mabsout, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p677-682.

Finite Element Analysis with Fuzzy Variables, Ru-Jen Chao and Bilal M. Ayyub, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p643-650.

and Juffstud syndaminal, 21, 1996, pes-3-00. A Finite Element Based Probability Contouring Method for Structural Analysis, David S. Riha, Harry R. Millwater, George Vellathottam and P. R. Perumalswami, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p922-925

Finite Element Computer Models for Analysis of Cold-Formed Steel Members, K. S. Siyakumaran and Nabil Abdel-Rahman, (Computing in Civil Engineering, Jorge

Vanegas, ed. and Paul Chinowsky, ed., 1996), p690-696. Finite Element Transient Analysis (FETA) of Solids and Structures Including Soil-Fluid-Structure Interaction, D. C. Rizos, D. L. Karabalis, G. J. Cokkinides, J. L. Tassoulas and J. S. Mulliken, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p480-486.

Frameview: Object-Oriented Visualization System for Frame Analysis, Sheloney Moni and Donald W. White,

CP Oct. 96, p276-285.

Guidelines and Benchmarks for Analysis of Isolated Build-ings, Harry W. Shenton, III and Andrew W. Taylor, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p236-245.

High Performance Computing: Application to Highway Bridges, T. E. Fenske, Z. Yu, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed.,

1996), p444-452

High-Temperature Properties of Stainless Steel for Build-

High-Temperature Profession of Salinas State Instances in g Structures, Y. Sakumoto, T. Nakazato and A. Matsuzaki, ST Apr. 96, p399-406.
Issues Related to Intelligent Bridge Monitoring, A. Emin Aktan, Arthur J. Helmicki and Victor J. Hunt. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996).

Modal Coupling and Accuracy of Modal Strain Energy Method, Alessandra Zambrano, José A. Inaudi and James M. Kelly, EM July 96, p603-612.

Model to Incorporate Architectural Walls in Structural Analyses, H. Allison Smith and Vicki L. Vance, ST Apr. 96, p431-438.

Natural Disaster Reduction Structures Specialist of the Urban Search and Rescue Task Forces, Daniel W. Cook, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p221-222.

and Rifey M. Chung, ed., 1997), p.221–222.
Roural Network Approach to Detection of Changes in Structural Parameters, S. F. Masri, M. Nakamura, A. G. Chassiakos and T. K. Caughey, EM Apr. 96, p.350–360.
A New Software Architecture for Finite Element Analysis, Graham Archer, Christopher Thewalt and Gregory L. Fenves, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p.683–689.
The Next Generation of Structural Engineering Automation

The Next Generation of Structural Engineering Automation Systems, Song Fong Jan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p494-500.

Notes on Prestressed Structures, Morris Schupack, CE Nov. 96, p30.

Numerical Methods in Structural Mechanics, Co-published with Thomas Telford, U.K., Zdeněk Bittnar and Jiří Šejnoha, 1996, 0-7844-0170-5, 422pp.

Numerical Simulation of Permanent Deformation in Flexi-ble Pavement Systems Subjected to Moving Loads David J. Kirkner, Weixin Shen, Michael I. Hammonds and Donald M. Smith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p430-433.

On Buckling Analysis of Beams and Frame Structures by the Differential Quadrature Element Method, Xinwei Wang, Huizhi Gu and Bin Liu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p382-385.

On Structural Identification of Constructed Facilities, A. Emin Aktan and James T. P. Yao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p651-658.

Optical Fiber Sensors for Advanced Civil Structures, Marten J. de Vries, Stephen H. Poland, Jennifer L. Grace, Vivek Arya, Kent A. Murphy and Richard O. Claus, (*Engineering Mechanics*, Y. K. Lin and T. C. Su, 1996), p64-67.

Parallel Structural Analysis with Computers and Engineers, Edward L. Wilson, (Analysis and Computation, Franklin

Y. Cheng, ed., 1996), p1-18.

Parameter Estimation of Structures from Static Strain Measurements. I: Formulation, Masoud Sanayei and Michael J. Saletnik, ST May 96, p555-562.

Parameter Estimation of Structures from Static Strain Measurements. II: Error Sensitivity Analysis, Masoud Sanayei and Michael J. Saletnik, ST May 96, p563-572.

Parking Lot Corrosion Cure, Scott Greenhaus, CE Nov. 96,

Prominent Educator Goldberg of Purdue Dies at 85, NE Feb. 96, p14.

Reassessment and Requalification of Infrastructure: Appli-cation to Offshore Structures, R. G. Bea, IS June 96,

A Refined Numerical Approach for the Limit-Load Analysis of 3-D Steel Rod Structures, Norbert Gebbeken, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Reliability Procedures as a Design Tool for Structures and Mechanical Components, G. I. Schuëller, M. Gasser, J. Hartl and G. Lener, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p800-803.

Sectional Analysis for Nonlinear System Identification of Concrete Structures, Jie Wang, Manoj B. Chopra and Sashi K. Kunnath, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p339-342.

Seismic Analysis, Design and Evaluation of Hospitals— Vulnerability Studies by Energy Methods, Omar D. Car-dona and Jorge E. Hurtado, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p319-320.

Statistical Seismic Responses of Structures using Response Spectrum Matching Technique, Ruichong Zhang and Masanobu Shinozuka, (Engineering Mechanics, Y. K.

Lin and T. C. Su, 1996), p527-530.

Stochastic Linearization of a Boolean Hysteresis Model, S. Dobson, M. Noori, Z. Hou and M. Dimentberg, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p502-505.

Structural Analysis Model for Mat Foundations, Gin-Show Liou and S. C. Lai, ST Sept. 96, p1114-1117.

Liou and S. C. Lat. ST Sept. 20, Proceedings of Structural Analysis with Fuzzy-Based Load Uncertainty, Robert L. Mullen and Rafi L. Muhanna, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p310-313.

Structural Consequences of Imperfection in Thin-Walled Components, Luis A. Godoy and John Carrasquillo, (En-gineering Mechanics, Y. K. Lin and T. C. Su, 1996), p997-1000.

Structural Fragility Analysis Using Finite Element Computational Models, Dan M. Ghiocel, Paul R. Wilson, Gary G. Thomas and John D. Stevenson, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p18-21.

Use of Pasternak Foundation Model in Concrete Pavement Analysis, T. F. Fwa, X. P. Shi and S. A. Tan, TE July/

Analysis, T. F. Fwa, X. P. Shi and S. A. Tan, TE July/ Aug. 96, p323-328.

Vibration Control of Structures Utilizing Architectural Walls, H. Allison Smith, Luciana R. Barroso and Vicki L. Vance, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p495-498.

Visualizing Global Force Distributions in Finite Element Models, Kirk Martini, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p607-703. p697-703.

Visualizing Global-Force Distributions in Finite-Element Models, Kirk Martini, AE June 96, p71-77.

Structural behavior

Analytical and Measured Strains in Sunshine Skyway Bridge. II, Mohsen A. Shahawy and M. Arockiasamy, BE May 96, p87-97.

The Art of the Structural Engineer by Bill Addis, Wolfgang Schueller, AE Dec. 96, p145-146.

Constitutive and Structural Behavior of Siliceous High-Strength Concretes After a Thermal Cycle at High Temperature, Roberto Felicetti and Pietro G. Gambarova, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p583-592.

Constructional and Environmental Aspects of Structural Materials at Antarctica and Indian Himalayas, R. C. Pathak, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p968-977.

Cyclic Tests of Concrete-Filled Steel Box Columns, Har bin Ge and Tsutomu Usami, ST Oct. 96, p1169-1177.

A Dynamic Submerged Breakwater, A. N. Williams and W. G. McDougal, WW Nov/Dec. 96, p288-296. Effect of Ground Condition on Earthquake Damage, Mako-to Nasu, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p233-234.

Experimental Study of Behavior of New Space Truss Sys-tem, A. I. El-Sheikh and H. El-Bakry, ST Aug. 96, p845-853.

Field Instrumentation to Study the Time-Dependent Behavior in Sunshine Skyway Bridge. I, Mohsen A. Shahawy and M. Arockiasamy, BE May 96, p76-86.

and M. Arockiasamy, BE May 96, p76-86.
Measuring and Modeling Dynamic Loads Imposed by
Moving Crowds, A. Ebrahimpour, A. Hamam, R. L.
Sack and W. N. Patten, ST Dec. 96, p1468-1474.
Micromechanics Based Design of FRCC Components,
Christopher K. Y. Leung and Y. Philip Geng, (Materials
for the New Millennium, Ken P. Chong, ed., 1996),

Modal Filter Based On-Line Monitoring of Uncertain Structural Systems, E. A. Johnson, L. A. Bergman, P. G. Voulgaris and L. C. Freudinger, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p156-159.

Monitoring Systems on Historic Buildings: The Brunelle-schi Dome, Gianni Bartoli, Andrea Chiarugi and Vittorio

Gusella, ST June 96, p663-673.

Negative Shear Lag in Framed-Tube Buildings, Y. Singh and A. K. Nagpal, ST Nov. 94, p3105-3121.

Response of Base Isolated USC Hospital Building in the 1994 Northridge Earthquake, Satish Nagarajaiah and Xiaohong Sun, (Analysis and Computation, Franklin Y. Chenne at 1006), 212-223. Cheng, ed., 1996), p212-223.

Seismic Performance of Cladding: Responsibility Revisit-ed, Julie Mark Cohen, CF Nov. 95, p254-270.

Spectral Relative Motion of Two Structures due to Seismic Travel Waves, Van Jeng and Kazuhiko Kasai, ST Oct. 96, p1128-1135.

Stochastic Damage Model for Brittle Materials Subjected to Monotonic Loading, S. Kandarpa, D. J. Kirkner and B. F. Spencer, Jr., EM Aug. 96, p788-795.

Structural Behavior of End-Plate Bolted Connections to Stiffened Columns, Mohammed R. Bahaari and Archi-bald N. Sherbourne, ST Aug. 96, p926-935.

Tensioned Fabric Structures—A Practical Introduction edit-ed by R. E. Schaeffer, Frederick S. Merritt, AE Sept. 96, p121.

Structural control

Acceleration Feedback Control of MDOF Structures, S. J. Dyke, B. F. Spencer, Jr., P. Quast, M. K. Sain, D. C. Kaspari, Jr. and T. T. Soong, EM Sept. 96, p907-918.

Actuator Dynamics and Delay Compensation Using Neuro-controllers, Khashayar Nikzad, Jamshid Ghaboussi and Stanley L. Paul, EM Oct. 96, p966-975. Analysis and Design of ER Damper for Seismic Protection of Structures, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, EM Oct. 96, p1003-1011.

Basic Concepts and Applications of Structural Control, T. T. Soong, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p16-29.

Control of Sliding-Isolated Buildings Using Sliding-Mode Control, J. N. Yang, J. C. Wu, A. M. Reinhorn and M. Riley, ST Feb. 96, p179-186.

Riley, ST Feb. 96, p179-186.
Design of Supplemental Dampers for Control of Structures, N. Gluck, A. M. Reinhorn, J. Gluck and R. Levy, ST Dec. 96, p1394-1399.
Dynamical Model of a Magnetorheological Damper, B. F. Spencer, Jr., S. J. Dyke, M. K. Sain and J. D. Carlson, (Analysis and Computation, Franklin Y. Cheng, ed., 1006), a261-3273

1996), p361-370.

Engineering Mechanics, 2 vols., Y. K. Lin and T. C. Su, 1996, 0-7844-0172-1, 1240pp.

Engineering Research on Smart Materials and Structural Systems, Ken P. Chong, S. C. Liu and O. W. Dillon, IS June 96, p41-44.

Experimental Study of Seismic Response of Structures with Semi-Active Damping Control Systems, M. D. Symans and M. C. Constantinou, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p350-360.

Frankini 1 · Cheng, ed., 1999, p.530-500.
Experimental Verifications of H. and Sliding Mode Control for Seismically Excited Buildings, J. N. Yang, J. C. Wu, A. M. Reinhorn, M. Riley, W. E. Schmitendorf and F. Jabbari, ST Jan. 96, p69-75.

Fuzzy Logic Based Control for Sliding Structures, Andrei M. Reinhorn, Ravi S. Subramaniam and Michael A. Riley, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p298-309.

H., Active Seismic Response Control Using Static Output Feedback, İ. E. Köse, W. E. Schmitendorf, F. Jabbari and J. N. Yang, EM July 96, p651-659.

Heuristic-Based Algorithm for Active Control, Yu Tang, EM Aug. 96, p801-803.

Linear Optimal Structural Control Including the External Excitation, G. F. Panariello, R. Betti and R. W. Longman, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p760-763.

Managing Multi-Degree-of-Freedom Systems in Structural Fuzzy Control, Fabio Casciati and Lucia Faravelli, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p306-309.

Modified Bang-Bang Control Law for Structural Control Implementation, Z. Wu and T. T. Soong, EM Aug. 96, p771-777.

New Algorithm for Active Structural Control, Yu Tang, ST Sept. 96, p1081-1088. Nonlinear Control Strategies for Limiting Dynamic Re-sponse Extremes, D. P. Tomasula, B. F. Spencer, Jr. and M. K. Sain, EM Mar. 96, p218-229.

Optimal Polynomial Control of Seismically Excited Linear Structures, Anil K. Agrawal and Jann N. Yang, EM Aug. 96, p753-761.

Parallel Eigenvalue Algorithms for Large-Scale Control-Optimization Problems, A. Saleh and H. Adeli, AS July

Passive Structural Control with Sequential Coupling, Paul Weidlinger, ST Sept. 96, p1072-1080.

Probabilistic Stability Robustness of Structural Systems, R. V. Field, Jr., P. G. Voulgaris and L. A. Bergman, EM

Oct. 96, p1012-1021.

Robust H. Control Considering Actuator Saturation. I: Theory, J. Geoffrey Chase and H. Allison Smith, EM Oct. 96, p976-983.

Robust H., Control Considering Actuator Saturation. II: Applications, J. Geoffrey Chase, H. Allison Smith and Tetsuo Suzuki, EM Oct. 96, p984-993.

Rule-Based Control Algorithm for Active Tuned Mass Dampers, Masato Abé, EM Aug. 96, p705-713.

Seismic Active Control by a Heuristic-Based Algorithm, Yu Tang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p232-235.

Stability of Actively Controlled Civil Engineering Structures with Actuator Saturation, Anil K. Agrawal, Ashish Das and Jann N. Yang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p756-759.

System Identification Study of a 1:10 Scale Steel Model using Earthquake Simulator, Satish Nagarajaiah and Xiaojiang Ma, (Engineering Mechanics, Y. K. Lin and T.

C. Su, 1996), p764-767.

Theoretical and Experimental Studies on Hybrid Control of Seismic Structures, F. Y. Cheng, P. Tian, V. Rao, K. Martin, F. Liou and J. H. Yeh, (Analysis and Computa-tion, Franklin Y. Cheng, ed., 1996), p322-338.

Time Delayed Control of Classically Damped Structures, R. Kumar and F. E. Udwadia, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p751-755.

Tuned Mass Dampers for Structures with Bilinear Hysteresis, Masato Abé, EM Aug. 96, p797-800.

Verifying the Timing Requirements of Multiprocessor Control Systems, John W. Baugh, Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p278-285.

Addressing Current Issues in Structural Design Software, Julia D. Biedermann, CP Oct. 96, p286-294.

Analysis and Design of Retaining Structures Against Earth quakes, Geotechnical Special Publication No. 60, Shamsher Prakash, ed., 1996, 0-7844-0206-X, 144pp.

The Art of the Structural Engineer by Bill Addis, Wolfgang Schueller, AE Dec. 96, p145-146.

Assurance of Structural Safety—Priority Issue for Structur-al Engineers, Frank J. Heger, SC Nov. 96, p113-118.

Basic Concepts and Applications of Structural Control, T. T. Soong, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p16-29.

Big Tires Stabilize a Canal Bed, CE Jan. 96, p22,24.

Building an International Community of Structural Engineers, 2 vols., S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, 0-7844-0158-6, 1320pp.

- Building Code Requirements for Masonry Structures (ACI 530-95/ASCE 5-95/TMS 402-95); Specification for Ma-sonry Structures (ACI 530.1-95/ASCE 6-95/TMS 602-95); Commentary on Building Code Requirements for Masonry Structures (ACI 530-95/ASCE 5-95/TMS 402-95); Commentary on Specification for Masonry Structures (ACI 530.1-95/ASCE 6-95/TMS 602-95) (St No. 95-005, 95-006), Masonry Standards Joint Committee, (James Colville, chmn.), 1996, 0-7844-0115-2, 97pp.
- Cast-in-Place Factory Largest for Industry, CE Nov. 96, p13.
- A Combined Fuzzy and Random-Set Approach to the Mul-tiobjective Optimization of Uncertain Systems, Alberto Bernardini and Fulvio Tonon, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p314-317.

Compendium of Design Office Problems—Volume II, Committee on Design of Steel Building Structures of the Committee on Metals, Structural Division, ST Feb. 96,

Computer Applications to Improve Efficiency of Structural Analysis and Design, J. A. Bohinsky and J. P. Lee, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p383-388.

Computer-Developed Structural Calculations, Russell D. Snyder, P.E., SC Nov. 96, p122-125.

Conceptual Design Optimization of Structural Systems, Donald E. Grierson, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p99-110.

Concurrent Engineering and Electronic Data Interchange, Tony Tascione, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p397-406.

Design Considerations for the Use of Plastic Lumber i Structural Applications, Richard G. Lampo, Thomas J. Nosker and Richard W. Renfree, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1492-1500.

Design Live Loads for Crowds in Motion, A. Ebrahimpour and R. L. Sack, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p420-427. Design of the Inlet/Outlet Tower for the Eastside Reservoir Project, Robert P. McBean and Clifford D. Dillon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1783-1788.

Development of Natural and External Man Induced Design Code Requirements Applicable to Special Facilities, John D. Stevenson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p149-

150

150.
Effects of Non-Structural Elements on the Acceleration Response of Tall Multi-Story Buildings Under Wind Excitation, Cindy X. Qiu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p974-977.
Engineering Ethics, Stanley H. Goldstein, P.E and Robert A. Rubin, CE Oct. 96, p40-44.
Environmental Engineering Forum, Dee Ann Sanders, EE

Nov. 96, p957. Forum, Stan Rolfe and John Barsom, ST Nov. 96, p1258.

Fuzzy Controlled Genetic Algorithm Search for Shape Op-timization, Chee Kiong Soh and Jiaping Yang, CP Apr. 96, p143-150.

Hybrid Inverse Mode Problems for FEM-Shear Models, Izuru Takewaki and Tsuneyoshi Nakamura, EM Aug. 95,

p873-880.

Possoli Implementation of Structural Redundancy in Bridge Design
 A Probabilistic Approach, Robert W. Kritzler and Jamshid Mohammadi, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and

munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p682-687. Incorporating Damage Control in Structural Design, Dan M. Frangopol, Marek Klisinski and Kai-Yung Lin, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p598-605.

1996), p598-005.
Limit State Design Method of Structural System Using Reliability-Based Optimization and Efficient Monte-Carlo Simulation Technique, Wataru Shiraki, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p635-

Loading and Material Behavior Effects on System Redun-dancy, Dan M. Frangopol and Keito Yoshida, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

Low Cycle Fatigue of Structural Materials, Paul Howdy-shell and Kathryn Carlson, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p83-92.

Minimizing Uncertainties in Geotechnical Investigations, Yakov M. Reznik, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p149-166.

More Ethical Practice, Not Training, Dan Feger, P.E., CE Nov. 96, p38,40.

Myron Goldsmith, Structural Engineer, Architect, Dies at

77, CE Oct. 96, p78. The Next Generation of Structural Engineering Automation Systems, Song Fong Jan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p494-500.

Reliability Design of Laminated Plate for Buckling, Nozo-mu Kogiso, Shaowen Shao and Yoshisada Murotsu, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p627-634.

Reliability-Based STructural Optimization-Software Development, M. Gasser and G. I. Schuëller, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p531-534.

chanics, Y. K. Lin and T. C. Su, 1996), p531-534.
Reliability-Based Structural System Optimization: State-of-the-Art versus State-of-the-Practice, Dan M. Frangopol and Ross B. Corotis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p67-78.
Repetitive Member Adjustment for Wood Structural Design, Ron Wolfe and Steve Cramer, (Building an International Conference of the Conference

tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p804-811. Right Questions, Wrong Answers, Eugene H. Harlow, CE

June 96, p26-27.

San Francisco Bay's Jeweled Necklace (Available only in Focus on Structures Special Edition), Charles Seim. CE Jan. 96, p14A-16A.

Sequence Control for Integrated Structural Design Models, Chang-Ho Lee and Richard Sause, CP July 96, p213-

225

Start the Presses! Ramon Gilsanz, CE Apr. 96, p65-67 Steel Girder Bridge Cost Optimization Using AASHTO Specifications, T. E. Fenske, M. Yener, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p472-481.

Structural Aerodynamics (Available only in Focus on Structures Special Edition), Bob Lang and Hugh Muir-

head, CE Jan. 96, p3A-7A.

Structural Aspects of Pipeline Crossings, R. C. Prevost, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p449-456.

Structural Design for Vehicular Bombs, Task Committee on Structural Design for Physical Security, (Paul F. Mlakar, FASCE, Chair, chmn.), (Building an Interna-

Mlakar, FASCE, Chair, chmn.), (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1269-1276.Structural Design Guide to the AISC (LRFD) Specification for Buildings, 2nd Ed. by Edward S. Hoffman, Albert S. Gouwens, David P. Gustafson, and Paul F. Rice, AE

Sept. 96, p121.

Sept. 96, p121.
Structural Serviceability Review and Standard Implementation, Bruce Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p436-443.
Transition from Partial Factors Method to Simulation Based Reliability, Assessment in Structural Design, Pavel Marek and Milan Guštar, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p558-561.
U.S. Firm Builds Shake Table for Japan, John Casey, ET Aug/Sept. 96, p.18.

Aug./Sept. 96, p1,8.

Aug. 20-pt. 20, p1.6.
Uncertainty Modeling for Preliminary Design of Structures, Yung-Ching Shen and Larry J. Feeser, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p565-571.

University Arts Building Presents Structural Challenge, CE Nov. 96, p10.

Visualizing Global-Force Distributions in Finite-Element Models, Kirk Martini, AE June 96, p71-77.

Models, Kirk Martini, AE June 96, p71-77.
Wind Tunnel and Water Flume Testing in the Design of High Rise and Long Span Structures, Charles H. Thorn-ton, Leonard M. Joseph and Thomas Z. Scarangello, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p944-951.

Wind-Tunnel Studies of Buildings and Structures, ASCE Aerospace Division Task Committee on Wind Tunnel Studies of Buildings and Structures, AS Jan. 96, p19-36.

Structural dynamics

Actuator Dynamics and Delay Compensation Using Neuro-controllers, Khashayar Nikzad, Jamshid Ghaboussi and Stanley L. Paul, EM Oct. 96, p966-975.

Stanley L. Paul, EM Oct. 96, p966-975.
Analysis of Damped and Undamped Systems Using DFT, Fady F. Barsoum and William F. Carroll, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p951-954.
Application of the Infinite Element Method to Solution of the Fokker-Planck Equation, W. Yi, S. F. Wojtkiewicz, L. A. Bergman and B. F. Spencer, Jr., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p685-688.
Class of Masing Models for Plastic Hysteresis in Structures, James L. Beck and Paramsothy Jayakumar, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1083-1090. p1083-1090.

Comparison of LQR and H. Algorithms for Vibration Con-trol of Structures in Seismic Zones, H. Allison Smith and J. Geoffrey Chase, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1164-1171.

A Comprehensive Relational Database of Structural Damp-ing Data, Sandeep Khare and Nicholas P. Jones, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p1236-1243.

Design and Implementation of Nonlinear Control Strategies, T. T. Soong and Z. Wu, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), pl147-1154.

Dynamically Modified Linear Structures: Deterministic and Stochastic Response, Giuseppe Muscolino, EM Nov. 96,

p1044-1051.

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ed., 1996), p354-357.

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Building an International Community of Structural Engineers, 2 vols., S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, 0-7844-0158-6, 1320pp.

Compendium of Design Office Problems—Volume II, Committee on Design of Steel Building Structures of the Committee on Metals, Structural Division, ST Feb. 96, p116-124.

A Continuing Education Program Involving A Partnership Among Building Designers, Constructors, and Code En-forcers, Michael A. Cassaro, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p92-96.

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Single-Criteria Genetic Optimization for Design and Detailing of Concrete Structures, W. M. Kim Roddis, Warren K. Lucas and Vorathum Chunnanond, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p91-96.

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An Assessment of Wind Damage to Wood-Frame Houses, Maher Jaafari and Henry Liu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p347-348.

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ments and the Compliance Approach, Hisham Abdel-fattah and Sameer A. Hamoush, (Computing in Civil En-gineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p154-139. Calculation of Stress Intensity Factors Using Finite Ele-

A CDM-Based Approach to Stochastic Damage Growth, Baidurya Bhattacharya and Bruce Ellingwood, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p772-775.

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Effects of Hurricane Luis on Structures in Antigua, Tony Gibbs, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p295-296.

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Forensic Evaluation of Guyed Tower Collapses, David F. Mazurek and Jonathan C. Russell, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p510-517.

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C. Su, 1996), p269-272.

Lifeline Failure and Disaster Preparedness of Businesses, Melvin J. D'Souza, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p105-

Magnitude-Distance Contours for Probabilistic Seismic Hazard Analysis, P. Bazzurro, S. R. Winterstein, T. C. Ude and C. A. Cornell, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p202-205

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Probabilistic Stability Robustness of Structural Systems, R. V. Field, Jr., P. G. Voulgaris and L. A. Bergman, EM

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Structural Damage due to Hurricane Marilyn in St. Thomas and Culebra, Luis A. Godoy, Roberto Huyke, Ricardo R. Lopez, J. A. Martinez-Cruzado and Raul Zapata, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p135-136.

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Two Recent Russian Far East Destructive Earthquakes. Case Studies and Post-Disaster Analysis, J. M. Eisenberg and A. M. Melentyev, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p235-236.

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EcoBlocks: Nontraditional Use for Mixed Wastepaper, A. M. Springer, Marc Rose and Rich Ryu, EE May 96, p437-444.

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The Return of Masonry as a Structural Material, Daniel P. Abrams, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), pl-12.

Structural Redundancy and Fracture in Composite Lattice/ Skin Structures, A. K. Maji, E. Fosness and D. Satpathi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p641-644.

Tensioned Fabric Structures—A Practical Introduction edited by R. E. Schaeffer, Frederick S. Merritt, AE Sept. 96, p121.

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Housner, ed. and Riley M. Chung, ed., 1997), 9379-380.
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Comparison of ASD and LRFD Design of an Office Building Supported by Arches, King-le Chang and Shuang Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p550-557.

Condition Assessment of Marine Timber Piles Using Stress Wave Method, Shunyi Chen and Y. Richard Kim, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p853-860.

Creep Behavior of FRP-Reinforced Wood Members, Nikolaos Plevris and Thanasis C. Triantafillou, ST Feb. 95,

Exact Stiffnesses for Tapered Members, Husain Jubran Al-Gahtani, ST Oct. 96, p1234-1239.

Inspection of Fatigue Sensitive Bridge Members, Richard A. Walther and Michael J. Koob, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p321-328.

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Repetitive Member Adjustment for Wood Structural Design, Ron Wolfe and Steve Cramer, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p804-811.

Resistance of Wood Members and Connections to Dynamic Loading, Laura Brantley, Robert Emerson and Kenneth Fridley, (Building an International Community of Struc-nural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p771-777.

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Safety of Concrete Members Designed by ACI 318 Chapter 9 and Appendix C Load Combinations, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p218-221

Reviceability System Factor for Design of Wood Floors, K. J. Fridley, D. V. Rosowsky and P. Hong, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p792-

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Structural Safety for Fire Conditions, Fan Li and R. W. Fitzgerald, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid

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Finite Element Computer Models for Analysis of Cold-Formed Steel Members, K. S. Sivakumaran and Nabil Abdel-Rahman. (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p690-696.

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System Identification Study of a 1:10 Scale Steel Model using Earthquake Simulator, Satish Nagarajaiah and Xiaojiang Ma. (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p764-767.

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goriu, ed., 1996), p566-569.
Bridge Design by the AASHTO LRFD Bridge Design Specifications, Dennis R. Mertz and John M. Kulicki, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1-8.
A Bridge Live Load Model Including Overloads, Gongkang Fu and Osman Hag-Elsafi, (Probabilistic Mechanics & Structural Reliability Dan M. Engaged and Met.

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A Comparative Analysis of FORM/SORM and Polynomial

Chaos Expansions for Highly Nonlinear Systems, R. Ghanem and D. Ghiocel, (Engineering Mechanics, Y. K.

Lin and T. C. Su, 1996), p535-538.

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and Ichiro Iwaki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p206-209. Effects of Testing, Inspection and Repair on the Reliability of Offshore Structures, Guoyang Jiao and Oddwar I. Eide, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p154-157.

1990), p134-137.
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missible Domains, Roger Sindel and Rüdiger Rackwitz, (Probabilistic Mechanics & Structural Reliability, Dan Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p570-573

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p674-681.

portion of Exceedance by Random Fields for Ocean Stress and Environmental Application, M. R. Leadbetter and Holger Rootzén, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p258-261.

A Melnikov Theoretic Bound on Probability of Escape from a Potential Well, Michael R. Frey, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p510-513

ed. and winced D. Origorin, ed., 1990), p310-313.

A Method for Structural Reliability Analysis of Marine Structures Using Combined Plate and Frame Structure Models, Hiroo Okada, Koji Masaoka, Yoshisada Murotus, Shigeyuki Hibi and Wataru Kiyokawa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p150-153.

Ocean Environment Contours for Structural Response
Analysis and Experiment Design, Steven R. Winterstein,
Todd C. Ude, Paolo Bazzurro and C. Allin Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Performance of Laminated Glass Units under Simulated Windborne Debris Impacts, Richard A. Behr and Paul A. Kremer, AE Sept. 96, p95-99.

Probabilistic Aspects of Material Failure, David F. Bizup and Nozer D. Singpurvalla, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p474-477.

A Probabilistic Formulation of Damage Detection, Loukas Papadopoulos and Ephrahim Garcia, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p350-353.

Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996, 0-

7844-0184-5, 1025pp.

Proof Loads, Construction Error and the Reliability of Service Proven Structures, Mark G. Stewart, (*Probabilis*tic Mechanics & Structural Reliability, Dan M. Frango-pol, ed. and Mircea D. Grigoriu, ed., 1996), p226-229.

Protection of the Building Envelope in Maintaining Struc-tural Integrity, Clifford Oliver, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p121-122.

Re-Assessment of Concrete Bridges, P. Thoft-Christensen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p613-620.

Reliability Analysis of Masonry Walls, A. S. Al-Harthy and D. M. Frangopol, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p338-341.

goriu, cu., 1990), p.536-341. Reliability Analysis of Nonlinear Structures Using Stochas-tic Finite Elements, C. E. Brenner and C. Bucher, (*Prob-*abilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p.596-599.

Reliability Concept and Application in Bridge Management System, Zongwei Tao and Brian J. Stearman, (Probabi-listic Mechanics & Structural Reliability, Dan M. Fran-gopol, ed. and Mircea D. Grigoriu, ed., 1996), p442-445.

Reliability Design of Laminated Plate for Buckling, Nozo-mu Kogiso, Shaowen Shao and Yoshisada Murotsu, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p627-634.

Reliability Evaluation Using SFEM, Achintya Haldar and Liwei Gao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p166-169.

Reliability Framework for Managing Risk of Aging Struc-tures, Bruce Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, p590-597.

Reliability of Jackets: Beyond-Static-Capacity, D. G. Schmucker and C. A. Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p578-581.

Reliability-Based Structural System Optimization: State-of-the-Art versus State-of-the-Practice, Dan M. Frangopol and Ross B. Corotis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p67-78.
Response Surface Method for Time-Variant Reliability Analysis, Timothy H.-J. Yao and Y.-K. Wen, ST Feb.

96, p193-201.

Seismic Analysis, Design and Evaluation of Hospitals-Nulnerability Studies by Energy Methods, Omar D. Car-dona and Jorge E. Hurtado, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p319-320.

Service Life of Timber Trestles, William G. Byers, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

SFEM for Reliability of Structures with Material Nonlinearities, Jun Zhang and Bruce Ellingwood, ST June 96, p701-704

Simulation-Based Reliability Assessment for Structural En-gineers by Pavel Marek, Milan Gustar, and Thalia Anag-no, James T. P. Yao, ST July 96, p841.

A Stochastic Model for Elastic-Plastic Fracture of Cracked

A Stochastic Model for Elastic-Plastic Fracture of Cracked Pipes, Sharif Rahman, Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p764-767.

System and Input Identification with Partially Correlated Load Processes, K. Pan, N. P. Jones and J. H. Ellis, Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p138-141 p138-141.

System Factors Using First-Order Reliability Methods, William M. Bulleit and Weifeng Liu, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p786-

System Risk for Multi-Storey Reinforced Concrete Build-ing Construction, Deepthi Epaarachchi, Mark G. Stewart and David V. Rosowsky, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p230-233.

Uncertainty Measures in Reliability Assessment of Ship Structures, Bilal M. Ayyub and Kwan-Ling Lai, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996).

p621-626.

Structural response

Analysis of Pavement Structural Responses Using In-Situ Instrumentation, Dar-Hao Chen and Michael Murphy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

An Approximate Method for Assessment of Seismic Damage on Buildings, Mario Paz and Jeffrey S. Janover, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p428-434.

Assessments of Lateral and Torsional Structural Responses Induced by Incoherent Ground Motions, G. D. Hahn and X. Liu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p188-191.

Computational Aspects of Dynamic Concrete Viscoplasticity, Olubayo O. R. Famiyesin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p282-285.

Considering Uncertainty in Earthquake Response Spectra, Sara Wadia-Fascetti and Burcu Vuran Gunes, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p211-212.

Convex Models for Impulsive Response of Structures, Shyh-Rong Tzan and Chris P. Pantelides, EM June 96, p521-529.

Dynamic Stiffness Analysis of Lattice Structure, Eldad Levy and Moshe Eisenberger, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, p526-533.

Dynamical Model of a Magnetorheological Damper, B. F. Spencer, Jr., S. J. Dyke, M. K. Sain and J. D. Carlson, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p361-370.

Earthquake Response of Structures by Structural Mixture Earnquake Response of Structures by Structural Mixture
Theory, Mohammed S. Al-Ansari, O. M. Kirkely and
Gregory Gillette, ST Oct. 96, p1198-1207.
Editor's Note, David Darwin, ST Dec. 96, p1393.

Effect of Soil-Structure Interaction on Structural Response, Y. Yong, R. C. Zhang and J. Yu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1098-1101.

Experimental Investigation of Tuned Liquid Dampers, Dor-Experimental Investigation of Tuned Liquid Dampers, Dorothy A. Reed, Harry Yeh, Jinkyu Yu and Sigurdar Gadarsson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p215-216.
Finite Element Interval Estimation by Convex Model, Shigeru Nakagiri and Nobuhiro Yoshikawa, (Probabilistic

Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p278-281.

Forensic Evaluation of Guyed Tower Collapses, David F. Mazurek and Jonathan C. Russell, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p510-517

Heuristic-Based Algorithm for Active Control, Yu Tang,

Heuristic-Based Algorithm for Active Control, Yu Tang, EM Aug. 96, p801-803. Identification of Wind Spectral Characteristics from Struc-ture Response, R. Pan, N. P. Jones and J. H. Ellis, (Prob-abilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p482-485.

Implications of Measured Near-Field Ground Motion on Structural Response, Wilfred D. Iwan, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p1213-1220.

Incorporation of Fuzzy Damage States in Seismic Fragility
Analysis, Jun-Rong Huo and Howard H. M. Hwang,
(Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996). p318-321

Maximum Structural Response Using Convex Models, Yakov Ben-Haim, Genda Chen and T. T. Soong, EM

Yakov Ben-Hami, Genda Chen and Apr. 96, p325-333.

Measured Seismic Behavior of a Two-Story Masonry Building, Gregory R. Kingsley, Guido Magenes and G. Michele Calvi, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996, p123-134.

Method for Probabilistic Evaluation of Seismic Structural Damage, Ajay Singhal and Anne S. Kiremidjian, ST Dec. 96, p1459-1467.

Model to Incorporate Architectural Walls in Structural Analyses, H. Allison Smith and Vicki L. Vance, ST Apr.

96, p431-438. Neural Network Constitutive Models Determined from Structural Tests, Jamshid Ghaboussi, David A. Pecknold,

STUCLUTAI TESTS, JABISHIO UTADOUSSI, DAVID A. PECKION, Ming-Fu Zhang and Rami M. HajAli, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p701-704.
Nonlinear Identification of Semi-Active Control Devices, B. F. Spencer, Jr., S. J. Dyke, M. K. Sain and J. D. Carl-son, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p. 1997.

1996), p164-167.

Ocean Environment Contours for Structural Response Analysis and Experiment Design, Steven R. Winterstein, Todd C. Ude, Paolo Bazzurro and C. Allin Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p592-595

On the Response of Transmission Structures to High Winds, Acir Mércio Loredo-Souza and Alan Garnett Davenport, (Natural Disaster Reduction, George W.

Housner, ed. and Riley M. Chung, ed., 1997), p272-273.

Passive Control Systems for Mitigation of Near-Field Earthquake Ground Motions, Peter W. Clark and James M. Kelly, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p217-218.

Path Integration Applied to Structural Systems with Uncertain Properties, Søren R. K. Nielsen and H. Uğur Köylüoğlu, (*Probabilistic Mechanics & Structural Relia-*bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p6-9.

Prediction of Observed Response of Base-Isolated Structure, Nicos Makris and Himanshu S. Deoskar, ST May

96, p485-493.

Proposed Limit States Design Provisions for Masonry Mark B. Hogan, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p345-354.

Random Responses of Discretized Structures with Energy Dissipation Devices, C. W. S. To, M. L. Liu and J. M. Kelly, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p824-827.

Recent Progress in Thermally Induced Vibrations Research, John D. Johnston, Richard S. Foster, David L. Eby and Earl A. Thornton, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1134-

Reduction of Structural Response by Energy Dissipation Devices Modelled on Shape Memory Materials, C. W. S. To and J. M. Kelly, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p491-494.

Shear and Reaction Distributions in Continuous Skew Composite Bridges, Tarek Ebeido and John B. Kennedy, BE Nov. 96, p155-165.

A Simulation Procedure for First Passage Problems of Non-linear Structures, Veit Bayer and Christian Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996). p816-819.

Structural Evaluation of Existing Buildings for Seismic and Wind Loads, Charles Lindbergh, Maurice R. Harlan and James L. Lafrenz, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p317-318

Three-Dimensional Simulation of Structural Pounding During Earthquakes, M. Papadrakakis, C. Apostolopoulou, A. Zacharopoulos and S. Bitzarakis, EM May 96, p423-431.

Torsion in Symmetric Structures due to Ground-Motion Spatial Variation, Ernesto Heredia-Zavoni and Federico Barranco, EM Sept. 96, p834-843.

Variability Response Functions for Plane Elasticity Prob-lems with Multiple Stochastic Material/Geometric Properties, Lori Graham and George Deodatis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p174-177.

Structural safety

Assurance of Structural Safety—Priority Issue for Structur-al Engineers, Frank J. Heger, SC Nov. 96, p113-118.

Blast Resistant Design of Commercial Buildings, Mohammed Ettouney, Robert Smilowitz and Tod Rittenhouse, SC Feb. 96, p31-39.

Bridge Design by the AASHTO LRFD Bridge Design Specifications, Dennis R. Mertz and John M. Kulicki, Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1-8.

Computation of Structural Flexibility for Bridge Health Monitoring Using Ambient Modal Data, Scott W. Doe-bling and Charles R. Farrar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1114-1117.

Data and Data Interpretation in Bridge Management Sys-tems, George Hearn, Dan M. Frangopol, Tianna Szanyi and Steven Marshall, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p245-252.

Designs for Blast Protection (Available only in *Structures* special issue), Martin J. Fertal, P.E., CE Sept. 96, p3A-5A.

Earthquake Hazard Mitigation in Iran (Its Progress and Prospect), Mohsen Ghafory-Ashtiany, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p27-28.

Earthquake Predictions Shaky, CE Mar. 96, p8.

Embedded Sensors for Improved Early-Warning Emergency Response to Damaged Structures, Peter L. Fuhr, Dryver R. Huston and Edward Von Turkovich, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p39-40.

Health Monitoring Studies on Composite Structures for Aerospace Applications, George James, Dennis Roach, Bruce Hansche, Raul Meza and Nikki Robinson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1127-1133.

Implementation of Structural Redundancy in Bridge Design - A Probabilistic Approach, Robert W. Kritzler and Jamshid Mohammadi, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p682-687. A Multi-Loop Strategy for Performance-Based Optimization with Probabilistic Constraints, Robert H. Sues, David R. Oakley and Graham S. Rhodes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p126-129.

Optimum Reliability-Based Design Earthquake Load, Jun Kanda and Khaled A. Ahmed, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p194-197.

Protecting Buildings against Vehicle Bomb Attacks, Anatol Longinow and Kim R. Mniszewski, SC Feb. 96, p51-54.

Quake Proofing a Palace, John Casey, CE Aug. 96, p32-35.
Recent Advancements in Smart Tagged Composites for Infrastructure, Robert F. Quattrone and Justin B. Berman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1045-1054.

A Review (and Comparison) of DSHA and PSHA, Russell A. Green and William J. Hall, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p125-126.

Safety of Concrete Members Designed by ACI 318 Chapter 9 and Appendix C Load Combinations, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangool, ed. and Mircea D. Grigoriu, ed., 1996), p218-221.

Site-Specific Live Load Models for Bridge Evaluation, Michel Ghosn and Dan M. Frangopol, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p30-33.

Structural Control: Basic Concepts and Applications, Y. Fujino, T. T. Soong and B. F. Spencer, Jr., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1277-1287.

Structural Fire Resistance - Past, Present and Future, T. T. Lie and V. K. R. Kodur, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p345-351.

Structural Safety for Fire Conditions, Fan Li and R. W. Fitzgerald, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p352-356.

Structural Sensing with Fiber Optic Systems, Raymond M. Measures, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p224-227.

Structural stability

Collapse Analysis of Steel Frame Structures Under Earthquake Loading, Scott C. Martin and Roberto Villaverde, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p370-373.

Influence of Axial Stress and Dilatancy on Rock Tunnel Stability, Xiao-Dong Pan and Edwin T. Brown, GT Feb. 96, p139-146.

Maryland SHA's Procedure for Assessing Existing Bridges for Scour Vulnerability and for Rating Unknown Foundations, Leonard N. Podell, Stanley R. Davis and Dan Sajedi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2766-2774.

No More Flapping in the Wind, CE Aug. 96, p14.

Nonlinear Behavior of Composite Columns Under Varying Load Histories, A. Dall'Asta, EM Aug. 96, p743-752.

Restraint Demand Factors and Effective Lengths of Braced Columns, Jostein Hellesland and Reidar Bjorhovde, ST Oct. 96, p1216-1224.

Returning Veteran, Charles A. Baumgartner and William E. Beyer, CE Apr. 96, p68-71.

Rock Riprap for Grade Control, Charles E. Rice, Kerry M. Robinson and Kern C. Kadavy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p588-593.

Stormwater Management for San Joaquin Hills Transportation Corridor, Orange County, California, Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2826-2830.

Structural steels

691

ASTM A913/A913M: The Perfect Steel for Seismic Design, J. C. Gérardy, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p558-565.

Bridge Rehabilitation Permits Higher Live Loads, Dennis W. Stolldorf, P.E. and Thomas A. Holm, P.E., (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p1082-1090.

Concurrent Engineering and Electronic Data Interchange, Tony Tascione, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p397-406.

Decision Support Environment for Structural Steel, Gregory P. Pasley and W. M. Kim Roddis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p371-382.

European Experiences in Fire Design of Structural Steel, Yngve Anderberg, (Building an International Communiy of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p357-364.

Low Cycle Fatigue of Structural Materials, Paul Howdyshell and Kathryn Carlson, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p83-92.

No More Flapping in the Wind, CE Aug. 96, p14.

 Steel Connections Need More Research, A. Plumier, CE Sept. 96, p35.
 Structural Design Forum, Carl J. Lehman, SC May 96,

p60-66.

Structural Safety for Fire Conditions, Fan Li and R. W. Fitzgerald, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p352-356.

Swimming in Style, Gary Steficek, P.E., CE Aug. 96, p36-39.

Structural strength

Deformation, Alignment, and Vibration in Large Turbine-Generator Set, W. F. Teskey, J. W. Lovse and N. N. Al-Hanbali, SU May 96, p65-79.

Fiber Sensors for Damage Detection on Large Structures and for Assessment of Deformation Behavior of Cementitious Materials, W. R. Habel, D. Hofmann, B. Hillemeier and F. Basedau, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p355-358.

Measurement of Applied Stress in Steel Bridges, E. A. Mandracchia, (Engineering Mechanics, Y. K. Lin and T.

C. Su, 1996), p1118-1121.

Proposed Limit States Design Provisions for Masonry, Mark B. Hogan, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p345-354.

Structure reinforcement

System for Construction, Md. Salim, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p510-518.

Average Stress-Strain Relationships of Rebars in RC Panels, Abdeldjelil Belarbi and Amlan K. Sengupta, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p743-746.

Bond and Slip of Plain Rebars in Concrete, Y. L. Mo and J. Chan, MT Nov. 96, p208-211.

Concrete Beams and Slabs Retrofitted with CFRP Laminates, M. Arockiasamy, Ahmed Amer and M. Shahawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p776-779.

Design Recommendations for Bond of GFRP Rebars to Concrete, M. R. Ehsani, H. Saadatmanesh and S. Tao, ST Mar. 96, p247-254.

Development of Tension Grips for GFRP Rebars, Hota V. S. GangaRao and Derek Altizer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p394-399.

Evaluation of Bond Characteristics of Steel and Glass-Fiber Reinforcing Bars, James R. Lundy and Damian I. Kachlakev, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p638-647.

Fully Automated Rebar CAD/CAM System: Economic Evaluation and Field Implementation, Ronie Navon, Ya'acov Rubinovitz and Mendi Coffler, CO June 96, p101-108. Ground Penetrating Radar for Infrastructure Condition Assessment and Geophysical Applications: A Review, Udaya B. Halabe, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p812-819.

Improving Development Characteristics of Reinforcing Bars, CERF Report #94-6002, Civil Engineering Research Foundation, 1994, 0-7844-0062-8, 45pp.

Improving the Performance of Epoxy-Coaled Rebar, Robert D. Lampton, Jr. and Dieter Schemberger, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1209-1218.

1218

Inhibiting Action of Calcium Nitrite on Carbon Steel Re-bars, M. Ramasubramanian, B. N. Popov and R. E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1007-1016.

Long Term Behavior of Concrete Columns with CFRP, M. Arockinsamy, Ahmed Amer, S. Chidambaram and M. Shahawy, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1050-1053.

Monitoring Prestressed Structures, Jack F. Elliott, CE July

Neural Network Control for Accurate Rebar Bending, Phillip S. Dunston, S. (Ranji) Ranjithan and Leonhard E. Bernold, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p492-501.

ed., 1996), p492-501.
The Next Generation in Composite Rebars for Concrete Reinforcement, Salem S. Faza, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p905-913.
Prefabricated Epoxy-Coated Rebar for the U.S. Navy, Douglas F. Burke, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1199-1208.
Radical Rebar Forges Ahead, Eric Rasmussen, ET June/

July 96, p1,8.

Smart Composite Rebars with Enhanced Ductility, A. Be-larbi, K. Chandrashekhara and S. E. Watkins, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p788-791.

Annealing Strategy for Optimal Structural Design, Shyh-Rong Tzan and Chris P. Pantelides, ST July 96, p815-

827.
Application of the Concurrent Finite Element Method to Solution of the Fokker-Planck Equation, W. Yi, B. F. Spencer, Jr. and L. A. Bergman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p10-13.

Approximations for Elasto-Plastic Oscillations with Gaussian White Noise Excitation, Roger Pettersson, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p506-509.

Architectural Considerations in Design of Lunar-Based As-tronomical Observatories, Stewart W. Johnson, Koon Meng Chua, Milton Schwartz and Jack O. Burns, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p871-880.

Asymptotic Approximation of Reliability Integrals for Uncertain Systems, C. Papadimitriou, J. L. Beck and L. S. Katafygiotis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p574-577

Cable Corrosion in Bridges and Other Structures, Frank L. Stahl and Christopher Paul Gagnon, 1996, 0-7844-0014-

Stati and Sandra State S

Comparison of LQR and H. Algorithms for Vibration Control of Structures in Seismic Zones, H. Allison Smith and J. Geoffrey Chase, (Building on International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1164-1171.

monammani, ed., 1996), p1164-1171.
Concrete - A Practical Construction Material for Mars,
David S. McKay and Carlton C. Allen, (Engineering,
Construction, and Operations in Space, Stewart W.
Johnson, ed., 1996), p566-570.
Condition Assessment of Transportation Infrastructure
Using Ground-Penetrating Radar, Kenneth R. Maser, IS
June 96, p94-101.

Design Live Loads for Crowds in Motion, A. Ebrahimpour and R. L. Sack, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p420-427.

DSHA Versus PSHA for Critical Structures, Ellis L. Krinitzsky, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p241-242.

Dynamic Stability of Viscoelastic Structures under Sto-chastic Loading, S. T. Ariaratnam and G. Amaniampong, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p542-545.

An Electro-Optical Accelerometer for Civil Structural Applications, Maria Q. Feng, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p877-886.

An Electrorheological Damper with Annular Duct, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1197-1204.

Environmental Goal Needs Definition, David M. Herring, P.E., CE Dec. 96, p27-28.

Exact Solutions to A Class of Structure-Equipment Sys-tems, Genda Chen and T. T. Soong, EM Nov. 96, p1093-1100.

Experimental Implementation of Hybrid Control, J. Pandya, Z. Akbay, M. Uras and H. Aktan, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1172-1179.

Field Testing & Evaluating Carbon Cable Prestressed Pile, Srinivasa L. Iyer, Sivakumar Ramabhadran and Brian S. Vulcan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p386-393.

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Gain-Scheduled Adaptive Control of a Hybrid Structure, Moises A. Abraham, James R. Morgan and Alexander G. Parlos, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p260-261.

High-Performance Metals for Civil and Marine Structures, John W. Fisher, Richard Sause and Robert J. Dexter, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p23-37.

Hot-Spot Fatigue Design of Aluminum Joints, Maurice L. Sharp, Glenn E. Nordmark and Craig C. Menzemer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1027-1036.

Human Biomechanics Inform Seismic Protection, ET Apr./May 96, p10-11.

Identification of Structural Damage, S. Hassiotis and K. M. Grigoriadis, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1107-1114.

Identification of Wind Spectral Characteristics from Structure Response, K. Pan, N. P. Jones and J. H. Ellis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p482-485.

Including Inspection Imperfection in Optimizing Structural Management Policies, Mingxiang Jiang, Ross B. Corotis and J. Hugh Ellis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p368-371.

A Knowledge Based System for the Evaluation of Earth-quake Damaged Structures, John A. Kuprenas and John Manios, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p742-749.

Limit State Design Method of Structural System Using Re-liability-Based Optimization and Efficient Monte-Carlo Simulation Technique, Wataru Shiraki, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p635-

Load Space Formulation for Reliability Estimation of Complex Structures, X. L. Guan and R. E. Melchers, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p688-691. Loading and Material Behavior Effects on System Redun-dancy, Dan M. Frangopol and Keito Yoshida, (Building an International Community of Structural Engineers, S Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p674-681

Lunar Neighborhoods: Architecture for Extreme Environments, Milton Schwartz, Jeffrey Schwartz, John Bergquist, Carsten Keller, Preston Kelsey and Todd

Stringer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996, pp. 19127-1031. Lunar Regolith, John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

and Operations in 1996, p630-638.

Meteoroid Hazards in the Lunar Environment, Frank J. Rooney and John V. Gies, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p653-662.

Minimum Weight of Control Devices with Bounded LQG Control, Alexander A. Bolonkin, Duane E. Veley and Narendra S. Khot, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996). p1230-1236.

A New Element Flexibility Based FEM for Stochastic Structures, Yongjian Ren and Isaac Elishakoff, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p918-921. New Hybrid Seismic System Set for Seattle, CE Oct. 96,

p20,22

Notes on Prestressed Structures, Morris Schupack, CE Nov.

96, p30. NPC Integrator and Its Unconditional Stability for Response Analysis of Constrained Structures, David W Begg and Xiaojian Liu, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

p1.257-1244.
Numerical Modeling of Wind-Structure Interactions, Dahai Yu and Ahsan Kareem, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1005-1012.
On Housing Administration and Legislation of Egypt, A. S. Elnashai and M. M. Soliman, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p280-281.
On Structural Identification of Communications and Communication of the Co

1897), p.280-281.
Con Structural Identification of Constructed Facilities, A. Emin Aktan and James T. P. Yao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p651-658.

Optimal Rehabilitation of Locally Damaged Structures
Using the Pseudo Distortion Method, Prafulla V.
Makode, Ross B. Corotis and Martin R. Ramirez, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p606-612

Optimized Input Shaping for a Single Flexible Robot Link, David G. Wilson, Dennis Stokes, Gregory Starr and Rush D. Robinett, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996),

p1225-1229.

Overcoming Soil Uncertainty in Prediction of Construction and Industrial Vibrations, Mark R. Svinkin, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1178-1194. Parameter Identification of a Hysteretic Structure, M. Bat-

taini, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p430-433.

Planning an International Moon Mission: Lessons Learned, Joan Johnson-Freese, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p109-115.

p109-115.

Probabilistic Analysis of Complex Nonlinear Motions Under Combined Periodic and Random Excitations, Huan Lin and Solomon C. S. Yim, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p2-5.

Probabilistic Finite Element Analysis of Aerospace Structures, M. R. Khalessi, H.-Z. Lin, T. Y. Torng, Y. Zhang and A. D'Angelo, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p648-651.

A Probabilistic Framework for Brittle Fracture Assess-ments of Structures —Constraint and Ductile Tearing Effects, Claudio Ruggieri and Robert H. Dodds, Jr., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p878-881

Probabilistic Framework to Detect and to Identify Anoma-lies in Structures, Nabil Fares and Roula Maloof, (Prob-abilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Probability Based Design Requirements for Ship Struc-tures, Alaa E. Mansour, Paul H. Wirsching, Bilal M. Ayyub and Gregory J. White, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p98-101.

Probability Based Design Requirements for Unstiffened Panels in Ship Structures, Bilal M. Ayyub, Gregory J. White, Alaa E. Mansour and Paul H. Wirsching, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Probability Density Function of Linear Systems Subjected to a Random Stream of Poisson Pulses, G. Muscolino and G. Ricciardi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-

goriu, ed., 1996), p388-391.

Probability-Based Design Requirements for Longitudinally Stiffened Panels in Ship Structures, G. J. White, B. M. Ayyub, A. E. Mansour and P. H. Wirsching, (Probabilis-tic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p110-113.

Probability-Based Design Requirements with Respect to Fatigue in Ship Structures, P. H. Wirsching, A. E. Man-sour, B. M. Ayyub and G. J. White, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p114-117.

Protecting an American Folklore Legend, Arthur J. Sortet, III and Harry B. Thomas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p274-275.

Protection from Vibrations, S. Drabkin, P.E. and H. Lacy, P.E., CE Nov. 96, p30.

Random Elastic Response Characteristics of Bar Structures by Monte Carlo Simulation, Michael Koutsoukis and Edmund S. Melerski, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p812-815.

Ranking Models Used for Condition Assessment of Civil Infrastructure Systems, L. E. Chouinard, G. R. Andersen and V. H. Torrey, III, IS Mar. 96, p23-29.

Reliability Analysis in the Rehabilitation of Corps Strucclability Analysis in the Renabilitation of Corps sour-tures with Time-Dependent Needs, Mary Ann Leggett, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p134-141.

Reliability Analysis of Nonlinear Structures Using Stochastic Finite Elements, C. E. Brenner and C. Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p596-599.

Reliability Procedures as a Design Tool for Structures and Mechanical Components, G. I. Schuëller, M. Gasser, J. Hartl and G. Lener, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p800-803.

Reliability-Based Maintenance Strategy Using NDI, Achin-tya Haldar and Zhengwei Zhao, (*Probabilistic Mechan-*ics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p364-367.

Response to Arbitrarily Time-Varying Forces Using Convex Model, Chris P. Pantelides and Shyh-Rong Tzan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1252-1258.

Seismic Torsional Provisions: Influence on Element Energy Dissipation, Adrian M. Chandler, Joseph C. Correnza and Graham L. Hutchinson, ST May 96, p494-500.

A Simulation Procedure for First Passage Problems of Non-linear Structures, Veit Bayer and Christian Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996). p816-819

Smart Materials and Structures: A Review, C. Shakeri, M. N. Noori and Z. Hou, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p863-876.

Stability Analysis of a Geometrically Imperfect Structure Using a Random Field Model, York Schorling and Chris-tian Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p604-607.

Statistical Characteristics of Strength and Load Random Variables of Ship Structures, Khaled Atua, Ibrahim As-sakkaf and Bilal M. Ayyub, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p106-109.

Statistical System Identification of Structures Using ARMA Models, Joel P. Conte and Satyendra Kumar, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p142-145.

Structural Control with Electrorheological Dampers: Viscoplastic Behavior and Anticipation, Scott A. Burton and Nicos Makris, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1261-1268.

Structural Control: Basic Concepts and Applications, Y. Fujino, T. T. Soong and B. F. Spencer, Jr., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p127-1267.
Structural Damage due to Hurricane Marilyn in St. Thomas and Culebra, Luis A. Godoy, Roberto Huyke, Ricardo R. Lopez, J. A. Martinez-Cruzado and Raul Zapata, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p135-136.

Structural Studies of Historical Buildings IV, Frederick S. Merritt, AE Mar. 96, p42-43.

Success or Failure: A Tale of Two Projects, Dov Kaminetzky and Benjamin Lavon, CE June 96, p62-63.

Surface Profiling System for Measurement of Engineering Structures, Xiaoli Ding, Richard Coleman and J. Michael Rotter, SU Feb. 96, p3-13.

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Tensioned Fabric Structures—A Practical Introduction edited by R. E. Schaeffer, Frederick S. Merritt, AE Sept. 96,

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Toward Risk-Consistent Wind Hazard Design/Mitigation Criteria Using Probabilistic Methods, Lawrence A. dale, Peter J. Vickery and Andrew C. Steckley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p256-257.

Uncertainty Measures in Reliability Assessment of Ship Structures, Bilal M. Ayyub and Kwan-Ling Lai, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p621-626.

Wind Tunnel and Water Flume Testing in the Design of High Rise and Long Span Structures, Charles H. Thorn-ton, Leonard M. Joseph and Thomas Z. Scarangello, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p944-951.

Editor's Note, David Darwin, ST Jan. 96, pl.

Lateral Strength of Brick Cladded Frames, Stephen P. Schneider and Stephen J. Favieri, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p112-122.

Strength of Struts and Nodes in Strut-Tie Model, Young Mook Yun and Julio A. Ramirez, ST Jan. 96, p20-29.

Advice for Mentors, ME July/Aug. 96, p12-13.

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The Elements of Academic Research, Richard H. McCuen, ed., 1996, 0-7844-0171-3, 290pp.

Engineering Education for Appropriate Technology, Richard L. Rosen, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2743-2747.

Engineers Get Ready for 1996 Engineers Week, NE Jan. 96,

Getting No Respect? Whose Fault Is It Anyway? Phil Estes, NE May 96, p14.

How to Make Our Heroes—Their Heroes, Francis E. Griggs, Jr., (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p144-154.

Insect Robots: Case Studies for Teaching Students About Design of Computer-Aided Experimentation, James Moller and Osama Ettouney, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p310-316. Johnson Sparkplugs Chicago's Engineers Week Events, CE

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96, p14. School Children as Pedestrians in Cairo: Proxies for Improving Road Safety, Khaled A. Abbas, Ibrahim Mabrouk and Khaled A. El-Araby, TE July/Aug. 96, p291-

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Seismic Sleuths: A Grades 7-12 Materials Development and Teacher Enhancement Project, M. Frank Watt Ireton, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p33-34.
State Engineers as Policymakers: Apolitical Experts in a Federalist System, Bruce E. Seely, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E.

Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p123-135.
Student Guide for Space Conference Research Papers, Malva A. Knoll, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1319-1326.
Students Aid Bolivian Village, CE Sept. 96, p14,19.
Survey of University Students' Knowledge and Views on

Nuclear Waste Disposal and the Alternative Dispute Res-olution Process, Grant Sheng, Lenore Deffner and Sonja Fiorini, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p510-512. What's New at Nation's C.E. Schools, etc., NE Feb. 96, p9.

What's 'NEW' for 1996?, CE Jan. 96, p69.

what's NEW in 1990; C.E. Jan. 30, p.09.
The World's Oldest Civil Engineering Professor, Daniel S.
Turner, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert
T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p13-

Subcontractors

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Stochastic Determination of Wave Heights for Flood Control Channels, Scott E. Stonestreet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4058-4063.

Subgrades

Air Convection Embankments for Roadway Construction in Permafrost Zones, Douglas J. Goering, (Cold Regions Engineering: The Cold Regions Infrastructure—An In-ternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p1-12.

Assessing the Significance of Subgrade Variability on Test Section Performance, Maureen A. Kestler, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and

Mary J. S. Roth, ed., 1996), p685-694.

Cumulative Plastic Deformation for Fine-Grained Subgrade Soils, Dingqing Li and Ernest T. Selig, GT Dec. 96,

p1006-1013.

Dealing with Uncertain and Highly Variable Geotechnical Conditions Beneath the Inco Smelter in Copper Cliff, Karlis J. Jansons, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1383-1401.

Equivalent Single-Axle Load Factor for Rigid Pavements, Pin-Sien Lin, Yuan-Ting Wu, Tien-Kuen Huang and C. H. Juang, TE Nov./Dec. 96, p462-467.

Frost Action, Dennis E. Pufahl, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p57-86.

Modeling Damage to Rigid Pavements Caused by Subgrade Pumping, M. Asghar Bhatti, Jeffery A. Barlow and James W. Stoner, TE Jan./Feb. 96, p12-21.

Non-Linear Models for Resilient Modulus Characterization of Granular Soils, Anand J. Puppala, Louay N. Mohammad and Aaron Allen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p559-562.

Pavement Design Applying Allowable Frost Heave, Seppo Saarelainen, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p890-898.

Soil Stabilization Utilizing Alternative Waste Materials, Greg Heckel and Riyad Wahab, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p318-327.

Non-Growing Season Water Budgets for a Shortgrass Steppe, Shusen Wang, William J. Parton and Gigi A. Richard, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p237-242.

Submerged flow

Grade-Control Structures for Salt River Channelization, Dennis L. Richards and Tim Morrison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p606-611.

Submerged Flow Regimes of Rectangular Sharp-Crested Weirs, S. Wu and N. Rajaratnam, HY July 96, p412-414.

Local Scour: By A Deeply Submerged Horizontal Circular Jet, Yee-Meng Chiew and Siow-Yong Lim, HY Sept. 96,

p529-532.

Studies on the Erosion of a Compacted Soil, G. J. Hanson and K. M. Robinson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2427-2432.

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Sediment Control at Water Intakes, Yalin Wang, A. Jacob Odgaard, Bruce W. Melville and Subhash C. Jain, HY June 96, p353-356.

Coupled and Uncoupled Poroelastic Solutions to Land Subsidence due to Groundwater Withdrawal, Giuseppe Gambolati, Mario Putti and Pietro Teatini, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p483-486.

Cover-Subsidence Sinkhole Evaluation of State Road 434. Longwood, Florida, Jon Foshee and Brian Bixler, GT Nov. 94, p2026-2040. Eastern San Joaquin County Groundwater Management, Monique B. Magolske and Miguel A. Marino, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2781-2786. Effects of Ground Subsidence on a House, R. M. Bennett,

E. C. Drumm, G. Lin, T. Triplett and L. Powell, CF Nov.

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Geophysical Investigation of Karst Collapse Features for a Proposed Waste Rock Stockpile Irian Jaya, Indonesia, Philip H. Duoos and Rowland B. Cromwell, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p86-100.
Soft Ground Improvement in Lowland and Other Environ-

ments, D. T. Bergado, L. R. Anderson, N. Miura and A. S. Balasubramaniam, 1996, 0-7844-0151-9, 433pp.

Uncertainty in Evaluation of Historical Subsidence Measurements, Kevin M. O'Connor, Sean M. Killen, Mark R. Chandler, Jan E. Stache and John A. Siekmeier, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p710-726.

Verification of the Bruun Rule for the Estimation of Shoreline Retreat Caused by Sea-Level Rise, Nobuo Mimura and Hisamichi Nobuoka, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

Substitutes

Soil Stabilization Utilizing Alternative Waste Materials, Greg Heckel and Riyad Wahab, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p318-327.

Anaerobic Treatment of High-Sulfate Wastewater and Substrate Interactions with Isopropanol, Peter Fox and Swamy Ketha, EE Nov. 96, p989-994.

How Input Active Biomass Affects Sludge Age and Proc-ess Stability, Bruce E. Rittmann, EE Jan. 96, p4-8.

Substrate Consumption Kinetics in Anaerobic Biofilm Flu-idized Bed Reactor, Enrique J. La Motta and Patricio Cascante, EE Mar. 96, p198-204.

Damage Estimation Using Substructural Identification in Time Domain, Chung-Bang Yun and Hyeong-Jin Lee, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p846-849

Dynamic Sub-Structure Method in Time Domain Usin Analytical Representation of Dynamic Stiffness of Soil,

Nagayuki Yoshida, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p184-187.
High Performance Highway Bridge Substructures, Robert W. Barnes and John E. Breen, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p176-187.

Investigation of Nonlinear Fluid-Structure Interaction, T. E. Fenske, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p407-415

Parallel Structural Analysis with Computers and Engineers, Edward L. Wilson, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p1-18.

Subsurface drainage Alternatives for Managing Shallow Ground Water in Arid Irrigated Areas, James E. Ayars, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p183-188.

Dynamic vs. Quasi-Static Effluent Limits, Joe Karkoski, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Economic Incentives Encourage Improvements In Farm-Level Water Management Practices, David Cone, Laurie Houston and Dennis Wichelns, (North American Water

Houston and Dennis wichenis, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p406-411. An Evaluation of Drainage Conditions in the San Joaquin Valley, M. Manucher Alemi and George Nishimura, (North American Water and Environment Congress & Bathala ed. (1906). Destructive Water, Chenchayya Bathala, ed., 1996).

Monte Carlo Simulation to Evaluate Slope Stability, Doug-las Scott Chandler, (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p474-493.

Non-point Source Policies for Agricultural Drainage, Den-nis W. Westcot, Joe Karkoski and Rudy Schnagl, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p875-880.

Periodic Variation in Karst Stream Losses, C. Warren Campbell, Mohamed Abd El Latif and Larry Foster, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1261-1266.

Shallow Ground Water Management with a Modified Sub-surface Drainage System, J. E. Ayars, R. A. Schoneman, F. Dale and P. Shouse, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2130-2135.

Southern San Joaquin Drainage Water Management, Doug-las E. Davis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p382-387.

surface drai

BMP for Control of Agricultural Nonpoint Source Flow, E. K. O'Brien and J. C. Guitjens, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1489-1494.

Effective Subsurface Retention/Detention Systems, James E. Milligan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2276-2281.

Subsurface exploration

Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996, 0-7844-0203-5, 864pp.

- Application of the Limit-State Method for Probabilistic Unsaturated Flow Modeling, Yanyong Xiang and Srikanta Mishra, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p108-110.
- Computational Tools for Subsurface Conceptualization, Earl V. Edris and Eileen Poeter, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2577-2582.
- Controlled Field Experiments for Assessment of Subsurface NAPL Behaviour and Remediation, J. A. Cherry and D. J. A. Smyth, (Non-Aqueous Phase Liquid: (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p3-24.
- Hydraulic Design of Subsurface Flow Wetlands, Edward L. Marsteiner, Thomas L. Theis, Anthony G. Collins and Thomas C. Young, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2421-2426.
- Hydraulics of Subsurface Flow Constructed Wetlands, A. Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p52-57.
- Overview of DoD Research in Groundwater Modeling, J. P. Holland, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2565-2570.
- A Review of NAPL Modeling Approaches for Remedia tion, James W. Mercer, Zafar Adeel and Charles R. Faust, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p46-65.
- etland Designs for Environmental Protection— Application in India, Subijoy Dutta, Dennis A. Haag and Jon B. Kraft, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, Wetland Designs ed., 1996), p3722-3727.

Subsurface investigations

Air Sparging Experiments on a Two Dimensional Sand Box with DNAPLs: Multiphase Investigation with Electrical Impedance Tomography, Jong Soo Cho, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p369-380.

Application of GIS in Site Selection for Nuclear Waste Dis-posal Facility, Grant Sheng, Isaac N. Luginash and John Sorrell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p95-97.

Application of Ground-Penetreting Radar to a Site Investi-gation Involving Shallow Faults, Christopher L. Liner and Jeffrey L. Liner, (Case Histories of Geophysics Ap-plied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p101-111.

The Application of Time Domain Electromagnetics to a Regional Groundwater Investigation in Western Washington, Rory Retzlaff and Robert H. Anderson, (Case Histories of Geophysics Applied 11. Anderson, (Case Histo-Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p27-41.

Characterizing In Situ DNAPL Distribution, Mobility State, and Dissolution, Timothy J. Peck, Joy E. Ligé, Ian D. MacFarlane and Frank T. Barranco, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p103-114.

Damage due to Northridge Earthquake Induced Movement of Landslide Debris, Robert W. Day and Dennis M. Poland, CF Aug. 96, p96-108.

Delineating Subsurface Contamination Using Geostatistical and Non-Intrusive Geophysical Methodologies, Sandra Bowling, Wayne Woldt and Dennis Schulte, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2230-2235.

Delineation of a Dielectric Fluid LNAPL Using Discrete Sampling Methods, Michael J. Pierdinock, Spence S. Smith, Christopher L. Kingma and John Seferiadis, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p139-150.

Design and Construction of Large Diameter High Pressure Gas Transmission River Crossing for San Diego Gas and Electric Using Directional Boring, Jey K. Jeyapalan and Robert Dalby, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p379-386.

Development of Remediation Technologies Simulators, Mark S. Dortch and Christian J. McGrath, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2583-2588.

Distribution and Nutrient Limitations of Heterotrophic Bacteria from Yucca Mountain, D. L. Haldeman, L. Ragatz and P. S. Amy, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p30-32.

Equivalent Strength of Porous Fractured Rock, William G. Pariseau, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p216-219.

Evaluating Subsurface Uncertainty Using Zonal Kriging, William L. Wingle and Eileen P. Poeter, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1318-1330.

Evaluation of Geological Formations of West Ukraine from the Standpoint of Raw Disposal, Olga V. Shestopalova, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p79-80.

Generalized Plane Strain Finite Element Analysis: Geome-chanical Applications, V. N. Kaliakin, L. Cui and A. H-D Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p289-292.

Geophysical Log Interpretation Using Neural Network, S. Pezeshk, C. V. Camp and S. Karprapu, CP Apr. 96, p136-142.

Geotech Design Reports Get a Litmus Test, Brenda Myers Bohlke, CE Dec. 96, p47-49. Indian Programme on Deep Geological Disposal of Radio-active Waste, A. N. Prasad, K. Balu, R. K. Mathur and P. K. Narayan, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p22-24.

Influence of Hammer Type on SPT Results, Elliott E. Drumright, Charles W. Pfingsten and Robert G. Lukas.

GT July 96, p598-599.

Integrating the Refraction Seismic Method into Stream Crossing Characterization for Scour and Excavation Conditions, Michael L. Rucker, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1163-1177.

Laser Induced Fluorescence and Cone Penetrometer Testing for Delineation of Hydrocarbons, Benjamin J. Timering to Delineation of Hydrocaroons, Derightin J. Hiner-son and Donald M. Moran, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p115-126. Localized Alteration of the Paintbrush Nonwelded Hydro-

logic Unit within the Exploratory Studies Facility, Z. E. Peterman, R. W. Spengler, F. R. Singer and S. C. Beason, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p46-47.

Mapping History, Rebecca Balcom, CE Oct. 96, p54-56. Minimizing Uncertainties in Geotechnical Investigations, Yakov M. Reznik, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford,

ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p149-166.

Modelling of a Heater Experiment in a Saturated Granite with Thermoporoelastic Source Singularities, Emmanuel Detournay and Ilya Berchenko, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p44-47.

Modelling of Thermal-Hydrological-Mechanical Processes in a Discrete Joint, T. S. Nguyen, A. P. S. Selvadurai and P. Flavelle, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p60-63.

Naturally-Occurring Chemical Analogues for Repository-Derived Radionuclides, Bill Miller, (High Level Radio-active Waste Management, Technical Program Commit-

tee, 1996), p50-52.

Optimizing Soil Vapor Extraction System Design and Op-erations for NAPL Remediation, John M. Farr, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p201-211.

Practical Experiences with Sealing Technology in the Czech Republic, Michal Vanccek, (High Level Radioac-tive Waste Management, Technical Program Committee,

1996), p415-416.

Risk Assessment of Nambe Falls Dam, J. Lawrence Von Thun, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p604-635.

Settlement of Shallow Foundations on Uncontrolled Mine Spoil Fill, J. Richard Cheeks, CF Nov. 96, p143-151.

Simulation and Observation of ESF Tunnel Effects on Barometric Conditions, Parviz Montazer and Nick Stellava to, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p92-94.

Some Thoughts on Thermoporoelastic Coupling, M. Bai, Y. Abousleiman and J.-C. Roegiers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p48-51.

The Use of Direct Push Technologies in Expedited Site Characterization, Greg A. Stenback, Bruce H. Kjartanson, Al Bevolo and David Wonder, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p180-194.

Earthquake Response of Structure-Elevator System, F. Segal, A. Rutenberg and R. Levy, ST June 96, p607-616.

Earthquake Response of Structures by Structural Mixture Theory, Mohammed S. Al-Ansari, O. M. Kirkely and Gregory Gillette, ST Oct. 96, p1198-1207.

The Limitations of Independent Controller Design for a Multiple-link Flexible Macro-manipulator Carrying a Rigid Mini-manipulator, H. D. Stevens and Jonathan How, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p93-99.

Multidisciplinary Product Modeling of Buildings, W. P. S. Dias, CP Jan. 96, p78-86.

Subway tunnels

The Human Side of L.A. Metro, Donald R. Ciandella, CE Dec. 96, p36-39.

Lining the Line, Walter Mergelsberg, Vojtech Gall and Gerhard Sauer, CE Mar. 96, p50-52.

Nubways
Customer Oriented Train Scheduling in Underground Rail-way Systems, Riccardo Minciardi, Massimo Paolucci and Raffaele Pesenti, (Applications of Advanced Technologies in Transportation Engineering, Yogos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), 120 123 p149-153.

The Human Side of L.A. Metro, Donald R. Ciandella, CE Dec. 96, p36-39.

Soft-Ground Subway Construction, Mohammad Irshad, P.E. and John R. V. Dickson, P.E., CE Nov. 96, p54-57.

Anaerobic Treatment of High-Sulfate Wastewater and Substrate Interactions with Isopropanol, Peter Fox and Swamy Ketha, EE Nov. 96, p989-994.

Freeze-Thaw Durability of Concretes With and Without Class C Fly Ash, C. Ouyang and O. J. Lane, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p939-948.

ps39-948.

Preliminary Studies of a Karst Warm Spring in Mt. Kräuterin, Austria, Dachang Zhang, Rudolf Pavuza, Hans Fischer and Karl Mais, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1279-1284.

Sulfur dioxide

Boiler Emissions Drop, CE Nov. 96, p21. Computerized I&M Programs for Oil-Fired Space Heating Boilers, Alexander P. Economopoulos, EY Aug. 96,

ump pump

Effects of Approach Flow Conditions on Pump Sump Design, Gustavo Arboleda and Mutasem El-Fadel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p376-381.

Effects of Approach Flow Conditions on Pump Sump De-sign, Gustavo Arboleda and Mutasem El-Fadel, HY Sept. 96, p489-494.

Supercritical flow

Backwater Computation for Transcritical River Flows, C. Beffa, HY Dec. 96, p745-748.

Depth-Averaged Boussinesq Equations Applied to Flow in a Converging Channel, Thomas Molls and Gang Zhao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p328-333.

Incipient Jump Conditions for Flows over a Vertical Sill, Iwao Ohtsu, Youichi Yasuda and Hideki Hashiba, HY

Aug. 96, p465-469.

Aug. 96, pags-ags.
An LPI Numerical Implicit Solution for Unsteady Mixed-Flow Simulation, D. L. Fread, Ming Jin and Janice M. Lewis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3222-327.

Stochastic Determination of Wave Heights for Flood Control Channels, Scott E. Stonestreet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), P4058-4063.

Superstructures

Comparative Analysis of Bridge Superstructure Deteriora-tion, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136.

Development of Design Factors for Redundant Concrete Bridges, Michel Ghosn, Youhong Hang and Fred Moses, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p716-719.

Supervision
CII offers "Framework" for Supervisory Education, ME Sept./Oct. 96, p6.

Electrical Construction Foreman Task Scheduling, Bolivar A. Senior, CO Dec. 96, p363-369.

A Little Common Sense for the New Boss, David Purdy, SC Aug. 96, p91-92.

Supports

Alternative Strategies for Temporary Support during Struc-tural Repair of Reinforced-Concrete Beams, John Cairns, ST Mar. 96, p238-246.

Design of Pressure Class Ductile Iron Pipe on Supports, L. Gregg Horn, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p222-229.

Going Down, CE July 96, p14.

Rehab by Helicopter, Hans H. Torabi, Harold B. Tennat, A. John Burnell and Thomas C. Benson, Jr., CE Jan. 96, p44-47.

Generalized Coulomb Active Earth Pressure for a Dis-tanced Surcharge, Ernesto Motta, GT June 94, p1072-

1079.
Flysical Modeling to Determine Head Loss at Selected Surcharged Sewer Manholes, K. H. Wang, T. G. Cleveland, C. Towsley and D. Umrigar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3835-3840.

Application of the Q-3D SHORECIRC Model to Surfbeat. A. R. Van Dongeren, I. A. Svendsen and F. E. Sancho, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p233-244.

Wave Groups Approaching a Beach: Full Irrotational Flow Computations, T. C. D. Barnes and D. H. Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p116-127.

Surf zone
Acoustic Sediment Flux Measurements from DUCK '94, Karen M. Kohanowich, Timothy P. Stanton and Edward B. Thornton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p739-748.
Breaking Waves in Surfzones, Ke Yu and Ib A. Svendsen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p329-340.
Changes, of Spand Graip, Distribution in the Surf Zone, Ka.

Changes of Sand Grain Distribution in the Surf Zone, Kazumasa Katoh and Shin-ichi Yanagishima, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p639-650.

Zeidler, ed., 1920), po.39-030.

Comparison of Computed Three-Dimensional Wave-Driven Currents with Measurements, Philippe Péchon and Arnaud Desitter, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p513-520.

Contributions to the Momentum Balance in the Surf Zone, Marien Boers and Jan van de Graaff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p257-268.

Dynamics of Sand Bars in Coastal Zones, B. Boczar-Karakiewicz, J. L. Bona, A. Naguszewski and W. Romańczyk, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p862-867.

An Energetics Approach to Sand Transport on Beaches, Paul Russell, Yolanda Foote and David Huntley, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p829-840.

Longshore Nonuniformities of Nearshore Currents, F. E. Sancho, I. A. Svendseń, A. R. Van Dongeren and U. Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p425-436.

Looking for Wave Groups in the Surf Zone, Merrick C. Haller and Robert A. Dalrymple, (Coastal Dynamics' 95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p81-92.

1970), pol-32.
The Modelling of Plunging Breakers by the Introduction of a K-I Turbulence Closure Model, Michele Drago and Luigi Iovenitti, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p317-328.

Numerical Model for On-Offshore Sediment Transport with Moving Boundaries, Cheol-Eung Lee, Moo-Hyun Kim and Billy L. Edge, WW Mar./Apr. 96, p84-92.

On the Origin of Infragravity Waves in the Surf Zone of a Dissipative Multiple Bar System, B. G. Ruessink, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p93-104.

One-Dimensional Modelling of Individual Breaking Waves, K. M. Wijnberg and L. C. van Rijn, (Coastal Dy-namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p341-354.

Prototype Monitoring Study of Wave Climate and Beach Profile in the Surfzone, Joachim Grüne, (Coastal Dynam-ics '95, William R. Dally, ed. and Ryszard B. Zeidler,

ed., 1996), p559-570.

Spingat, Frank, Hans-H. Dette and Karsten Peters, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p477-488.

Studies on Wave, Current and Suspended Sediment Char-acteristics at the Surf Zone, Chien-Kee Chang and Ching-Her Hwang, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p728-738.

Study of Surf-Zone Macroturbulence and Mixing Using Delta '93 Field Data, A. Rodriguez, A. Sánchez-Arcilla, J. Gomez and E. Bahia, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p305-316

Surf-Zone Modeling, Ib A. Svendsen and Uday Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p13-32.

Nyszard B. Zeidler, ed., 1750, p. 15-52.
Vorticity and Eddies in the Surf Zone, D. Howell Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p460-464.

Wave Stress and Longshore Current on Barred Profiles, T. C. Lippmann, E. B. Thornton and A. J. H. M. Reniers, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), 401-412.

Waves on a 1:100 Slope: Experiments and Numerical Mod-els, G. Liberatore, M. Petti, M. Drago and M. Sclavo, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p355-365.

Design and Repair for Surficial Slope Failures, Robert W. Day, SC Aug. 96, p83-87.

Surface drainage

Design and Implementation of On-Farm Surface Drainage Projects in the Humid Tropics of Mexico, John C. Tiedeman and Rodolfo Namuche Vargas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2480-2485.

Periodic Variation in Karst Stream Losses, C. Warren Campbell, Mohamed Abd El Latif and Larry Foster, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1261-1266.

surface dynamics

Determination of Force and Surface Pressure Coefficients of High Reynolds Number Flow over Circular Cylinder by Discrete Vortex Method, Fusen He and Tsung-chow Su, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p979-982

Surface energy

Simulating Evapotranspiration on Semi-Arid Rangelands, G. N. Flerchinger, C. L. Hanson, W. P. Kustas and M. A. Weltz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p424-429.

An Update on Surface Renewal Estimation of Evapotranspiration, R. L. Snyder, D. Spano, P. Duce and K. T. Paw , (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p430-435.

Complete Hydrodynamic Border-Strip Irrigation Model, Vivekanand Singh and S. Murty Bhallamudi, IR July/ Aug. 96, p189-197.

Economic Incentives Encourage Improvements In Farm-Level Water Management Practices, David Cone, Laurie Houston and Dennis Wichelns, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p406-411.

Effects of Spatially Variable Intake on Surface Irrigation Advance, Dani Or and Wynn R. Walker, IR Mar/Apr.

96, p122-130.

Flexible Water Deliveries: One District's Experience, Eric Swenson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p679-684.

Initial-Inflow-Variation Impacts on Furrow Irrigation Eval-uation, D. Renault and W. W. Wallender, IR Jan/Feb.

Modeling Transport of Bromide in Furrow-Irrigated Field, Behzad Izadi, Bradley King, Dale Westermann and Ian McCann, IR Mar./Apr. 96, p90-96.

Two-Dimensional Simulation of Basin Irrigation. I: Theory, E. Playán, W. R. Walker and G. P. Merkley, IR Sept./ Oct. 94, p837-856.

Surface jets

Stably-Stratified Surface Thermal Jet in a Current: Cold Climate Condition, A. M. Zaghloul, R. Martinuzzi and R. E. Baddour, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1062-1065.

Erosion and Stability of a Mine Soil, Tien H. Wu, Alan T. Stadler and Chin-wah Low, GT June 96, p445-453.

Surface properties

Surface Modifications to Reduce Thaw Degradation of Permafrost, John P. Zarling and Jasper Rajesh, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p46-59.

Surface Profiling System for Measurement of Engineering Structures, Xiaoli Ding, Richard Coleman and J. Michael Rotter, SU Feb. 96, p3-13.

Surface roughness

Assessment of Kinematic Wave Time of Concentration, Richard H. McCuen and Jill M. Spiess, HY Mar. 95,

Attachment Strength of Zebra Mussels on Natural, Polymeric, and Metallic Materials, Josef Daniel Ackerman, Catherine M. Cottrell, C. Ross Ethier, D. Grant Allen and Jan K. Spelt, EE Feb. 96, p141-148.

Diffusion Wave Modeling of Distributed Catchment Dy-namics, Stefano Orlandini and Renzo Rosso, HE July 96,

Effects of Spatial Data Resolution and Subarea Size on a Distributed Runoff Model, Thomas A. Seybert and Chin Y. Kuo, (North American Water and Environment Conress & Destructive Water, Chenchayya Bathala, ed., 1996), p2701-2706.

Flow Investigation for Landfill Leachate (FILL), Reza M. Khanbilvardi, Shabbir Ahmed and Phillip J. Gleason, EE Jan. 95, p45-57.

Runoff Curve Number: Has It Reached Maturity? Victor M. Ponce and Richard H. Hawkins, HE Jan. 96, p11-19. Transforms for Runoff and Sediment Transport, Pierre Y. Julien, HE July 96, p114-122.

Surface waters

Accidental Situations: Application of Surface-Water Monitoring Data, P. Berg and T. Vasiljeva, (North American Water and Environment Congress & Destructive Water. Chenchayya Bathala, ed., 1996), p1338-1339.

Cheichayya Bathala, ed., 1995, p1359-1359.

Assessment of the Surface-Water Pollution and Measures for Emergency Stations Warning in the Republic of Uzbekistan, T. Osokova, V. Talskikh and O. Smolkova, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), 2523.

Bayesian Model for Fate and Transport of Polychlorinated Biphenyl in Upper Hudson River, Laura J. Steinberg, Kenneth H. Reckhow and Robert L. Wolpert, EE May 96, p341-349.

Bubbleless Fiber Aerator for Surface Waters, Peter T. Weiss, Bryan T. Oakley, John S. Gulliver and Michael J.

Semmens, EE July 96, p631-639.

The Direction of the Point Source Program, Deborah G. Nagle, Gregory W. Currey and Will Hall, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3580-3585.

Eastern San Joaquin County Groundwater Resource Plan-ning Model Development and Calibration, Najmus Sa-quib, Young Yoon and Mike Cornelius, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3509-3514.

Eastern San Joaquin County Groundwater Resource Plan-ning Alternative Analysis, Najmus Saquib, Alex Chen, Umesh Lalwani, Mike Cornelius, Jeff Kishel, Gary Nuss and Mark Williamson, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3515-3520.

Economic Efficiency of Regulations for Allocation and Control of Surface Water Withdrawals in Humid Re-gions, J. Wayland Eheart and Kenneth W. Harrison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2713-2718.

Editor's Note, Thomas L. Theis, EE Oct. 96, p888.

Effect of Surface Water and Ground Water Interaction on Atrazine Transport to Pumping Wells, Chittaranjan Ray, David Soong, Deva K. Borah and George R. Roadcap, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1575-1580.

EPA Requires Cryptosporidium Watch, CE July 96, p20.

Flooding of an Underground Facility at Yucca Mountain: A Summary of NRC Review Plans, Neil M. Coleman, Rex G. Wescott and Terry L. Johnson, (High Level Radioac-tive Waste Management, Technical Program Committee, 1996), p205-207

A Graphical Environment for Multi-Dimensional Surface Water Modeling, Alan K. Zundel and Norman L. Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Los Angeles County Department of Public Works Storm Water Quality Assessments, Los Angeles, California, Novin Rashedi and David Liu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3993-3997.

Modeling of Surface Water Pumps in TVA Reservoirs, Boualem Hadjerioua, Mark H. Mobley, Gary E. Hauser and W. Gary Brock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3188-3193.

A New Model of California's SWP/CVP Systems, Tariq N. Kadir and Miguel A. Marino, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3068-3073.

Courrence and Significance of Cryptosporidium parvum and Giardia lamblia in Surface Waters on Alaska's North Slope, Michael R. Pollen, Cindy L. Christian, Craig D. Nordgren and Jonathan D. Pollen, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p494-505.

Rational-Method Equation and HEC TD-15, T. V. Hromad-ka, II and R. J. Whitley, IR Jan./Feb. 96, p15-18.

Simulating Atrazine Transport with HSPF in an Agricultural Watershed, Anne-Marie Laroche, Jacques Gallichand, Robert Lagacé and Alain Pesant, EE July 96, p622-630.

Simulation of Three-Dimensional, Non-Hydrostatic Free-Surface Flows for Estuaries and Coastal Seas, Vincenzo Casulli and Stelling Guus S., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p1-12.

Small Inocula Can Effect In Situ Biodegradation, Rolf U. Halden and Daryl F. Dwyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2402.

Surface Water Pretreatment Using Floating Media Filter, C. Visvanathan, D. R. I. B. Werellagama and R. Ben Aim, EE Jan. 96, p25-33.

Water Resources Planning for the Fort Peck Indian Reservation, Montana, Deb Madison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4026-4029.

Effects of Soil Nonhomogeneity on SASW Testing, Nenad Gucunski, Vahid Ganji and M. H. Maher, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1083-1097.
Interactive RANS/Laplace Method for Nonlinear Free Surface Flows, Hamn-Ching Chen and Sing-Kwan Lee, EM

Feb. 96, p153-162.

Investigation on Active Isolation of Machine Foundations by Open Trenches, S. Ahmad, T. M. Al-Hussaini and K.

L. Fishman, GT June 96, p454-461.
Reliability of the SASW Method for Determination of the Shear Modulus of Soils, Karen E. Tuomi and Dennis R. Hiltunen, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1225-1238.

Wave Scattering by Submerged Elliptical Disk, S. Zhang and A. N. Williams, WW Jan./Feb. 96, p38-45.

Surface-active agents
2-D Experimental Investigation of Surfactant Mobilization
of Light Nonaqueous Phase Liquid, Lizette R. Chevalier,
Roger B. Wallace, David C. Wiggert and Mohsen D. Shabana, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p357-368.

Biodegradation of Nonionic Surfactants and Effects of Oxi-dative Pretreatment, C. D. Adams, S. Spitzer and R. M.

Cowan, EE June 96, p477-483.

Mechanisms of Removal of Residual Dodecane Using Surfactant Foam, HsienShen S. Chu, Amir Salehzadeh, Avery H. Demond and Richard D. Woods, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p269-280.

Rate-Controlled Micellar Solubilization of an LNAPL in Aquifer Materials, Dianne J. Luning Prak, Kurt D. Pennell, Linda M. Abriola and Walter J. Weber, Jr., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Enviro ment: Assessment and Remediation, Lakshmi N. Reddi,

ed., 1996), p639-648.

Soil Type Effect on NAPL Removal by Surfactant, Olubun-mi M. Ogunsola and Mark A. Tumeo, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Asand Remediation, Lakshmi N. Reddi, ed.,

1996), p281-291.

Surfactant Enhanced Electrokinetic Remediation of Gaso-Iline Contamiente Deciriosmiente Reineutation of Gastine Iline Contaminated Soils, Sujan K. Bhattacharya, David H. Foster and J. Mohan Reddy. (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p311-

Surfactant Enhanced Gravity Drainage (SEGD) of Dense Nonaqueous Phase Liquids: A New Concept in the In-situ DNAPL Remediation, Milind D. Deo and Ju-Woung Yoon, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Laksh-

mi N. Reddi, ed., 1996), p393-404.

Surfactant-Enhanced Extraction and Biodegradation of a Non-Aqueous Phase Contaminant in Soil, Satishkumar Santharam, Larry Eugene Erickson and Liang-tseng Fan, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p419-430.

The Use of Surfactants to Remediate NAPL-Contaminated Aquifers, Kurt D. Pennell, Linda M. Abriola and Laura Loverde, (Non-Aqueous Phase Liquids (NAPLs) in ent: Assessment and Remediation,

Subsurface Environment: Assessment at Lakshmi N. Reddi, ed., 1996), p221-232.

Forces on a Vertical Wall due to Long Waves, Bores, and Dry-Bed Surges, Jerald D. Ramsden, WW May/June 96, p134-141.

Surveying

Basic Concepts of L₁ Norm Minimization for Surveying Applications, John Marshall and James Bethel, SU Nov. 96, p168-179.

Editorial, Earl F. Burkholder, SU Nov. 96, p143-144.

Error Mohr Circle and Invariants of Cofactor Coefficient,

Xinjian Kou and Jimian Song, SU Nov. 96, p158-167.
Guest Editorial, Robert W. Foster, SU Aug. 96, p95-96.
Real-Time Construction Staking, Don K. Nasland and David Paul Johnson, CE June 96, p46-49.
Simplified Transformation between NAD27 and NAD83 in

outheastern Wisconsin, Kurt W. Bauer and Earl F. Burkholder, SU Feb. 96, p26-39.

Survey Distance Units: A Better Way, Larry E. Stanfel, SU Aug. 94, p130-132.

Aug. 94, p130-152.
A Surveying Trip Report from George Washington's Diary, Michael P. Johnson and William P. Johnson, Jr., (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p1-12.

Beach Profile Evolution Under Mean Conditions, José-María Medina V., Luis Moreno and José C. Santás, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p595-606.

Deformation, Alignment, and Vibration in Large Turbine-Generator Set, W. F. Teskey, J. W. Lovse and N. N. Al-Hanbali, SU May 96, p65-79. Editorial, Sharon deMonsabert, EY Apr. 96, p1.

Marketing is Top Priority for Construction Firms, ME Mar./Apr. 96, p9.

A Review and Assessment of the Journal of Computing in Civil Engineering, Sivand Lakmazaheri and William Rasdorf, CP Apr. 96, p95-96.

Role of Computing: Practitioners' Perspective, Robert J. O'Neill, Robert M. Henry and Thomas A. Lenox, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p670-676. A Satellite in Your Future?, ME Mar/Apr. 96, p9-10.

Survey of Storm-Water Utilities Available, Robert B. Benson, CE July 96, p29.

Surveys, data collection

ASCE's Biannual Salary Index, CE Aug. 96, p64,66,67. ASFE Publishes Financial Performance Survey, ME July/ Aug. 96, p6.

Bonuses Up Sharply, ME Nov./Dec. 96, p12.

Bonuses Up Sharpty, ME. Nov./Dec. 96, p12. Claims Analysis from Risk-Retention Professional Liability Group, Jack R. Janney, C. Roy Vince and Jack D. Mad-sen, CF Aug. 96, p115-122. Construction Execs Expect Growth, CE June 96, p8. Design Quality Management Activities, Abdulaziz A. Bubshait and Ahmad Al-Abdulrazzak, El July 96, p104-

Electric Vehicle Charging Sites Surveyed, CE Mar. 96, p8. Emerging High-Tech Areas of Civil Engineering Attract Women, Wesley Scott and Walter Boles, El Jan. 96,

An Empirical Assessment of Continuing-Education Needs, S. Dowlatshahi, ME Sept./Oct. 96, p37-44.

Environmental Engineering Forum, Steven I. Safferman, Vivek P. Utgikar and Sarwan S. Sandhu, EE Sept. 96, p779-784.

A Heyday for Engineers' Salaries, CE Oct. 96, p28. Irrigation Methods Used in California: Grower Survey, R. L. Snyder, M. A. Plas and J. I. Grieshop, IR July/Aug. 96, p259-262.

Latest ASCE Salary Index is Released, CE Mar. 96, p69-

Life-Cycle Costing in Municipal Construction Projects, David A. Arditi and Hany M. Messiha, IS Mar. 96, p5-14.

Lower Overhead Responsible for Rise in Profits, ME Mar/ Apr. 96, p8.

Anagement Bonuses Rise, CE Sept. 96, p11.
A Nationwide Survey of Civil Engineering-Related R&D, CERF Report #93-5006, Civil Engineering Research Foundation, 1993, 0-87262-970-8, 80pp.

Positive Outlook in Construction Industry, CE May 96, p8. A Practical Approach to Watershed Sanitary Surveys, Sachiko Itagaki and Elizabeth Teien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2964-2969.

Risky Business, ME Nov./Dec. 96, p12. Rough Road Ahead, CE Aug. 96, p10.

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Salary Growth Slows for Civils; Location a Major Factor, Says New ASCE Survey, NE May 96, p1,5.

Secret Strategies Revealed, ME May/June 96, p11.

Seismic Rehabilitation of Earth Dams, W. F. Marcuson, III, P. F. Hadala and R. H. Ledbetter, GT Jan. 96, p7-20.

Strategies for Achieving Excellence in Construction Safety Performance, Edward J. Jaselskis, Stuart D. Anderson and Jeffrey S. Russell, CO Mar. 96, p61-70.

Summary of Responses to Participant Questionnaire, Yacov Y. Haimes, David A. Moser and Eugene Z. Stakhiv, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p422-434.

Survey of Change Order Markups, Herbert Saunders, SC Feb. 96, p15-19.

Survey of University Students' Knowledge and Views on Nuclear Waste Disposal and the Alternative Dispute Res-olution Process, Grant Sheng, Lenore Deffner and Sonja Fiorini, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p510-512.

Survey to Estimate Residential Solid Waste Generation Benjamin F. King and Raymond C. Murphy, EE Oct. 96,

Total Quality Management Implementations and Results, John A. Kuprenas, Carlos J. Soriano and Sanscho Ramhorst, SC May 96, p74-78.

Working Hard, But Happily, ME July/Aug. 96, p12. Working Longer for Profitability, CE Dec. 96, p8.

Suspended load

Error Estimate in Einstein's Suspended Sediment Load Method, Nadim M. Aziz, HY May 96, p282-285.

Settling and Erosion Characteristics of Mud/Sand Mixtures, Hilde Torfs, Helen Williamson and Heidi Huysentruyt, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p749-758.

Suspended sediments

Adhesion Kinetics of Fuel Oil #6 and Oil-in-Water Emulsions on Marine Sediments under Turbulent Mixing Con-ditions, Rudolf Jaffé, Hector R. Fuentes, Vassilios A. Tsihrintzis and Liduo Shen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4389-4394.

Distributions of Return Flow in Navigable Waterways, Ta Wei Soong, Renjie Xia and Nani Bhowmik, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2855-2860.

Error Estimate in Einstein's Suspended Sediment Load Method, Nadim M. Aziz, HY May 96, p282-285.

Hydraulic and Engineering Considerations in Designing Constructed Treatment Wetlands for a Lake Restoration. C. Charles Tai, Donthamsetti V. Rao and Jonathan Polinkas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Hydrodynamic Changes Associated with Navigation Traffic on the Upper Mississippi River System, Nani G. Bhowmik, Ta-Wei David Soong and Renjie Xia, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2849-2854.

Influence of Flooding Events on Suspended Matter Quality of the Meuse River (The Netherlands), J. J. G. Zwolsman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3273-3274

Influence of Short and Long Waves Coupling on Sand Suspending, Sergey Yu. Kuznetsov and Nikolay V. Pykhov, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p720-727.

A Method to Study Suspended Sediment Induced Flow Characteristics Changes, D. Zhou and C. Mendoza, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1447-1452.

Resuspension of Particle Bed by Round Vertical Jet, Jordi Colomer and Harindra J. S. Fernando, EE Sept. 96, p864-869.

Sediment Transport Fluxes as Determined from Wave Breaker Induced Suspended Sediment and Flow Fields, Breazer Induced Suspended Sediment and Flow Fields, G. Smith, G. Mocke and L. Engelbrecht, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p783-794.

Sediment Transport Mechanism Over Rippled Sand Beds, S. G. Sajjadi, J. N. Aldridge and D. J. Nicholas, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and

Ralph T. Cheng, 1996), p669-680.

Studies on Wave, Current and Suspended Sediment Char-acteristics at the Surf Zone, Chien-Kee Chang and Ching-Her Hwang, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p728-738.

Suspended Sediment Loads in Dry and Wet Years, Renjie Xia and Misganaw Demissie, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1442-1446.

Towards Predicting Sediment Transport in Combined Wave-Current Flow, Zhihong Li and Alan G. Davies,

WW July/Aug. 96, p157-164.

Validation of a Model for Cross-Shore Sediment Transport, Irene Katopodi and Nikos Kitou, (Coastal Dynamics William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p806-817.

Suspended solids

Conveyance of Water and Wastewater Residuals, Sludge Treatment, Utilization, Reclamation and Disposal Committee, ASCE, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p994-996.

Shear Dispersion in the Benthic Boundary Layer, C. G. Hannah, J. W. Loder and Y. Shen, (Estuarine and Coast-al Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p454-465.

Cheng, 1990, p434-405.
Suspended-Solids Flux at a Shallow-Water Site in South San Francisco Bay, California, Jessica R. Lacy, David H. Schoellhamer and Jon R. Burau, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3357-3362.

Suspended structures

Aerial Pipeline Crossings - Inspection and Rehabilitation, Thomas Spoth, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p298-305.

Adhesion and Aerodynamic Resuspension of Fibrous Parti-cles, Nurtan A. Esmen, EE May 96, p379-383.

cies, Nurtan A. Esmen, Ele May 90, p579-385.
Diffusive Transport of Organic Colloids from Sediment Beds, K. T. Valsaraj, S. Verma, I. Sojitra, D. D. Reible and L. J. Thibodeaux, EE Aug. 96, p722-729.
Experiments on Resuspension of Fluid Mud Using an Oscillating-Grid Tank, Panagiotis D. Scarlatos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p808-811.

Formulation for Viscoelastic Response of Pavements under Moving Dynamic Loads, A. T. Papagiannakis, N. Amoah and R. Taha, TE Mar/Apr. 96, p140-145.

A Heuristic Model for Particle Entrainment into Suspen-sion, Yarko Niño and Marcelo García, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p812-815.

Dynamic Behaviour of Masonry Church Bell Towers, Alan R. Selby and John M. Wilson, (Worldwide Advances in R. Seily and John M. Wisson, (Worlawide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p188-199.
Radiation Hydrodynamics of a Slightly-Submerged Body, P. Ananthakrishnan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p832-835.

Assessment of the Consistency of Geohydrological Groundwater Flow Assessment of the Consistency of Geohydrological Groundwater Flow Models and Hydrochemical Mixing/ Reaction Models of the Aspö Hard Rock Laboratory, Peter Wikberg and Ingvar Rhen, (High Level Radioactive Waste Management, Technical Program Committee,

1996, pl 45-147.
Intended Validation in the Swedish Program for Spent Nuclear Fuel, Bjorn Cronhjort and Grant Sheng, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p67-69.

Isotopic Systematics of Saline Waters at Aspö and Laxemar, Sweden, Bill Wallin and Zell Peterman, (High Level Radioactive Waste Management, Technical Program

Radioactive Waste Management, Technical Program Committee, 1996), p41-42.

Low Temperature Performance Rating Criteria for Lubrication Greases, Ian Lundberg and Terry McFadden, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p153-172.

Studded Tire Research in Norway, Finland and Sweden, Eric Johnson, Tony Barter and David Sterley, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p676-687.

Switzerland

Biosphere Modelling for Radioactive Waste Disposal, Richard A. Klos and Frits Van Dorp, (High Level Radioactive Waste Management, Technical Program Commit-

tee, 1996), p237-239.

Geologic Uncertainties in Tunneling, Herbert H. Einstein, Vijaya B. Halabe, Jean-Paul Dudt and François Descoudres, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p239-262.

Synthetic fibers

Cellulose Fiber Reinforced Concrete, Parviz Soroushian, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p809-818.

Synthetic materials

Shock Waves in Curved Synthetic Cables, A. A. Tjavaras and M. S. Triantafyllou, EM Apr. 96, p308-315.

Advances in System Identification Using Output Measurements, N. P. Jones, J. H. Ellis and K. Pan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p160-163.

Mechanics, Y. K. Lin and J. C. Su, 1996), p100-1103. Generalized Random Decrement Method for System Identification, P. D. Spanos and B. A. Zeldin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p850-853.

ed. and Mircea D. Grigoriu, ed., 1996), p850-853.

Groundwater Monitoring System Design Using a Probabilistic Observation Method for Site Characterization,
Mauricio Angulo and Wilson H. Tang, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p797-812.

How Can Coupled Systems Evolve? A Scenario Simulation Methodology, H. Takase, P. Grindrod and S. P. Cromp-ton, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p258-260.

nical Program Committee, 1990, pc.3-205. Identification of Nonlinear Systems under Random Excita-tion, B. A. Zeldin and P. D. Spanos, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p168-171.

Modal Filter Based On-Line Monitoring of Uncertain Structural Systems, E. A. Johnson, L. A. Bergman, P. G. Voulgaris and L. C. Freudinger, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p156-159.

National High-Level Waste Systems Analysis, Thomas P.
O'Holleran and Keith Kristofferson, (High Level Radioactive Waste Management, Technical Program Commit-tee, 1996), p315-316.

Object-Oriented Analysis of South Florida Hydrologic Sys-tems, Todd S. Tisdale, CP Oct. 96, p318-326.

Operating Rule Optimization for Missouri River Reservoir System, Jay R. Lund and Inês Ferreira, WR July/Aug. 96, p287-295.

Repetitive Member Adjustment for Wood Structural De-sign, Ron Wolfe and Steve Cramer, (Building an Internasign, Kon Wolfe and Steve Craffic, (Ollands, Internal Linguistics), S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p804-811.

Solid-Waste Management System Analysis with Noise Control and Traffic Congestion Limitations, Ni-Bin Chang, Y. C. Yang and S. F. Wang, EE Feb. 96, p122-

A System Approach for Identifying and Improving Hydrau-lic Numerical Modeling Reliability, Bernard B. Hsieh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2725-2730.

System Dynamics and Modified Cumulant Neglect Closure Schemes, H. Uğur Köylüoğlu and Søren R. K. Nielsen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p380-383.

System Factors Using First-Order Reliability Methods, William M. Bulleit and Weifeng Liu, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p786-

Use of SID Method for Site Characterization, P. W. Jayawickrama, K. G. K. Jayakody and K. A. Rainwater, (Uncertainty in the Geologic Environment: from Theor to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p897-911.

Visualizing Global-Force Distributions in Finite-Element Models, Kirk Martini, AE June 96, p71-77.

System reliability

Capacity Predictions for Full Scale Transmission Line Test Foundations, Robert E. Kondziolka and Peter M. Kandaris, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p695-

Design of Optimal Reliable Multiquality Water-Supply Systems, Avi Ostfeld and Uri Shamir, WR Sept./Oct. 96, p322-333.

Important Parameters in the Performance of a Potential Repository at Yucca Mountain (TSPA-1995), Joel E. At-kins, S. David Sevougian, Joon H. Lee, Robert W. An-drews and Jerry A. McNeish, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p291-292.

Mode Search Algorithm for System Reliability under Earthquake Load, Hideki Idota and Tetsuro Ono, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p978-981.

A Monitoring System for High-Clearance Scaffold Systems during Construction, Y. L. Huang, T. Yen and W. F. Chen, (Building an International Community of Structur-al Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p719-726.

Reliability-Based Structural System Optimization: State-of-the-Art versus State-of-the-Practice, Dan M. Frango-pol and Ross B. Corotis, (Analysis and Computation,

Franklin Y. Cheng, ed., 1996), p67-78.

Stochastic Models for Chloride-Initiated Corrosion in Reinforced Concrete, Svend Engelund and John D. Sørensen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p664-667.

sessing of Abstractions for Total System Performance Assessment, Vinod Vallikat, Srikanta Mishra, Yanyong Xiang and David Sevougian, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p293-294. Testing of Abstractions for Total System Performance As-

Cumulants-Based Analysis of Concentration Data from Soil-Column Studies for System Identification, Rao S. Govindaraju, Bhabani S. Das and Gerard J. Kluitenberg, HE Jan. 96, p41-48.

A Framing System for a Lunar/Martian Inflatable Structure, Jenine E. Abarbanel, Ted A. Bateman, Marvin E. Cris-well and Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1069-1075.

Multidisciplinary Product Modeling of Buildings, W. P. S. Dias, CP Jan. 96, p78-86.

Reengineering Infrastructure Research, F. H.(Bud) Griffis, El Jan. 95, pl 1-18.

System and Input Identification with Partially Correlated Load Processes, K. Pan, N. P. Jones and J. H. Ellis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p138-141.

Utilities and Systems for the New U.S. South Pole Station, Amundsen-Scott Station, Antarctica, Steven Theno and Dick Armstrong, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p424-435

Value Engineering in the Assessment of Exterior Building Wall Systems, Abdulmohsen Al-Hammad and Moham-mad A. Hassanain, AE Sept. 96, p115-119.

Systems engineering
Air Transportation: A Systems Approach, Harry A. Kinnison, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p246-253.

Domain Modeling in Generic Parametric Architectures: Issues in Concurrent Representation and Inference, Hossam El-Bibany, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p522-528.

An Integrated Approach to Maintaining a Program Baseline on the International Space Station, Roy Patrick Norris and Larry D. Toups, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Solid Waste and Materials Systems Alternatives Study Summary, John R. Kasper and Stephen T. Smith, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p374-378.

Space Infrastructure Planning, J. Michael Snead, (Engi-neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p360-366.

Systems Engineering Firms Merge, CE Dec. 96, p22. Yields from Ground-Water Storage for California State Water Project, L. Jeffrey Lefkoff and Donald R. Kendall, WR Jan./Feb. 96, p72-74.

Failure of Tapo Canyon Tailings Dam, Leslie F. Harder, Jr. and Jonathan P. Stewart, CF Aug. 96, p109-114.

One-Dimensional Finite-Element Model for High Flow Ve-

locities in Porous Media, Blair T. Greenly and Douglas M. Joy, GT Oct. 96, p789-796.

Probabilistic Risk Assessment for Tailings Impoundment Founded on Paleokarst, Dirk Van Zyl, Ian Miller, Victor Milligan and W. James Tilson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p563-585.

Spray Freezing to Treat Oil Sands Tailings Pond Water, W. Gao, D. C. Sego and D. W. Smith, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p60-70.

Tailwater

Designing Concrete Culverts to Resist Scour Damage, John Kurdziel, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3942-3949.

Influence of Backwater on Headcut Advance, Kerry M. Robinson and Gregory J. Hanson, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p117-122.

Managing Border Irrigation for Near-Zero Discharge, T. S. Strelkoff and A. J. Clemmens, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1711-1715.
Submerged Flow Regimes of Rectangular Sharp-Crested
Weirs, S. Wu and N. Rajaratnam, HY July 96, p412-414.

Analysis of Long-term Supply-demand Planning of Water Resources in Taiwan, Shiang-Kueen Hsu, Nien-Sheng Hsu and William W-G. Yeh, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3153-3157.

Analysis of Proliferation Risk for Taiwan's Spent Fuels, K. K. Li, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p489-491.

Development of Islandwide Groundwater Pollution Potental for Taiwan, Wen-Sen Chu, Chin-Hwa Chiang, Mei-Hui Chang and Cheh-Ming Lee, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3164-3169. Drought Experiences of Ohio and Their Applications in the DAR-JAI River Basin of Taiwan, Tiao J. Chang, Wen C. Huang and Chian M. Wu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p628-636.

History of Coastal Engineering in Taiwan, Ching-Ton Kuo, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p500-512.

703

An Introduction to Taipei Suburban Sewage Collection and Treatment Systems, Chiang-Tsai Lin and Der-Liang Sheen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3170-3175.

Lake/Reservoir Restoration Activities in Taiwan, Shaw I Yu, Jan-Tai Kuo, Ching-Gung Wen, Shang-Lien Lo and Jen-Yang Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4208-4213.

Reliability of Code Provisions for Wind-Induced Discomfort, Rwey-Hua Cherng, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p494-497.

Risk Analysis of Joint Reservoir Operation in Central Taiwan, Jan-Tai Kuo, Chang-Shian Chen and Yuan-Hsi Liao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3158-3163.

ps/36-3103.
Studies on Wave, Current and Suspended Sediment Characteristics at the Surf Zone, Chien-Kee Chang and Ching-Her Hwang, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p728-738.

Analysis of Free Vibrations of Tall Buildings, Qiusheng Li, Hong Cao and Guiqing Li, EM Sept. 94, p1861-1876.

Application of Structural Optimization to Practical Tall Steel Building Design, Chun-Man Chan and Joohyuk Park, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p123-134.

Competition Spurs High-Rise Innovation, CE Aug. 96, p10. Control of Mega-Sub Building Against Wind Loads, Winston Chai and Maria Q. Feng. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p486-489.

Design Case Adaptation Using Genetic Algorithms, Mary Lou Maher and Andrés Gómez de Silva Garza, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p294-300.

Design of Vibration Control System for High-Rise Residential Buildings in Consideration of Wind-Induced Response, Yukio Tamura, Kiyoshi Uesu and Takeshi Ohkuma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1244-1251.

Dynamic and Quasi-Static Design of High-Rise Buildings Subjected to Wind Loads, Okey Onyemelukwe and Guil-lermo Claure, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p141-142.

Effects of Non-Structural Elements on the Acceleration Response of Tall Multi-Story Buildings Under Wind Excitation, Cindy X. Qiu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p974-977.

Evaluation of a 47-Story Building Subjected to Hurricane Alicia, Lawrence G. Griffis, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p960-965.

Gain-Scheduled Adaptive Control of a Hybrid Structure, Moises A. Abraham, James R. Morgan and Alexander G. Parlos, (Natural Disaster Reduction, George W. Hous-

ner, ed. and Riley M. Chung, ed., 1997), p260-261.

High Over Shanghai, Stan Korista, P.E., Mark Sarkisian, P.E. and Ahmad Abdelrazaq, CE Dec. 96, p58-61.

Myron Goldsmith, Structural Engineer, Architect, Dies at 77, CE Oct. 96, p78.

Prominent Educator Goldberg of Purdue Dies at 85, NE Feb. 96, p14.

Shear Lag in Shear/Core Walls, A. K. H. Kwan, ST Sept. 96, p1097-1104.

Simple ATMD Control Methodology for Tall Buildings Subject to Wind Loads, Seshasayee Ankireddi and Henry T. Y. Yang, ST Jan. 96, p83-91.

Storm-Driven Trajectories of Rain near Balconies on Tall

Building, Fillmer W. Ruegg, AE Sept. 96, p100-160.

A Strategy for Active Control of Tall Civil Structures Using Regenerative Electric Actuators, A. C. Nerves and R. Krishnan, (Engineering Mechanics, Y. K. Lin and T. C. Stat. 1996), p503-506.

C. Su, 1990, p.03-500.
System Risk for Multi-Storey Reinforced Concrete Building Construction, Deepthi Epaarachchi, Mark G. Stewart and David V. Rosowsky, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p230-233

cea D. Grigoriu, ed., 1996), p230-233.
Tall Buildings Triumph, CE June 96, p21-22.
Vibration Control of Tall Buildings under Seismic and Wind Loads, Lih-Shing Fur, Henry T. Y. Yang and Seshasayee Ankireddi, ST Aug. 96, p948-957.
Wind Tunnel and Water Flume Testing in the Design of High Rise and Long Span Structures, Charles H. Thornton, Leonard M. Joseph and Thomas Z. Scarangello, (Building an International Community of Structural Engineers, S. K. Ghosh ed and Jambid Mohammedi ed. gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p944-951.

Statistical Seismic Responses of Structures using Response Spectrum Matching Technique, Ruichong Zhang and Masanobu Shinozuka, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p527-530.

Experimental Investigation of Tuned Liquid Dampers, Dor-othy A. Reed, Harry Yeh, Jinkyu Yu and Sigurdar Gar-darsson, (*Natural Disaster Reduction*, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p215-216. Methodology for Optimizing Design of Integrated Tank Ir-rigation System, R. C. Srivastava, WR Nov./Dec. 96, p394-402. Experimental Investigation of Tuned Liquid Dampers, Dor-

Retention-Tank Systems: A Unique Operating Practice for Managing Complex Waste Streams at Research and Development Facilities, Shari Brigdon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1771-1776.

Technique for Precise Measurement of Large-Scale Silos and Tanks, Xiaoli Ding, Richard Coleman and J. Michael Rotter, SU Feb. 96, p14-25.

Telling Florida's Water Story, David W. Landis and Blair

K. Hanuschak, CE Feb. 96, p40-43.

Two-Dimensional Hydraulics of Recirculating Ground-Water Remediation Wells in Unconfined Aquifers, W. M. Stallard, K. C. Wu, N. Shi and M. Yavuz Corapcioglu, EE Aug. 96, p692-699.

Taper

Exact Stiffnesses for Tapered Members, Husain Jubran Al-

Galtani, ST Oct. 96, p1234-1239.

Lateral-Torsional Buckling of Nonprismatic I-Beams, Pra-tyoosh Gupta, S. T. Wang and G. E. Blandford, ST July 96, p748-755.

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Stiffness Formulation for Nonprismatic Beam Elements, Arturo Tena-Colunga, ST Dec. 96, p1484-1489.

Targets

Target Safety Level for Bridges, Andrzej S. Nowak and Vi-jay K. Saraf, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p696-703.

Study Concludes Feds Should Exit Water Business, CE June 96, p12.

Controlling Brazil's Pollution: Federal versus State Taxes and Fines, Antonio Estache and Kangbin Zheng, IS June 96, p83-93.

For Public Works, Metrication is a Luxury, Ronald F. Kil-martin, CE Jan. 96, p31-32.

Reader Remembers Cost, Not Fish, Charles C. McCloskey, P.E., CE Nov. 96, p32,36.

Reader Says Feds Overspend on Highways, Kirk R. Barrett, P.E., CE Oct. 96, p32.37.

Taylor series

Statistical Moments of Principal Stress-Related Quantities in Random Vibration Analysis, Ronald S. Harichandran and Mu-Tsang Chen, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p962-965.

Teaching methods

Argument Against Separate Writing Courses for Engineers, Terry Clayton, El July 96, p111-113.

Context for Writing in Engineering Curriculum, Matthew R. Kuhn and Karen Vaught-Alexander, El Oct. 94,

Engineering Education Goes Digital with World Wide Web Database, CE Jan. 96, p16,18.

Environmental Engineering Forum, Steven I. Safferman, Vivek P. Utgikar and Sarwan S. Sandhu, EE Sept. 96, p779-784.

Honing the Writing Skills of Engineers, P. M. Berthouex, El July 96, p107-110.

Insect Robots: Case Studies for Teaching Students About Design of Computer-Aided Experimentation, James Moller and Osama Ettouney, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p310-316.

Integrated Civil Engineering Curriculum: Implementation and Management Issues, Neil S. Grigg, Marvin E. Criswell and Thomas J. Siller, El Oct. 96, p151-155.

Lesson One for Engineers: Using Judgment, Angelo Pol-

vere, CE Jan. 96, p32.

Multimedia Development Software: Object-Oriented Inter-face-Based Simulation, Hossam El-Bibany, CP Oct. 96,

Recent Innovations in Undergraduate Civil Engineering Curriculums, Joy M. Pauschke and Anthony R. In-graffea, El July 96, p123-133.

grantea, El July 96, p1,25-133.

Rethinking Training in the 1990s, John V. Farr and James F. Sullivan, Jr., ME May/June 96, p29-33.

Seismic Sleuths: A Grades 7-12 Materials Development and Teacher Enhancement Project, M. Frank Watt Ireton, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p33-34.

Be Flexible in the Workplace, G. Michael Barton, ME Jan./Feb. 96, p6-7.

Bentley's Brave New World, CE Oct. 96, p22,24.

A Computational Organizational Approach to Modeling an Engineering Design Team, Jan Thomsen, Yul J. Kwon, John C. Kunz and Raymond E. Levitt, (Computing in Cruit Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p275-280. Creativity Techniques for Teams, Mel Hensey, ME July/ Aug. 96, p5-6.

Editorial, Thomas L. Theis, EE Nov. 96, p955. Expedition Applications to Long Duration Space Missions, Gloria R. Leon and Victor S. Koscheyev, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p997-1001.

The Future of Engineered Quality, Michael T. Kubal, ME Sept./Oct. 96, p45-52.

How to Build a Consortium to Advance Computing and Technology Transfer to the Project, Yvan J. Beliveau, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p793-799.

More-Stable Owner-Contractor Relationships, Peter Dozzi, Francis Hartman, Neil Tidsbury and Rafi Ashrafi, CO

Mar. 96, p30-35.

Owner-Contractor Relationships on Contaminated Site Re-mediation Projects, Cynthia M. Ruff, David A. Dzombak and Chris T. Hendrickson, CO Dec. 96, p348-353.

Partnering for Performance, Duke Nielsen, ME May/June 96, p17-19.

Practitioners' Forum, Frederick S. Merritt, AE Dec. 96, p125-128.

Relationship Between Project Interaction and Performance Indicators, James B. Pocock, Chang T. Hyun, Liang Y. Liu and Michael K. Kim, CO June 96, p165-176. Slow Starter, Strong Finisher, Mel Hensey, ME July/Aug.

96, p10.

Twenty-First Century Partnering and the Role of ADR, Robert S. Miles, ME May/June 96, p45-55.

The Virtual Design Team (VDT): Concurrent Design of Facility Products, Processes and Organizations, Raymond E. Levitt, Tore R. Christiansen, Geoff Cohen, Yan Jin and John C. Kunz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p268-274.

What Project Partnering Is and Is Not, Gary D. Bates, ME Jan./Feb. 96, p10.

Technology

21st Century Leadership and Technology, Malcolm J. Todd, ME July/Aug. 96, p40-49.

Accelerating Innovation: New Style of Leadership Needed, Les McCraw, ME Sept./Oct. 96, p3-5

Action Plans: An Enhanced Building Technology Evalua-tion Process, CERF Report #96-5021-02, Civil Engineering Research Foundation, 1996, 0-7844-0198-5, 42pp.

Advanced Technologies Applied to Public Transport Fleets Maintenance: Diamante Project, Antonio Marqués, Vi-cente Sebastián, Vicente Macián and Ma. José Lerma, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p19-23.

Air Force Planetary Defense System: Initial Field Test Re-sults, Grant Stokes, Robert Weber, Frank Shelly, David Beatty, Herbert Viggh, Eugene Rork and Byron Hays, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p46-53.

Air Force Planetary Defense Technology, J. Darrah, S. Worden and G. H. Stokes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p32-45.

An Analysis of Effect of Dynamic Traffic Information Considering Driver's En-Route Route Switches, Yasunori Iida, Nobuhiro Uno and Tetsuro Hasegawa, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p604-608.

Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996, 0-7844-0146-2, 730pp.

Appropriate Technology for Sustainable Development, Maurice L. Albertson, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3247-3252.

An Appropriate Technology to Treat Domestic Sewage, S.
A. Mohsin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2748-2753.

Bentley's Brave New World, CE Oct. 96, p22,24. California Unveils Fuel Cell Plant, CE Nov. 96, p20-21.

CCATS and CCIDS Technologies for Traffic Data and Incident Detection. An Overview of the Technology and the Main Applications, V. Picciolo and F. Lemaire, (Ap-plications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p183-187.

Comparison of Commonly Used Odor Control Technologies, Kartik Vaith, Mike Cannon, Darrell Milligan and James Heydorn, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p64-74.

Competition Spurs High-Rise Innovation, CE Aug. 96, p10. Conference Tracks Progress of Trenchless Technologies, CE June 96, p10,12

Dam Engineering Exhibit Wins Prize for New Museum in Arizona, NE Dec. 96, p9.

The Digital Architect: A Common-Sense Guide to Using Computer Technology in Design Practice by Ken Saunders, Frederick S. Merritt, AE Mar. 96, p42.

Editor's Letter, Bob McCullouch, ME July/Aug. 96, p3-4. Editor's Letter, Joseph Kaplan, SC Nov. 96, p93-94. Editorial, Boris Berkovski, EY Dec. 96, pvi-x.

Education and Research Needs for Appropriate Technology, Maurice L. Albertson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2760-2765.

Education: Pathway to Mitigation, James W. Russell, (Nat-ural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p35-36.

Engineering Education for Appropriate Technology, Richard L. Rosen, (North American Water and Environent Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2743-2747.

Engineers Seek Better Way to Market New Building Technology, CE Sept. 96, p26-27.

Enhancing Creativity when Solving Contradictory Techni-cal Problems, Sergey Drabkin, El Apr. 96, p78-82. Evaluating Earth Retaining Systems, CE Aug. 96, p10. Evaluating the Potential of ATT Technologies in Hazardous

Materials Transportation Risk Management, Konstan-tinos G. Zografos and George M. Vasilakis, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p480-484.

Evaluation of Road Maintenance Automation, Arif Osmani, Carl Haas and W. Ron Hudson, TE Jan./Feb. 96, p50-58 Ground Improvement Salvation, Peter J. Nicholson, CE

May 96, p6.

Guest Editorial, Harlan J. Onsrud, SU Feb. 96, p1-2.

How Strategies Happen: A Decision-Making Framework, Karen Lee Hansen and C. B. Tatum, ME Jan./Feb. 96. p40-48.

Human Biomechanics Inform Seismic Protection, ET

Apr./May 96, p10-11.
The Idea of Building: Thought and Action in the Design and Protection of Buildings by Steven Groak, Jeffrey S. Russell, ME July/Aug. 96, p15-17.

Improvements in Mining Technology, Jacques Nantel, (En-

amprovements in mining Technology, Jacques Namel, (Emgineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p806-812.
Indianapolis Uses New Radar Technology to Refine Hyetographs for CSO Model and SSES Studies, Patrick L. Stevens, (North American Water and Environment Constructions). gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1236-1241.

Inflatable Habitat Option for a Human Lunar Return Mission, Kriss J. Kennedy, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996).

Innovative N.Y. Bridges Add Highway Clearance, CE July 96, p19-20.

Innovative Technology Development for Safe Excavation, Xiaodong Huang, Daniel Bernd and Leonhard E. Ber-nold, CO Mar. 96, p91-96.

An Integrated Approach to Maintaining a Program Baseline on the International Space Station, Roy Patrick Norris and Larry D. Toups, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p450-457

Iron Filing Installation Cleans Contaminants, CE Nov. 96, p22

Kentucky Researchers Complete Composite Foot Bridge, CE Dec. 96, p14-15.

Lunar Base Scenario for Middle School with RC Rover, Louise Fayette, Ruth M. Fruland and Carolyn Evans McDonald, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p317-322.

Metacomputing on the Horizon, CE Dec. 96, p20. Methanol Plant Construction Begins, CE Feb. 96, p8.
Mitigation, Preparedness & Sustainable Development:

Linking Research & Resources in the Global Information Infrastructure, Robert J. Coullahan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p321-322.

Nanotechnology and Orbital Debris, Hans-Joachim Blome and Thomas L. Wilson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), a328, 333.

p328-333.

p.528-333.

The NASA Reusable Launch Vehicle Technology Program, Delma C. Freeman, Theodore A. Talay and Robert E. Austin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p.385-391.

Networked Multimedia Tools for Architectural Engineering, Anthony C. Webster, AE Mar. 96, p11-19.

New Hybrid Seismic System Set for Seattle, CE Oct. 96, p20,22.

New Materials for the 21st Century, Edward E. DiTomas, (Materials for the Pist Century, Edward E. Di Tomas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p14-22. On the Web, CE Nov. 96, p8. President Nominates ASCE Fellow to NIBS Board, NE

Sept. 96, p15.

Sept. 30, p1.5.

Process Research in Support of the Human Exploration and Development of Space: Issues in Program Development, Bradley M. Carpenter, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p509-515.

Progress in Chemical Admixtures: Where Are We? Mosongo Moukwa, CE Mar. 96, p6.

Mossongo Moukwa, CE Mar. 96, p6.
Radiation Hardening of Robotic Control Components
Against Terrestrial Radiation, G. U. Youk, J. S. Tulenko,
H. Liu and H. Zhou, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p248-254.
Real Time Positioning and Equipment Control for Hostile
Environments, Yvan J. Beliveau, (Robotics for Challenging Environments, 1994, A. Demsetz, ed. 1009, 64, 20.

environments, I van J. Beriveau, (Robolics for Challenging Environments, Laura A. Demsect, ed., 1996), p64-70.
Rethinking Training in the 1990s. John V. Farr and James F. Sullivan, Ir., ME May/June 96, p29-33.
The Return of Deep Soil Mixing, Donald A. Bruce, CE

Dec. 96, p44-46.

Rocket Experiments and Demonstrations for Microwave Power Transmission (MPT), Nobuyuki Kaya, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p280-286.

Sea Launch: Commercial Launch Competitiveness, Derek E. Lang, Darrel L. Choate and Marcus L. Nance, (Engi-E. Lang, Darrel L. Choate and Marcus L. Nance, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p419-425.

Searching for a Successful Strategy? Mel Hensey, ME Sept./Oct. 96, p6-7.

Secret Strategies Revealed, ME May/June 96, p11.

Seven ASCE Members Elected to NAE, CE Aug. 96, p67.

SOCRATES - From Research Towards Commercial Imple-

mentation, Ian Catling and Richard Harris, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p588-593.

ed., 1996), p388-593.
The Solar System Cruiser—Interstellar Precursor, Divya Chander, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p302-310.
Solving the Innovation Puzzle, Harvey M. Bernstein and Andrew C. Lemer, 1996, 0-7844-0023-7, 130pp.
Steel Connections Need More Research, A. Plumier, CE

Sept. 96, p35.

Sustainability: Another New Paradigm, Larry Quinn, P.E., CE Oct. 96, p6. CE Oct. 96, p6. System Integration in Traffic Management Centres, Jorge Navas, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996, p485-489. Technology Development and Sustainable Construction, Yasuyoshi Miyatake, ME July/Aug. 96, p23-27. Technology for Mining of Building Materials at First Stages of Moon Development, Oleg V. Nagovicin, (Engineering, Construction, and Operations in Space Stewart

neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p830-839.

Technology Has Bright Future, Darryl W. Davis, CE May

96, p26-27

Technology Standards and Deployment of Advanced Transportation Technologies: A Comparative Case Study of Electronic Toll and Traffic Management (ETTM) in the United States and France, Jonathan L. Gifford and Jean-Luc Ygnace, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p535-541

Tolis Ready to Roll, ET Mar/Apr. 96, p7. Under Way: Decontamination Pilots for Dredged Material, CE Nov. 96, p10,12.

Unique Coalition Plans to Revitalize Neighborhood, CE Nov. 96, p12-13.

Nov. 96, p12-13.
Urban Control Services Integration the Innovative Components of THERMIE-JUPITER Architecture in Florence, G. Ambrosino, M. Boero, L. Niccolai, M. Romanazzo and M. Turrini, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p515-519.

Who Springs for Water? Eric Rasmussen, CE Sept. 96, p65-67.

Evaluating Innovative Concrete Technologies through the HITEC Process: the JMI Channel Bridge, Kathleen H. Almand, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p161-166.

International Sourcebook for Construction Industry Product Assessment, CERF Report #95-5021, July 1996, Civil Engineering Research Foundation, 1996, 0-7844-0173-X,

Intranet Technology to Aid Engineers, CE Dec. 96, p20.

Technology transfer

ASCE's Strategic Plan in Action: The Civil Engineering Research Foundation, NE Oct. 96, p7.

Catching Up on Composites, Harry Goldstein, CE Mar. 96, p47-49

CERF Receives Award, CE Nov. 96, p8.

CERF Unveils Interactive Extension Program, CE Jan. 96,

CERF, U.K. Agree to Broaden Ties, CE May 96, p73.

Civil Engineering and Disaster Responses in Developing Countries, Egon B. Westen, El Apr. 96, p89-92.

Current U.S. - Japan Collaborative Activities in Wind Engineering. B. Bienkiewicz, T. Ohkuma and K. Fujii, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1075-1082.

Editorial, EE Jan. 96, p1-2.

Engineering and Construction for Sustainable Development in the 21st Century: Assessing Global Research Needs, CERF Report #96-5016A, Civil Engineering Research Foundation, 1995, 0-7844-0142-X, 145pp.

A Framework for Sanitation and Health Risk Assessment, Charles G. Gunnerson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2390-2395.

The Great Technology Transfer, Tim Cassidy, (Engineer ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1265-1269.

How to Build a Consortium to Advance Computing and Technology Transfer to the Project, Yvan J. Beliveau, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p793-799.

International Technology Transfer of Hydrologic Compo-nents, Eugene A. Stallings, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p325-326.

Research Conclave Takes Aim at Global Sustainable Development, CE Apr. 96, p76.

Small Business in the Construction Industry, Howard H. Bashford, SC Aug. 96, p71-73.

Solving the Innovation Puzzle, Harvey M. Bernstein and Andrew C. Lemer, 1996, 0-7844-0023-7, 130pp.

Title: "Self-Constructing Space Systems", Daniele Bedini, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1032-1037.

Transferring Knowledge about High-Level Waste Reposi-tories: An Ethical Consideration, Stefan Berndes and Klaus Kornwachs, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), p494-

Viewpoint, George Seaden, IS Sept. 96, p103-107.

Tectonics

The 1994 California State University, Northridge Earth-quake Experience - A Case Study, Gerry Simila, (Natu-ral Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p45.

Approach, Methods and Results of an Individual Elicitation for the Volcanism Expert Judgment Panel, Bruce M. Crowe, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p56-58.

Changes in Water Table Elevation at Yucca Mountain in Response to Seismic Events, Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p102-104.

Development of the Deterministic Caltrans Seismic Hazard Map of California, Lalliana Mualchin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p297-298.

New USGS Seismic Hazard Maps for the United States, A. Frankel, C. Mueller, D. Perkins, T. Barnhard, E. Leyendecker, E. Safak, S. Hanson, N. Dickman and M. Hopper, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p173-174.

Probabilistic Seismic Hazard and Sensitivity Analysis: A Case Study from Southern California, Mehrdad Mahdyiar, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p299-300.

- The Research of the Relationship Between Earthquakes and the 30 Years of Intensive Geological Surveys in Xin Feng River, China, Ru- Qi Lu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p388.
- Risk Assessment of Nambe Falls Dam, J. Lawrence Von Thun, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p604-635
- Seismic Reflection Evidence Against a Shallow Detachment Beneath Yucca Mountain, Nevada, Thomas M. Brocher and W. Clay Hunter, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p148-150.

Seismotectonic and Seismic Hazard in Southern Bulgaria, Tosho Stoyanov, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p175-

The Yucca Mountain Probabilistic Volcanic Hazard Analysis Project, Kevin J. Coppersmith, Roseanne C. Perman, Robert R. Youngs, Todd A. Crampton, Laurel A. DiSilvestro, Richard P. Smith, C. Allin Cornell, Peter A. Morris, Timothy Sullivan, Stephen T. Nelson and J. Carl Stepp, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p53-55.

Telecommunication

Communication Breakdown, Felix S. Wong and Jeremy Isenberg, CE Jan. 96, p52-54.

Constitutive Modeling of Composites in Opto-Mechatronics, Tau C. Fan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p632-636.

An Evaluation of TLC Systems Benefits and Potential Market in Italy, Ennio Cascetta and Bruno Montella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p59-65.

The Gaudi-Marseille Experiment: An Example of a Mul-tiservice Remote Payment System. D. Danflous and G. Coquet, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p\$42-546.

IFMS: Evaluation of Pilot Projects, Marco Monticelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p475-479.

Management Buys Back HDR From French Parent, CE

Nov. 96, p27.

Passenger Information Terminals: Towards Standardisa-tion, P. Papaioannou, S. Basbas and D. Panayotako-poulos, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p24-29.

Simulating Seismic Response Behavior of Telecommunica-tions Equipment, Ronald Ziemian, Derek Mostoller and Kenneth Philogene, ST Oct. 96, p1247-1249.

SOCRATES - From Research Towards Commercial Implementation, Ian Calling and Richard Harris, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p588-593.

Rapid Slope Monitoring, William F. Kane and Timothy J. Beck, CE June 96, p56-58.

Telescopes

Air Force Planetary Defense System: Initial Field Test Re-sults, Grant Stokes, Robert Weber, Frank Shelly, David Beatty, Herbert Viggh, Eugene Rork and Byron Hays, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p46-53.

Connections of Large Steerable Antennas, Joseph Antebi and Mehdi S. Zarghamee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p505-509

HF Interference in Space from Terrestrial Sources, Marisa McCoy, John P. Basart and Monte Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p854-860.

Interferometric Imaging for Deep Space Asset Monitoring, Gary C. Loos, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p214-

- On Exploration and Usage of Near-Earth-Missing Objects, V. A. Simonenko, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p61-
- Optimal Detection of Short-Warning Near-Earth Object Threats, Gregory H. Canavan, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p26-31.

Optimization Sensing and Control in Design of Antennas Mehdi S. Zarghamee and Joseph Antebi, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p147-153.

Recent Progress in Thermally Induced Vibrations Research John D. Johnston, Richard S. Foster, David L. Eby and Earl A. Thornton, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1134-

Sizes and Masses of Satellite Observed Meteoroids, Z. Ceplecha, R. E. Spalding, C. Jacobs and E. Tagliaferri, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p95-101.

Temperature

Analysis of Structural Members Under Elevated Temperature Conditions, K. W. Poh and I. D. Bennetts, ST Apr. 95, p664-675.

Assessing Integrity of Weather Data for Reference Evapotranspiration Estimation, Richard G. Allen, IR Mar./Apr. 96, p97-106.

Comparison of Methods for Estimating REF-ET, D. M. Amatya, R. W. Skaggs and J. D. Gregory, IR Nov/Dec. 95, p427-435.

Field Instrumentation to Study the Time-Dependent Behavior in Sunshine Skyway Bridge. I, Mohsen A. Shahawy and M. Arockiasamy, BE May 96, p76-86.

Laboratory Aging Methods for Simulation of Field Aging of Asphalts, Shin-Che Huang, Mang Tia and Byron E. Ruth, MT Aug. 96, p147-152.

Longitudinal Analysis of Bicycle Count Variability: Results and Modeling Implications, Debbie A. Niemeier, TE May/June 96, p200-206.

Method for Estimating Boiling Temperatures of Crude Oils, Robert K. Jones, EE Aug. 96, p761-763.

Phenol- and Thiocyanate-Based Wastewater Treatment in RBC Reactor, Goutam Banerjee, EE Oct. 96, p941-948.

Photocatalytic Degradation of Formic Acid via Metal-Supported Titania, Heung Yong Ha and Marc A. Anderson, EE Mar. 96, p217-221.

Two-Dimensional Parallel Computing Solution of Coupled Heat and Moisture Flow in Unsaturated Soil, Hywel Rhys Thomas and Chi Leung Welkin Li, CP July 96, p236-247.

Temperature distribution

Drift Apex Temperature Distributions due to Cylindrical Heat Sources, W. G. Culbreth and J. J. Ventresca, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p435-437.

Long Term Prediction of Far-Field Heat Conduction, Bahram Nassersharif and Lixing Ma, (High Level Radio-active Waste Management, Technical Program Committee, 1996), p438-441.

Predicting the Level of Frost Penetration into Landfill Cov-ers, Horace K. Moo-Young, Jr., Thomas F. Zimmie and Morris H. Morgan, III. (Cold Regions Engineering: The Cold Regions Infrastricture—An International Impera-tive for the 21st Century, Robert F. Carlson, ed., 1996),

Temperature effects

Age, Deformation, and Temperature Effects of Viscoelastic Materials Under Large Deformations, Ashok Gurjar, Tianxi Tang, Dan Zollinger and Kenneth Slavick, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1398-1407.

Aging and Low-Temperature Cracking of Asphalt Concrete Mixture, Julie E. Kliewer, Huayang Zeng and Ted S.

Vinson, CR Sept. 96, p134-148.

Aging Effects on Temperature Susceptibility of Polymer Modified Asphalts, Shin-Che Huang, Jung-Do Huh, Raymond E. Robertson and Mang Tia, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1367-1378.

Biological Phosphorus Removal: Effect of Low Tempera-ture, Pradeep Kumar, Indu Mehrotra and T. Viraragha-

van, CR June 96, p63-76.

CO₂ and Temperature Effects on Evapotranspiration and Irrigated Agriculture, Jorge A. Ramírez and Bryce Finnerty, IR May/June 96, p155-163.

Cold Regions' Icy Reach, Eric G. Johnson, CE Sept. 96, p6. Compressibility of Clays: Fundamental and Practical Aspects, S. Leroueil, GT July 96, p534-543.

Computational Modeling of Early Age HPC, Rob ter Steeg, Jan Rots and Ton van den Boogaard, (Worldwide Ad-vances in Structural Concrete and Massony, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p542-553.

Concrete/Reinforcing Steel Bond Strength of Low-Temperature Concrete, Herbert P. Schroeder and Thom-

as B. Wood, CR June 96, p93-117.

Constitutive and Structural Behavior of Siliceous High-Strength Concretes After a Thermal Cycle at High Temperature, Roberto Felicetti and Pietro G. Gambarova, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p583-592.

Dynamic Fatigue of High-Rise Natural Draught Cooling Towers, Wilfried B. Krätzig, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and

S. L. McCabe, ed., 1996), p298-309.

Effect of Temperature and Galvanization on Cold-Formed Steel, A. B. Abdel-Rahim and D. Polyzois, MT Aug. 96,

Effect of Temperature and Salt Contamination on Carbonation of Cements, Mohammed Maslehuddin, C. L. Page and Rasheeduzzafar, MT May 96, p63-69.

Finite-Element Analysis of Temperature Effects on Plain-Jointed Concrete Pavements, Eyad Masad, Ramzi Taha and Balasingam Muhunthan, TE Sept./Oct. 96, p388-398.

Fuel and Cladding Oxidation under Expected Repository Conditions, J. Kevin McCoy, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p396-398.

High-Temperature Properties of Stainless Steel for Build-ing Structures, Y. Sakumoto, T. Nakazato and A. Matsuzaki, ST Apr. 96, p399-406.

Importance of Strain Rate and Temperature Effects in Geotechnical Engineering, Serge Leroueil and Maria Esther Soares Marques, (Measuring and Modeling Time De-pendent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p1-60.

Legal Weight Truck Cask Response to Regulatory Format Thermal Events, Part 1: Fuel Cladding, M. Greiner, R. J. Faulkner and Y. Jin, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Linkages Between the El Nino-Southern Oscillation and U.S. Droughts, John A. Dracup and Thomas C. Piechota, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p373-374.

Performance Evaluation of Overland Flow Wastewater Treatment System under Winter and Summer Condi-tions, R. Y. Surampalli, P.E., S. C. Chou and S. K. Ban-erji, P.E., CR Dec. 96, p163-177.

Performance of Repair Materials Exposed to Fluctuation of Temperature, A. S. Al-Gahtani, Rasheeduzzafar and A. A. Al-Mussallam, MT Feb. 95, p9-18.

Pipe-Soil Interaction Analysis of Field Tests of Buried PVC Pipe, Senro Kuraoka, Balvant Rajani and Caizhao Zhan, IS Dec. 96, p119-120.

Seasonal Effects on Generation of Particle-Associated Bacteria During Distribution, Blaise J. Brazos and John T. O'Connor, EE Dec. 96, p1050-1057.

A Strength Sensitivity Index for Assessing Climate Warming Effects on Permafrost, Branko Ladanyi, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p35-45.

Stress and Temperature Effects on Silt Frost Heave, Seyed M. Marandi, Douglas I. Stewart and Terrence Cousens, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p23-34.

Uniaxial Compression Behavior of Small Blocks of Welded Tuff, Stephen C. Blair and Patricia A. Berge, (High Level Radioactive Waste Management, Technical Program

Committee, 1996), p409-411.

Viscosity Characteristics of Rubber-Modified Asphalts, T. J. Lougheed and A. T. Papagiannakis, MT Aug. 96, p153-156.

Water Vapor Effects on the Corrosion of Steel, John C. Estill and Gregory E. Gdowski, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p457-458.

Wave Climate Variability in Southern California, Richard Seymour, WW July/Aug. 96, p182-186.

Temperature measurement

Effect of Repository Underground Ventilation on Emplacement Drift Temperature Control, Hang Yang, Yiming Sun, Daniel G. McKenzie and Kalyan K. Bhattacharyya, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p417-419.

Numerical Simulation of Temperature in the New York Bight, S. Rao Vemulakonda, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng,

1996), p66-79.

Simultaneous Measurement of Strain and Temperature Using Fiber Grating Sensors, Faramarz Farahi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Temperature Determination for a Contacting Body Based an Inverse Piezothermoelastic Problem, Fumihiro Ashida and Theodore R. Tauchert, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p784-787.

Westbay/MOSDAX Instrumentation of UE-25 ONC #1 and USW NRG-4 at Yucca Mountain, Nevada, Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p163-165

Temporary structures

3-D Graphical Simulation for Temporary Facility Planning using Object-Oriented Building Product Model, Kenji Ito, Yuji Kano, Jun Ueda and Shinichi Setoguchi, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p49-55.

Adaptation of a Layout Design System to a New Domain: Construction Site Layouts, Bongjin Choi and Ulrich Flemming, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), 9711-717.

Alternative Strategies for Temporary Support during Struc-tural Repair of Reinforced-Concrete Beams, John Cairns, ST Mar. 96, p238-246.

ArcSite: Enhanced GIS for Construction Site Layout, M. Y. Cheng and J. T. O'Connor, CO Dec. 96, p329-336.

The Idea of Building: Thought and Action in the Design and Protection of Buildings by Steven Groak, Jeffrey S. Russell, ME July/Aug. 96, p15-17.

A Monitoring System for High-Clearance Scaffold Systems during Construction, Y. L. Huang, T. Yen and W. F. Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p719-726.

Temporary Snow and Ice Pavement Structures, Robert L. Scher, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p87-120.

Cellular Confinement System Helps Hold Slope, CE Dec.

Creep Test Results Confirmed, Toby D. Leamon, P.E., CE Sept. 96, p30.

Editor's Note, David Darwin, ST Feb. 96, p115.

Engineering Innovations Highlighted at Research Symposium, ET Mar/Apr. 96, p1.5.

Fiber-Reinforced Bridges Studied, CE May 96, p8.

Implications of Tendon Modeling on Nonlinear Response of TLP, Basim B. Mekha, C. Philip Johnson and Jose M. Roesset, ST Feb. 96, p142-149.

Inflated Contour Approach for Deepwater Tendon Design, J. W. van de Lindt and J. M. Niedzwecki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p582-585

Japan Shows the Way with Aramids, CE Mar. 96, p14-15. Long-Term Deflection Control in Cantilever Prestressed Concrete Bridges. I: Control Method and Algorithm, Hui-Sheng Chiu, Jenn-Chuan Chem and Kuo-Chun Chang, EM June 96, p489-494.

Long-Term Deflection Control in Cantilever Prestressed Concrete Bridges. II: Experimental Verification, Hui-Sheng Chiu, Jenn-Chuan Chern and Kuo-Chun Chang, EM June 96, p495-501.

Notes on Prestressed Structures, Morris Schupack, CE Nov. 96, p30.

Parking Lot Corrosion Cure, Scott Greenhaus, CE Nov. 96, p58-60.

Probabilistic Analysis of Tendon Loads for a TLP in Deep Water, Charles G. Acquaah and Robert B. Gilbert, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p162-165.

Standard Specifications for Structural Concrete (ACI 301-96) by ACI Committee 301, AE Sept. 96, p120.

Stress-Laminated Timber Decks Using Glass FRP Ten-dons, H. J. Dagher, B. Abdel-Magid, S. Iyer and W. Lu, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1458-1468.

VSL's Experience with Post-Tensioned Masonry, Hans Rudolf Ganz, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p25-36.

Wave Induced Reaction Forces and Tension in TLP Tendons, John M. Niedzwecki, Dadi S. Soemantri and Oriol R. Rijken, (Probabilistic Mechanics & Structural Relia-Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p586-587

Potential-Scour Assessments at 130 Bridges in Iowa, Edward E. Fischer, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1149-1155.

Tennessee Valley Authority

Aeration of Reservoirs and Releases TVA Porous Hose Line Diffuser, Mark H. Mobley and W. Gary Brock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1311-1316.

Plans for Testing and Evaluating the New Autoventing Tur-bines at TVA's Norris Hydro Project, Paul Hopping, Pa-trick March, Thomas Brice and Joseph Cybularz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1299-1304.

Semicontinuous Mathematical Model for Bending of Multilayered Wire Strands, Claude Jolicoeur and Alain Cardou, EM July 96, p643-650.

Tensile Response of Reinforced High Strength Concrete Members, S. P. Shah and C. Ouyang, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p431-442.

Tensile strength

Accurate Asphalt Mixture Tensile Strength, William G. Buttlar, Reynaldo Roque and Namho Kim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p163-

172. Precipitation Hardened, High Strength, Weldable Steel, Semyon Vaynman, Morris E. Fine, Gautam Ghosh and Shrikant P. Bhat, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1551-1560.
Development and Characterization of Cellular Grouts for Sliplining, C. Vipulanandan and V. Jasti, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p829-

Development of a Solidification Method for Pulverized Concrete Waste by Hydrothermal Hot-Pressing and Fiber Reinforcement, Kazuhiko Sato, Toshiyuki Hashida, Hideaki Takahashi and Nakamichi Yamasaki, (*Materials* for the New Millennium, Ken P. Chong, ed., 1996),

Editor's Note, David Darwin, ST Jan. 96, p1.

Evaluation of Grout Materials for Anchor Embedments in Hardened Concrete, Willie E. McDonald, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p958-

Grouted Anchors for Carbon FRP Tendon, Antonio Nanni and Jay Thomas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p527-534.

Agan Shows the Way with Aramids, CE Mar. 96, p14-15.

Low Temperature Solidification of CaCO, Using Hydro-thermal Hot-Pressing, Kazuyuki Hosoi, Toshiyuki Hashida, Hideaki Takahashi, Nakamichi Yamasaki and Takashi Korenaga, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p694-700.

Ken P. Chong, ed., 199b.), p694-70U.
Mechanical Properties Characterization of Asphalt Concrete Barrier for Radioactive Nuclear Waste Vaults, Bernard A. Vallerga, Akhtarhusein A. Tayebali, Shmuel L. Weissman and Carl L. Monismith, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1288-1297.
Mechanical Properties of Reinforcing and Prestressing Steels after Heating, I. Cabrita Neves, João Paulo C. Rodizouse and António de Pádua Lourgino, MT. Nov. 96.

drigues and António de Pádua Loureiro, MT Nov. 96, p189-194

Mechanical Properties of Vitrified Soils, Christopher Y. Tuan and William C. Dass, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p731-740.

tennium, Ken P. Chong, ed., 1996), p731-740.
The Next Generation in Composite Rebars for Concrete Reinforcement, Salem S. Faza, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p905-913.
Non Linear Computation of Fiber Reinforced Micro-Concrete Structures, Mouloud Behloul, Régis Adeline and Gérard Bernier, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p518-529.
Replace or Repair? Pine Study Will Tell, ET Mar /Apr. 96.

Replace or Repair? Pipe Study Will Tell, ET Mar./Apr. 96,

Safety Analysis of Suspension-Bridge Cables: Williams-burg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

Computational Modeling of Early Age HPC, Rob ter Steeg, Jan Rots and Ton van den Boogaard, (Worldwide Advances in Structural Concrete and Masonry,

vances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p542-553.
Influence of the Yield Strength of Steel Fibres on the Toughness of Fibre Reinforced High Strength Concrete, Lucie Vandewalle, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p496-505.
Investigation of Pipeline Buckle Failure in a Horizontally Directionally Drilled Installation, Hugh W. O'Donnell, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), 163-172.

1996), p163-172.

Monitoring Stable Crack Propagation in Metals, Luis A. de Bejar, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p890-893.

Behavior of Beam-Column Connections Under Axial Column Tension, El Mostafa M. Higazy, Amr S. Elnashai and Mihran S. Agbabian, ST May 96, p501-511. Development of Tension Grips for GFRP Rebars, Hota V. S. GangaRao and Derek Altizer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p394-399.
Practical Formulas for Estimation of Cable Tension by Vibration Method, Hiroshi Zui, Tohru Shinke and Yoshio Namita. ST Lung 66, 6521-654.

Namita, ST June 96, p651-656.

Stress Limits in Prestressed Concrete Bridge Girders, Hassan H., El-Hor and Andrzej S. Nowak, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p460-467

Ultimate Behavior of Tie Plates at High-Speed Tension, Makoto Obata, Yoshiaki Goto, Sei Matsuura and Hideyuki Fujiwara, ST Apr. 96, p416-422.

Tension leg platforms

Implications of Tendon Modeling on Nonlinear Response of TLP, Basim B. Mekha, C. Philip Johnson and Jose M.

Roesset, ST Feb. 96, p142-149.

Inflated Contour Approach for Deepwater Tendon Design, J. W. van de Lindt and J. M. Niedzwecki, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p582-585. Probabilistic Analysis of Tendon Loads for a TLP in Deep

Water, Charles G. Acquash and Robert B. Gilbert, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p162-165.

Use of Quadratic Transfer Functions to Predict Response of Tension Leg Platforms, Inyeol Paik and Jose M. Roesset, EM Sept. 96, p882-889.

Wave Induced Reaction Forces and Tension in TLP Tendons, John M. Niedzwecki, Dadi S. Soemantri and Oriol P. Bilien, (Probabilities) Mechanic, & Structural Relic. R. Rijken, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p586-587.

Tension structures

Tensioned Fabric Structures: A Practical Introduction, Task Committee on Tensioned Fabric Structures of the Technical Committee on Special Structures of the Technical Administrative Committee on Metals of the Structural Division of the A.S.C.E., (R.E. Shaeffer, chmn.), 1996, 0-7844-0156-X, 80pp.

Terminal facilities

Driven Pile Capacities in Warm Permafrost in Komi Republic, Russia, Steven R. Thompson and Rupert G. Tart, Jr., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p254-265. Grand Plans for Grand Central, CE Apr. 96, p24.

Motion Planning of a Robotic Arm on a Wheeled Vehicle on a Rugged Terrain, Yong K. Hwang, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p8-14.

Terrain mapping

Incorporating Terrain Uncertainties in Autonomous Vehicle Path Planning, Kevin K. Gifford and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p15-21.

Terrain models

Runoff Computation Using Spatially Distributed Terrain Parameters, Francisco Olivera and David R. Maidment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3212-3217.

Tertiary treatment Retrofitting a Nuclear Lab, CE Dec. 96, p12,13.

Optical Fiber Sensors for Advanced Civil Structures, Mar-ten J. de Vries, Stephen H. Poland, Jennifer L. Grace, Vivek Arya, Kent A. Murphy and Richard O. Claus, (En-gineering Mechanics, Y. K. Lin and T. C. Su, 1996), p64-67.

Test procedures

Creep Test Results Confirmed, Toby D. Leamon, P.E., CE Sept. 96, p30.

Testing on the Web, CE Oct. 96, pl 1.

Testing

Anaheim State-of-the-Art Water Treatment Plant - Six years from Conception to Completion, Isaac Pai, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2654-2659.

Application of an Optical Monitor in Automatic Control of Coagulation Dosing in Water Treatment Operations, Chihpin Huang and Chi-Bing Liu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2450-2455.

Automation-Related Quality Improvements in Power Plant Design and Operation, George V. Jones, Phillip W. Garrett, Jones Randall E. and Carl K. Toner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), p487-493.

Bolted Field Splices for Steel Bridges, Firas Sheikh-Ibrahim and Karl H. Frank, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p290-297.

CERF Receives Award, CE Nov. 96, p8.

Cold Weather Testing of Outdoor Gas-Fired Heaters, De-bendra K. Das, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p410-

Critical Concepts for Column Testing, Charles D. Shackelford, GT Oct. 94, p1804-1828.

Development Testing of the Mars Pathfinder Inflatable Landing System, Tommaso P. Rivellini, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1059-1068.

Earthquakes, Bombs and Mines, CE July 96, p8

Effects of Testing, Inspection and Repair on the Reliability of Offshore Structures, Guoyang Jiao and Oddvar I. Eide, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p154-157.

Engineers Establish Bridge Safety Site, CE Nov. 96, p8. Bridge System, CERF Report: HITEC 96-01, Civil Engineering Research Foundation, 1996, 0-7844-0157-8,

Facilities for the Earth-Moon Test Range, Robert C. Wigand, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p956-962.

Fatigue Strength of Externally Reinforced Concrete Beams, L. C. Muszynski and R. L. Sierakowski, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p648-656

Fracture Mechanics of Concrete: Applications of Fracture Mechanics to Concrete, Rock and Other Quasi-Brittle Materials by Surendra P. Shah, Stuart E. Swartz, and Chengsheng Ouyang, Walter H. Gerstle, ST Nov. 96, p1390-1391.

An Innovative Plastic Housing System, E. Burnett, A. Arenja and L. Holroyd, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p545-554.

Issues on Geomechanics, Nicholas C. Costes and Stein Sture, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p516-520.

Kentucky Researchers Complete Composite Foot Bridge, CE Dec. 96, p14-15. Marine Borers are Back, Vahan Tanal and Alex Matlin, CE

Oct. 96, p71-73. More Research Needed for Steel Moment Frames, Garry D. Myers, CE July 96, p29,31.

Nevada Test Site on Track, CE Mar. 96, p20-21.

Passive Isolation Systems for Launch Vehicles, Eugene R. Fosness, Paul S. Wilke and Conor D. Johnson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1176-1182.

Performance Monitoring of Three Stress-Laminated Timber Bridges in Leon County, Nur Yazdani and Joy Orlando Kadnar, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p268-275.

Prestress Force Effect on Vibration Frequency of Concrete Bridges, M. Saiidi, B. Douglas and S. Feng, ST July 94, p2233-2241.

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Resistance of Silica-Fume Concrete to Corrosion-Related Damage, Safwan A. Khedr and Ahmed F. Idriss, MT May 95, p102-107.

Service Load Test of 1:3 Scale Shell Bridge Model, F. S. Fanous, F. W. Klaiber and W. G. Wassef. ST Feb. 96.

Statistical Implications of Methods of Finding Characteristic Strengths, Richard D. Hunt and Anthony H. Bryant, ST Feb. 96, p202-209.

Structural Fire Resistance - Past, Present and Future, T. T. Lie and V. K. R. Kodur, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p345-351.

Studies on the Erosion of a Compacted Soil, G. J. Hanson and K. M. Robinson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2427-2432.

Tennessee Tests Water Treatment, CE July 96, p20-21.

Validating Expert Systems in Transportation Practice, Gary S. Spring, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p985-991.
Validation of Rutting in the CAL/APT Program, J. Harvey, S. Shatnawi and S. Weissman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p701-710.

Venting Test Analysis Using Jacob's Approximation, Kenneth B. Edwards, EE Mar. 96, p232-234.

Welded Steel Moment Frame Joint Testing Programs, Thomas A. Sabol and Michael D. Engelhardt, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1228-1235.

Accurate Asphalt Mixture Tensile Strength, William G. Buttlar, Reynaldo Roque and Namho Kim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p163-

ASR Behavior of Class C Fly Ash Modified Cement, Anil Misra, H. P. Niu, Bryan R. Becker and Jinshi Liu, (Mate-rials for the New Millennium, Ken P. Chong, ed., 1996), p348-355.

Assessing the Significance of Subgrade Variability on Test Section Performance, Maureen A. Kestler, (Uncertainty Section Performance, Maureen A. Restier, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p685-694. Behavior of Cold-Formed SHS Beam-Columns, Raef M. Sully and Gregory J. Hancock, ST Mar. 96, p326-336.

Behavior of Fiber Reinforced Polymer Concrete, C. Vipulanandan and S. K. Mantrala, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1160-1169.

Capacity Predictions for Full Scale Transmission Line Test Foundations, Robert E. Kondziolka and Peter M. Kan-daris, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p695-

Coefficient of Permeability from AC Electroosmosis Experiments. II: Results, R. J. Finno, K. Chung, J. Yin and J. R. Feldkamp, GT May 96, p355-364.

Consolidation Characteristics of Phosphatic Clays, A. Naser Abu-Hejleh, Dobroslav Znidarcic and Bobby L. Barnes, GT Apr. 96, p295-301.

Data Acquisition and Handling for the Minnesota Road Re-search Project, David E. Newcomb and Joseph A. Cor-nell, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p510-514. Development of Tension Grips for GFRP Rebars, Hota V.

Development of Tension Grips for GFRP Rebars, Hota V. S. GangaRao and Derek Altizer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p394-399.
The Effect of Measurement Scale on the Worth of Hydraulic Conductivity Data: Slug Tests and Pumping Tests, Willy Zawadzki and Roger Beckie, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Poth ed. 1996; 1034-1051. S. Roth, ed., 1996), p1034-1051.

Electrokinetic Remediation. I: Pilot-Scale Tests with Lead-Spiked Kaolinite, Yalçın B. Acar and Akram N. Alshawabkeh, GT Mar. 96, p173-185.

Evaluation of Dynamic Analysis Results using Full-Scale Lattice Tower Tests, Markus Ostendorp, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p518-525

Evaluation of Service Load Behavior of Small Bridges Using Strain Measurement, Ben T. Yen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p667-

Evaluation of the UK Coastal Research Facility, Richard R. Simons, Richard J. S. Whitehouse, Ruairi D. MacIver, Jonathan Pearson, Paul B. Sayers, Yingdao Zhao and Adrian R. Channell, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p161-172.

Feasibility of Fullerene Waste as Carbonaceous Adsorbent, Theodore G. Cleveland, Sanjay Garg and William G. Rixey, EE Mar. 96, p235-238.

Field Evaluation of GEOSYNTHETICALLY STABI-LIZED PAVEMENTS, Imad L. Al-Qadi, Thomas L. Brandon and Salman A. Bhutta, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p328-337.

Flexural Buckling of Steel Angles: Experimental Investiga-tion, Seshu Madhava Rao Adluri and Murty K. S. Ma-

dugula, ST Mar. 96, p309-317.

Geotextile-Reinforced Surface for Rapid Construction of Low-Volume Pavements, Reed B. Freeman and Randy C. Ahlrich, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p298-307.

Hydraulic Conductivity of Desiccated Geosynthetic Clay Liners, B. Tom Boardman and David E. Daniel, GT Mar.

Hydraulic Design of Subsurface Flow Wetlands, Edward L. Marsteiner, Thomas L. Theis, Anthony G. Collins and Thomas C. Young, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2421-2426.

Laboratory Study of Large Stone Asphalt Paving Mixtures, Joe W. Button, W. W. Crockford and E. G. Fernando, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p603-611.

Measuring Blast Damage, Clifton E. R. Lawson, P.E., CE Oct. 96, p38-39.

Neural Networks and AASHO Road Test, M. R. Banan and K. D. Hjelmstad, TE Sept./Oct. 96, p358-366.

Optimization of a 550-/690-MPa High-Performance Bridge Steel, A. B. Magee, J. H. Gross and R. D. Stout, (Materi als for the New Millennium, Ken P. Chong, ed., 1996), p1561-1570.

Orthotropic Steel Deck for the Williamsburg Bridge Reconstruction, R. B. Gajer, J. Patel and D. Khazem, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p491-498

An Overview of Field Experiments on a Low-Rise Build-ing, Douglas A. Smith, Kishor C. Mehta and Praveen Sandri, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p1029-1036.

Physical Tests and Analyses of Composite Steel-Concrete Beam-Columns, S. Ali Mirza, Ville Hyttinen and Esko Hyttinen, ST Nov. 96, p1317-1326.

Pipe Plunge Pool Energy Dissipator, Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323.

Self Deployable Mechanism for Large Disk Antenna Using Centrifugal Force, Takanori Sato, Shinji Matsumoto, Haruyuki Namba, Kenji Takagi, Hisashi Tadokoro, Hiroshi Yamakawa, Takao Oura, Kenji Nozaki and Nobuyuki Kaya, (Engineering, Construction, and Opera tions in Space, Stewart W. Johnson, ed., 1996), p1155-1161

Shrinkage Control in Acrylamide Grouts and Grouted Sands, V. Jasti, C. Vipulanandan, David Magill and Don Mack, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p840-850.

Simulation and Visualization of Martian Rover, William Lincoln, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p143-149.

Strengthening Concrete Block Walls Using Carbon Fiber, Dan Engebretson, Rajan Sen, Gray Mullins and Alfred Hartley. (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1592-1600.

Chong, ed., 1990, p.1932-1000.
Studies on Galvanized Carbon Steel in Ca(OH)₂ Solutions, Bala S. Haran, Branko N. Popov and Ralph E. White, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p997-1006.

Testing on the Web, CE Oct. 96, pl 1.
Thermogravimetric Analysis of Fiber Reinforced Plastics,
Luca Prian, Ritsuko Pollard and Aaron Barkatt, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Under Way: Decontamination Pilots for Dredged Material, CE Nov. 96, p10,12

Wave Reflection and Overwash of Dunes, Nobuhisa Koba-yashi, Yukiko Tega and Mark W. Hancock, WW May/ June 96, p150-153.

Weld Performs Under Earthquake Conditions, CE Aug. 96,

Zero-Brittleness Size-Effect Method for One-Size Fracture

Test of Concrete, Zdeněk P. Bažant and Zhengzhi Li, EM May 96, p458-468.

"Do Nothing" Title Misleading, Bruce E. Rittmann, Mi-chael C. Kavanaugh and Jacqueline A. MacDonald, CE Nov. 96, 736-738. Nov. 96, p36,38.

Hydrodynamic Modeling for Assessing Engineering Alter-natives for Elevating the Kennedy Causeway, Corpus Christi, Texas, Cheryl A. Brown, Nicholas C. Kraus and Adele Militello, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p681-694

San Angelo High Performance Concrete Bridge in Texas, Mary Lou Ralls, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L.

McCabe, ed., 1996), p164-175.

Simulation of Regional Ground-Water Flow on a Transboundary Flowline; Trans-Pecos, Texas and Chihuahua, Mexico, Barry J. Hibbs, Bruce K. Darling, John M. Sharp, Jr. and John B. Ashworth, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1323-1330.

Technical Activities in a Large Branch or Section, Martha Ferrero Juch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2248-2253.

Water Allocation on US/Mexico Boundaries, Conrad G. Keyes, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3429-3433.

Textiles

Lunar Textile Method for the Shield Wall on the Lunar Surface, Mikiya Okumura, Takao Ueno and Yasuhiro Ohashi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p889-895.

Thailand

A Boom in Thailand, Charles R. Heidengren, CE Nov. 96, p64-67.

Collapse of Transmission Line Towers in Typhoon Gay, Panitan Lukkunaprasit, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p351-352.

Environmental-Induced Longitudinal Cracking in Cold Regions Pavements, Robert L. Scher, (Cold Regions Engineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p899-910.

An Open Graded Base to Reduce Thaw Weakening in Flex-

ible Pavements, Maureen A. Kestler, (Cold Regions Engineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p878-889.

Performance of a Triodetic Foundation Near Fairbanks, Alaska, Thomas C. Kinney, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p291-302. Surface Modifications to Reduce Thaw Degradation of Permafrost, John P. Zarling and Jasper Rajesh, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p46-59.

Cartson, ed., 1990, 1940-39.
Upheaval Buckling of a Pipeline in an Arctic Environment,
T. Bartlett Quimby and Michael R. Fitzpatrick, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p215-225.

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Editorial, Harry H. Yeh, WW May/June 96, p109. Editorial, Thomas L. Theis, EE June 96, p451.

Forum, El Oct. 96, p139-146.

Hindsight on River Ice Jam Stability, Spyros Beltaos, CR Sept. 96, p122-133.

Seven ASCE Members Elected to NAE, CE Aug. 96, p67. Toward a Unified Nomenclature for Reinforced-Concrete Theory, Thomas T. C. Hsu, ST Mar. 96, p275-283.

Thermal analysis

Dam Construction in Northern Environment: A Numerical Study, Mu Shen and J.-M. Konrad, (Cold Regions Engi-neering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p736-744.

Double-Layer Grids: Review of Static and Thermal Analysis Methods, Ramesh B. Malla and Reynaud L. Serrette, ST Aug. 96, p873-881.

Microstructural and Phase Characteristics of Phosph sum-Cement Mixtures, Amitava Roy, Ramesh vakaalva and Roger K. Seals, MT Feb. 96, p11-18.

Near-Drift Thermal Analysis Including Combined Modes of Conduction, Convection, and Radiation, Clifford K. Ho and Nicholas D. Francis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p448-450.

Pyrolysis Kinetics of Uncoated Printing and Writing Paper of MSW, Ching-Yuan Chang, Chao-Hsiung Wu, Jiann-Yuan Hwang, Jyh-Ping Lin, Wan-Fa Yang, Shin-Min Shih, Leo-Wang Chen and Feng-Wen Chang, EE Apr. 96, p299-305.

Thermal convection

Near-Drift Thermal Analysis Including Combined Modes of Conduction, Convection, and Radiation, Clifford K. Ho and Nicholas D. Francis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p448-450.

Thermal factors

Aging and Low-Temperature Cracking of Asphalt Concrete Mixture, Julie E. Kliewer, Huayang Zeng and Ted S. Vinson, CR Sept. 96, p134-148.

Anisotropic Thermal Expansion Causes Deformation of Marble Claddings, Clemens Widhalm, Elmar Tschegg and Walter Eppensteiner, CF Feb. 96, p5-10.

Computational Modeling of Early Age HPC, Rob ter Steeg, Jan Rots and Ton van den Boogaard, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p542-553.

Contaminant Transport in Nonisothermal Fractured Porous Media, Mao Bai, Jean-Claude Roegiers and Hilary I. In-yang, EE May 96, p416-423.

Discrete-Fracture Modeling of Thermal-Hydrological Processes at G-Tunnel and Yucca Mountain, John J. Nitao and Thomas A. Buscheck, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p117-118.

Drying of a Heated Porous Medium at Sub-Residual Saturations, Y.-T. Chen, A. K. Sathappan and R. Boehm, (High Level Radioactive Waste Management, Technical

Program Committee, 1996), p119-121.

Ensuring Consistency of Groundwater Modeling Results with Indirect Evidence, S. Vomvoris, A. Scholtis and P. Vinard, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p133-134.

High-Temperature Properties of Stainless Steel for Build-ing Structures, Y. Sakumoto, T. Nakazato and A. Matsuzaki, ST Apr. 96, p399-406.

Hydrothermal Effects on the Bearing Strength of GFRP Composite Joint, Stephanie Hurd and Robert Yuan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p243-250.

Legal Weight Truck Cask Response to Regulatory Format Thermal Events, Part 1: Fuel Cladding, M. Greiner, R. J. Faulkner and Y. Jin, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p351-353.

Mountain, Y. S. Wu, T. M. Bandurraga, C. F. Ahlers, S. Finsterle, G. Chen, C. Haukwa, G. S. Bodvarsson, E. Kwicklis, J. Rousseau and L. Flint, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p73-75.

Optimization Sensing and Control in Design of Antennas, Mehdi S. Zarghamee and Joseph Antebi, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p147-153.

A Progress Report on the Large Block Test, W. Lin, D. Wilder, J. Blink, P. Berge, S. Blair, V. Brugman, K. Lee, M. Owens, C. Radewan, Ramirez. A., N. Rector, J. Roberts, D. Ruddle and J. Wagoner, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p122-124.

Quartic Formulation for Elastic Beam-Columns Subject to Thermal Effects, B. A. Izzuddin, EM Sept. 96, p861-871. Recent Advances in Sensitivity Analysis for Thermomechanical Postbuckling of Composite Panels, Ahmed K. Noor, EM Apr. 96, p300-307.

Recent Progress in Thermally Induced Vibrations Research, John D. Johnston, Richard S. Foster, David L. Eby and Earl A. Thornton, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl 134-

Reliability-Based Model for Predicting Pavement Thermal Cracking, Said M. Easa, Ahmed Shalaby and A. O. Abd El Halim, TE Sept/Oct. 96, p374-380.

Scoping Analysis of In Situ Thermal-Hydrological Testing at Yucca Mountain, Thomas A. Buscheck and John J. Nitao. (High Level Radioactive Waste Management, Technical Program Committee, 1996), p130-132.

Status of Thermal Loading Evaluations for a Potential Re-pository, Steven F. Saterlie, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p442-444.

Thermal Response of Bare Steel Roof Assemblies to Fire Environments in Aerosol Storage Facilities, S. P. Hunt, J. L. Scheffley and R. G. Gewain, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p365-372.

Thermogravimetric Analysis of Fiber Reinforced Plastics, Luca Prian, Ritsuko Pollard and Aaron Barkatt, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p54-62

Unsaturated Flows Around a Horizontal Hole with Constant Heat Input, Y.-T. Chen and R. F. Boehm, (High Level Radioactive Waste Management, Technical Pro-gram Committee, 1996), p125-127.

Thermal and Vapor Performance of Insulated Assemblies, Axel R. Carlson, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p384-

Thermal properties

Depleted-Uranium-Silicate Backfill of Spent-Fuel Waste Packages for Repository Containment and Criticality Control, Charles W. Forsberg, Ron B. Pope, Ron C. Ash line, Mark D. DeHart, Kenneth W. Childs and Jabo S. Tang, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p366-368.

Evaluation of Crumb Rubber (CRM) as a Smart Additive in Evaluation of Crimb Rubber (CRM) as a Smart Additive in Asphalt Concrete Mises, Gary Gowda, Kevin Hall and Robert Elliott, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p612-621. Fundamental Thermal Mechanical Modeling of Gas-Filled Porous Composites, N. J. Salamon and Rampath Gane-

san, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p52-55.

Long Term Prediction of Far-Field Heat Conduction, Bahram Nassersharif and Lixing Ma, (High Level Radio-active Waste Management, Technical Program Committee, 1996), p438-441.

Minimum Thermal Protection for Cold Weather Masonry, C. J. Korhonen, E. R. Cortez and R. D. Thomas, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p128-140.

Modelling of a Heater Experiment in a Saturated Granite with Thermoporoelastic Source Singularities, Emmanuel Detournay and Ilya Berchenko, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p44-47.

Modelling of Thermal-Hydrological-Mechanical Processes in a Discrete Joint, T. S. Nguyen, A. P. S. Selvadurai and P. Flavelle, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p60-63.

Postbuckling of Moderately Thick Circular Plates With Edge Elastic Restraint, G. Venkateswara Rao, N. Ra-jasekhara Naidu and K. Kanaka Raju, EM Oct. 94,

Some Thoughts on Thermoporoelastic Coupling, M. Bai, Y. Abousleiman and J.-C. Roegiers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p48-51.

Thermal Impact of a Buried Chilled Gas Pipeline, Lutfi Raad, Xioalin Yuan and Dieter Weichert, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p203-214.

Upheaval Buckling of a Pipeline in an Arctic Environment, T. Bartlett Quimby and Michael R. Fitzpatrick, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p215-225.

Thermal resistance

Soil Thermal Properties for the Design of Underground Structures in Cold Regions, J. E. Steinmanis, D. Parmar, H. S. Radhakrishna and A. S. Judge, (Cold Regions Engi-neering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p471-482.

Modeling of Surface Water Pumps in TVA Reservoirs, Boualem Hadjerioua, Mark H. Mobley, Gary E. Hauser and W. Gary Brock, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3188-3193.

Sediment Transport in a Thermally Stratified Bay, Kai-Ping Wang, Zenitha Chroneer and Wilbert Lick, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p466-477.

Selective Withdrawal through Intake Fitted with a Collar, James J. Sharp, T. M. Parchure and Z. R. Guo, HY Dec. 96, p683-686.

Three-Dimensional Tidal Currents and Water Quality in Stratified Omura Bay, Tadashi Fukumoto, Akihide Tada, Takehiro Nakamura and Hiroyoshi Togashi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p707-721.

Upper Chehalis River Pollutant Capacity and Load Alloca-tions, Paul J. Pickett, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1045-1050.

Thermal stresses

Numerical Analyses of Reinforced Underground Openings Subjected to Seismic Loadings, Fei Duan and Saeed Bonabian, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p412-414.

Probabilistic Fatigue Life Analysis of High Density Electronics Packaging, N. R. Moore, E. A. Kolawa, S. Sutharshana, L. E. Newlin and M. Creager, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p886-889.

Steady-State Thermal Bending of Thick Rectangular Plates, Isamu A. Okumura, EM June 96, p512-520.

Thermocouples

Field Evaluation of GEOSYNTHETICALLY STABI-LIZED PAVEMENTS, Imad L. Al-Qadi, Thomas L. Brandon and Salman A. Bhutta, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p328-337.

Millermum, Ken F. Chong, ed., 1990, p. 222-331.
Mixed Convection Heat Transfer Coefficients for Horizon-tally Emplaced Waste Packages, J. J. Ventresca, W. G. Culbreth and C. Lawson, (High Level Radioactive Waste Management, Technical Program Committee, 1996).

Thermodynamics

A CDM-Based Approach to Stochastic Damage Growth, Baidurya Bhattacharya and Bruce Ellingwood, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p772-775.

Coupled Processes of Gas Hydrates Dissociation and Fluid Filtration in Saturated Porous Media, Alexey Maksimov, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p220-223.

A Damage Mechanics-Based Approach to Structural Deterioration, Baidurya Bhattacharya and Bruce Ellingwood, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Griffith Energy Balance Model for Crack-Growth Predic-tion in Reinforced Concrete, Kamel Ben Amara, EM

July 96, p683-689.

Near-Drift Thermal Analysis Including Combined Modes of Conduction, Convection, and Radiation, Clifford K. Ho and Nicholas D. Francis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p448-450.

Nonequilibrium Thermodynamical Model for Spent Fuel Dissolution Rate, Ray B. Stout, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p393-395.

1996), p393-395.

Pore Structure Evolution and State of Pore Water in Hydrating Cement Paste at Cryogenic Temperatures, J-Y. Jehng, D. T. Sprague, S. Bhattacharja and W. P. Halperin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p600-607.

Strength Growth as Chemo-Plastic Hardening in Early Age Concrete, Franz-Josef Ulm and Olivier Coussy, EM Dec.

96, p1123-1132.

The Thermodynamic Structure of a Fluid-Saturated Compressible and Incompressible Elastic Porous Solid, Reint de Boer, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p56-59.

Contaminant Transport in Nonisothermal Fractured Porous Media, Mao Bai, Jean-Claude Roegiers and Hilary I. In-

Media, Maio Bai, Peair-Caude Rosegaria and Hilling Yang, EE May 96, p416-423.

Some Thoughts on Thermoporoelastic Coupling, M. Bai, Y. Abousleiman and J.-C. Roegiers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p48-51.

Temperature Determination for a Contacting Body Based on an Inverse Piezothermoelastic Problem, Furnihiro Ashida and Theodore R. Tauchert, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p784-787.

The Thermodynamic Structure of a Fluid-Saturated Com-pressible and Incompressible Elastic Porous Solid, Reint de Boer, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p56-59.

Time Domain Fundamental Solution to Nonclassical Thermoelasticity with One Relaxation Time Part I: Three-Dimensional Solution, Jianming Chen and Alexander H.-D. Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p80-83.

Time Domain Fundamental Solution to Nonclassical Thermoclasticity with One Relaxation Time Part II: Two-Dimensional Solution, Jianming Chen and Alexander H.-D. Cheng, (Engineering Mechanics, Y. K. Lin and T.

C. Su, 1996), p88-91.

Thermography

Karst Water Inventories Using Thermography, C. Warren Campbell, Joseph W. Foster and Mohamed Abd El Latif, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3910-3914.

Analysis of Concrete Pavements by Rectangular Thick-Plate Model, T. F. Fwa, X. P. Shi and S. A. Tan, TE Mar/Apr. 96, p146-154.

Appalachian Piedmont Regolith: Relations of Saprolite and Residual Soils to Rock-Type, Milan J. Pavich, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996, pl-11.

Hindsight on River Ice Jam Stability, Spyros Beltaos, CR Sept. 96, p122-133.

Steady-State Thermal Bending of Thick Rectangular Plates, Isamu A. Okumura, EM June 96, p512-520.

Using Cavity Well to Determine Aquifer Thickness and Constants, Mohammad Saleem, IR May/June 94, p504-

Using Spaceborne Imaging Radar to Identify Lake Water Resources on the Alaskan North Slope, M. O. Jeffries, K. Morris and G. E. Liston, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p855-865.

Thin shell structures

Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST May 94, p1471-1488.

Geometric and Material Nonlinearities in Steel Plates, P. Roca, E. Mirambell and J. Costa, ST Dec. 96, p1427-

Stability Analysis of Axisymmetric Thin Shells, Ashutosh Bagchi and V. Paramasiyam, EM Mar. 96, p278-281.

Technique for Precise Measurement of Large-Scale Silos and Tanks, Xiaoli Ding, Richard Coleman and J. Michael Rotter, SU Feb. 96, p14-25.

Thin wall section

Nonlinear FE Solution for Thin-Walled Open-Section Composite Beams, B. Omidvar and A. Ghorbanpoor, ST Nov. 96, p1369-1378.

Simplified Analysis of Thin-Walled Composite Members, A. Ghorbanpoor and B. Omidvar, ST Nov. 96, p1379-

Thin-Walled Prestressed Concrete Members under Combined Loading, B. M. Luccioni, J. C. Reimundin and R. Danesi, ST Mar. 96, p291-297.

Warping Solution for Shear Lag in Thin-Walled Orthotrop-ic Composite Beams, Roberto Lopez-Anido and Hota V. S. GangaRao, EM May 96, p449-457.

Thin wall structures

Continuum Model for Analysis of Multiply Connected Per-forated Cores, Domenico Capuani, Marco Savoia and Ferdinando Laudiero, EM Aug. 94, p1641-1660.

Dynamic Behavior of Continuous and Cantilever Thin-Walled Box Girder Bridges, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, BE May 96, p67-75.

Improving Design in Composite Thin-Walled Columns, Luis A. Godoy and Leonel I. Almánzar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1155-1158.

Large-Displacement Analysis of Elastoplastic Thin-Walled Frames. I: Formulation and Implementation, B. A. Izzuddin and D. Lloyd Smith, ST Aug. 96, p905-914.

Large-Displacement Analysis of Elastoplastic Thin-Walled Frames. II: Verification and Application, B. A. Izzuddin and D. Lloyd Smith, ST Aug. 96, p915-925. New Warping Function for Thin-Walled Beams. I: Theory, A. Prokić, ST Dec. 96, p1437-1442.

New Warping Function for Thin-Walled Beams. II: Finite Element Method and Applications, A. Prokić, ST Dec. 96, p1443-1452.

Stability of Shear Deformable Thin-Walled Space Frames and Circular Arches, Sung-Pil Chang, Sung-Bo Kim and Moon-Young Kim, EM Sept. 96, p844-854.

Structural Consequences of Imperfection in Thin-Walled Components, Luis A. Godoy and John Carrasquillo, (En-gineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Vibration of Thin-Walled Box-Girder Bridges Excited by Vehicles, Dongzhou Huang, Ton-Lo Wang and Mohsen Shahawy, ST Sept. 95, p1330-1337.

Three-dimensional analysis

3-D Elastodynamic Green's Functions of Laminated Plates, J. Zhu and A. H. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1159-1162.

3D Simulation of End-Plate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94, p3122-3136.

Analysis of a Long Thick Orthotropic Circular Cylindrical Shell Panel, K. Chandrashekhara and K. S. Nanjunda Rao, EM June 96, p575-579.

A Complete Three Dimensional Analysis of Pressures on a Vertical Cylinder by Earthquakes Including Fluid-Structure Interaction, Bang-Fuh Chen, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p519-522.

Dynamic Analysis of Concrete Pavements Subjected to Moving Loads, Chih-Ping Wu and Pao-Anne Shen, TE Sept/Oct. 96, p367-373.

High Performance Computing: Application to Highway Bridges, T. E. Fenske, Z. Yu, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p444-452.

Mapping Underground, ET June/July 96, p7,11.

Modeling the Blue Ridge, CE Aug. 96, p20,22.

Structural Behavior of End-Plate Bolted Connections to Stiffened Columns, Mohammed R. Bahaari and Archibald N. Sherbourne, ST Aug. 96, p926-935.

Thermal Management with Ventilation, George Danko, Thomas A. Buscheck, John J. Nitao and Steven Saterlie. (High Level Radioactive Waste Management, Technical Program Committee, 1996), p420-422.

Three-Dimensional Analysis of Doubly Curved Laminated Shells, Chih-Ping Wu, Jiann-Quo Tarn and Shu-Man Chi, EM May 96, p391-401.

Three-Dimensional Failure Analysis of Composite Mason-ry Walls, Subhash C. Anand and Kishore K. Yalamanchili, ST Sept. 96, p1031-1039.

Three-Dimensional Finite Element Analysis of Deep Excavations, Chang-Yu Ou, Dar-Chang Chiou and Tzong-Shiann Wu, GT May 96, p337-345.

Three-Dimensional Moving Contact Line for an Accelerat-ing Vertical Cylinder, K.-H. Wang, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p848-851.

Three-Dimensional Nonlinear Transient Dynamic Accident Analyses of Waste Packages, Scott M. Bennett, Zekai Ceylan and Thomas W. Doering, (High Level Radioac-tive Waste Management, Technical Program Committee, 1996), p382-384.

Three-dimensional flow

3D Flow Structures - From Laboratory to Field Applica-tions, P. Mewis and K.-P. Holz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3446-3451.

Characteristics in Evaluating Stream Functions in Ground-Water Flow, G. B. Matanga, HE Jan. 96, p49-53.

Hydrodynamic Behavior of Partly Vegetated Open Chan-nels, Dan Naot, Iehisa Nezu and Hiroji Nakagawa, HY Nov. 96, p625-633.

Preliminary Validation of the MAC3D Numerical Flow Model, Robert S. Bernard, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3434-3439.

Statistical Sample Size for Construction of Soil Liners, Craig H. Benson, Huaming Zhai and Salwa M. Rashad, GT Oct. 94, p1704-1724.

Three-Dimensional Organized Vortices Above Flexible Water Plants, Syunsuke Ikeda and Minoru Kanazawa, HY Nov. 96, p634-640.

Unstable Patterns in Partly Vegetated Channels, Dan Naot, lehisa Nezu and Hiroji Nakagawa, HY Nov. 96, p671-

Verification of a 3D Flow Model Using Laboratory Data, Yafei Jia and Sam S. Y. Wang, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3458-3463.

Three-dimensional models

3-D CAD Links to Project Savings, ME Sept./Oct. 96, p5-6.

A 3-D NAPL Flow and Biodegradation Model, Phillip C. de Blanc, Daene C. McKinney, Gerald E. Speitel, Ir., Kamy Sepehmoori and Mojdeh Delshad, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p478-489.

3D Model of Estuarine Circulation and Water Quality Induced by Surface Discharges, Wenrui Huang and Malcolm Spaulding, HY Apr. 95, p300-311.

715

3D Numerical Modeling of Cohesive Sediments, Scott A. Yost and Nikolaos D. Katopodes, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p478-489.

Accuracy of a 3D Hydrodynamic Model Verification due to the Relative Magnitude of Forcing Functions, Bernard B. Hsieh, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3452-3457.

Application of a Coupled 3-D Hydrodynamics-Sediment-Water Quality Model, Xinjian Chen and Y. Peter Sheng, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p325-339.

Application of a Three-Dimensional Model to Assess Seawater Intrusion in the South San Diego Embayment, David Huntley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4072-4077.

Application of the Model SPECIES to Kaneohe Bay, Oahu, Hawaii, Clifford J. Hearn, (Estuarine and Coastal Mod-eling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p355-366.

Application of the Q-3D SHORECIRC Model to Surfbeat, pplication of the C3-D Strokes-Rec Nobel to Sunban, A. R. Van Dongeren, I. A. Svendsen and F. E. Sancho, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p233-244.

Ryszard B. Zenteric, etc., 1990; pc.53-244.
Application of Vertical Turbulence Closure Schemes in the Chesapeake Bay Circulation Model — A Comparative Study, Harry V. Wang and Raymond S. Chapman, (Esturarine and Coastal Modeling, Malcolm L. Spaulding and Rajph T. Cheng, 1996), p283-297.

BAYMAP: A Simplified Embayment Flushing and Trans-port Model System, J. Craig Swanson and Daniel Men-delsohn, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p570-582.

Can Numerical Estuarine Models be Driven at the Estuary Mouth, B. H. Johnson, H. V. Wang and K. W. Kim, (Es-tuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p255-267.

Cracking Analysis of Arch Dams by 3D Boundary Element Method, L. M. Feng, O. A. Pekau and C. H. Zhang, ST

June 96, p691-699.

Defining the Potential Repository Siting Block Yucca Mountain, Nevada, Robert W. Elayer and Richard M. Nolting, III, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p157-159.

Discrete-Fracture Modeling of Thermal-Hydrological Processes at G-Tunnel and Yucca Mountain, John J. Nitao and Thomas A. Buscheck, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p117-118.

Discussions of a 3D Numerical Simulation of Transient Regional Groundwater Flow and Transport, Bernard B. Hsieh, Mansour Zakikhani and William D. Martin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2218-2223

Dissolution of Toluene Residuals: 3-D Laboratory Experiments, David A. Reynolds, Philippe Lamarche Michel Tétreault, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p607-618

Dynamic Response of Rectangular Flexible Fluid Containers, Jac Kwan Kim, Hyun Moo Koh and Im Jong Kwahk, EM Sept. 96, p807-817

Every Road That Rises Must Converge on GIS, Eric Rasmussen, ET Oct./Nov. 96, p8.

Field Estimation of Standard Deviations for 3D Gaussian Model, An Jin and Shoou-Yuh Chang, EE July 96, p660-662.

A Graphical Environment for Multi-Dimensional Surface Water Modeling, Alan K. Zundel and Norman L. Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p207-212.

Groundwater Flow Component of a Wetland-Dynamics Model, Hector R. Bravo and Gregory H. Brown, (North American Water and Environment Congress & Destruc-

the Water, Chenchays Bathala, ed., 1996), p.2793-2798.
Hydrodynamic Flow Modeling at Confluence of Two
Streams, K.-H. Wang, T. G. Cleveland, S. Fitzgerald and
X. Ren, EM Oct. 96, p994-1002.

Integrating Information with 3D Models for Facility Life-Cycle Support, A. B. Cleveland, Jr., (Analysis and Com-putation, Franklin Y. Cheng, ed., 1996), p253-261.

Integration of CAD Drawings and Construction Robot Motion Controllers, Jaeho Son and Miroslaw J. Skibniewski, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p71-78.

Long Term Prediction of Far-Field Heat Conduction,

Long Term Prediction of Far-Field Heat Conduction, Bahram Nassersharif and Lixing Ma, (High Level Radio-active Waste Management, Technical Program Commit-tee, 1996), p438-441.
Modeling 3D Free Surface Flow in Compound Channels: A Validation Case Study, Fraincisco J. M. Simões and Sam S.-Y. Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, 4, 1996, 92719-2724.

Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2719-2724.

Modeling of Possible Outflow of Radionuclides from Deep Burials into Biosphere, V. M. Shestopalov, B. D. Stetsenko and A. S. Boguslawski, (High Level Radioactive Waste Management, Technical Program Committee, 1996).

1996), p176-177.

1990), p1/6-17/.
Modeling Outfall Plume Behavior Using Far Field Circulation Model, Alan F. Blumberg, Zhen-Gang Ji and C. Kirk Ziegler, HY Nov. 96, p610-616.
Modeling the Impact of Sea Level Rise in Delaware Bay, K. W. Kim and B. H. Johnson, (North American Water

and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2737-2742. Modelling Eddy Formation in Coastal Waters: A Comparison between Model Capabilities, Duncan Galloway, Eric Wolanski and Brian King, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng,

1996), p13-25.

Modelling of El Berrocal Field Tracer Tests, J. P. Humm, J. Guimera, P. Grindrod and S. P. Crompton, (High Level Radioactive Waste Management, Technical Program

Committee, 1996), p114-116.

Multi Dimensional Modeling of Water Quality Using the Finite Element Method, Ian P. King and John F. De-George, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p340-354.

Spatitumg and Raiph 1. Cheng, 1970, p.34-358.
Nested Three-Dimensional Hydrodynamic Modeling of the Delaware Estuary, John S. Ramsey, Robert P. Hamilton, Jr. and David G. Aubrey, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p53-65.

Numerical Modeling for Saturated-Zone Groundwater Travel Time Analysis at Yucca Mountain, Bill W. Arnold and George E. Barr, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Numerical Simulation of Temperature in the New York Bight, S. Rao Vernulakonda, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p66-79.

Optimized Boundary Conditions for Coastal Modeling, Igor Shulman and James K. Lewis, (Estuarine and C Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p268-282.

Parametric Thermal Evaluations of Waste Package Emplacement, Robert H. Bahney, III and Thomas W. Doering, (High Level Radioactive Waste Management, Technology)

nical Program Committee, 1996, p434-447.

Practical Geoenvironmental Visualization, G. B. Baecher,
J. A. Zarge and J. Shapiro, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed.,
1996), p56-62.

Pseudo Three-Dimensional Finite Element, Michael H. Triche and James A. Richardson, ST July 96, p832-835.

A Quasi-3D Model of Longshore Currents, A. F. Garcez Faria, E. Thornton and T. Stanton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p389-400.

Radwaste Disposal in Granite—E.C. Everest Project, IPSN Contribution, P. Baudoin and C. Serres, (High Level Ra-dioactive Waste Management, Technical Program Com-

mittee, 1996), p168-169.
Refined Three-Dimensional Finite Element Model for Pand-Plate Connection, Chang-Koon Choi and Gi-Taek Chung, ST Nov. 96, p1307-1316. Simulation of Bioventing for Soil and Ground-Water Re-mediation, Paul D. McClure and Brent E. Sleep, EE Nov.

96, p1003-1012.

Simulation of Interaction between Canal Regulation and Groundwater, Hsin-Chi J. Lin and Hwai-Ping Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1587-1591.

thern Boundary Experimental Forecasts with the Southern Boundary Experimental Forecasts with the NOAA East Coast Ocean Model, Richard A. Schmalz, Jr., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p442-453. Three Dimensional Design and Construction at the Auburn VPS Recycle Fiber Mill, Ronald J. Zabilski, (Analysis Constant)

and Computation, Franklin Y. Cheng, ed., 1996), p482-491.

A Three Dimensional Oil Spill Model, Li Zheng and Poojitha D. Yapa, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3764-3769.

Three Dimensional Particle Tracking Model for the Sacramento-San Joaquin Delta, Tara A. Smith and Gilbert V. Bogle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4329-4334.

19730, 19329—339.
Three-Dimensional Modeling of Wind-Driven Upwelling of Anoxic Bottom Water 'A-oshio' in Tokyo Bay, Keiji Nakatsuji, Jong Sung Yoon and Koji Muraoka, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and

rine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p618-631. Three-Dimensional Numerical Simulation of Soil Vapor Extraction, Albert T. Yeung and Hui-Tsung Hsu, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi,

ed., 1996), p442-453.

Three-Dimensional Simulation of River Ice Jams, Mark A. Hopkins, Steven F. Daly and James H. Lever, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p582-593.

Three-Dimensional Simulation of Structural Pounding During Earthquakes, M. Papadrakakis, C. Apostolopoulou, A. Zacharopoulos and S. Bitzarakis, EM May 96, p423-

Transport Modeling of the Coastal Waters of Oahu, Hawaii, Alan F. Blumberg and John P. Connolly, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4084-4089. Two- and Three-Dimensional Hydrodynamic Modeling of

the Salton Sea, California, Christopher B. Cook and Ger-ald T. Orlob, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3752-3757

Wave Propagation in Shallow Waters: Modelling and Real Data, José C. Santás and José M. de la Peña, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p128-139.

Weir Aeration: Models and Unit Energy Consumption, Ning H. Tang, N. Nirmalakhandan and R. E. Speece, EE Feb. 95, p196-199.

Tidal bores

Formation and Propagation of Tidal Bore, Nitish C. Mazumder and Somnath Bose, WW May/June 95, p167-

Tidal currents

Applicability of Scour Equations in Tidal Areas, J. R. Richardson, E. V. Richardson and B. L. Edge, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1980-1989. Development of a Large-Scale Tidal Circulation Model for the Mediterranean, Adriatic and Aegean Seas, D.J. Mark and N. W. Scheffner, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Interaction Between Nearshore Natural Processes on Macro-Tidal Beaches. Case Study Along the Capricorn Coast, Australia, Jerzy Piorewicz and Paul Boswood, (Castal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p489-500.

Investigation into the Possibilities of Using Bristol Channel Models for Tidal Predictions, M. Amin and R. A. Flather, (Extuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p41-52.

Observations of Tidal Circulation in Mamala Bay, Hawaii, Peter Hamilton, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3880-3885.

Three-Dimensional Tidal Currents and Water Quality in Stratified Omura Bay, Tadashi Fukumoto, Akihide Tada, Takehiro Nakamura and Hiroyoshi Togashi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p707-721.

Planta Licets
History of Coastal Engineering in Great Britain, Rendel Palmer, ed. and Tritton Limited Development and Engineering Consultants, ed., (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p214-274.

al Engineering, Nicholas C. Kraus, ed., 1970, p.214-214.
Santa Ana River Salt Marsh Restoration: Orange County,
California, U.S.A. Lan-Yin Li Weber, (North American
Water and Environment Congress & Destructive Water,
Chenchayya Bathala, ed., 1996), p.536-540.
Sedimentation Dynamics of Tidal Inlets, Clifford R. Merz.

and Panagiotis D. Scarlatos, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4377-4382.

Evaluation of the Nitrogen Cycle in a Tidal Flat, Kyoko Hata, Iwao Oshima, Takcaki Kuramoto and Kisaburo Nakata, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p542-554.

Sedimentation Dynamics of Tidal Inlets, Clifford R. Merz and Panagiotis D. Scarlatos, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4377-4382.

Hydraulic and Sediment Models for Design of Restoration of Former Tidal Marshland, Guang-dou Hu, M. L. Johnson and R. B. Krone, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Mitigation Wetland Losses for a Major Transportation Im-provement Project in New Hampshire, Craig A. Wood, William J. Barry, Albert S. Garlo and William Arcieri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Protecting Dredged Material Containment Levees Along the Houston Ship Channel, Deron N. Austin and Marc S. Theisen, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p3121-3128.

Santa Ana River Salt Marsh Restoration: Orange County, California, U.S.A. Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p536-540.

Wetland Restoration in Southern North Sea Coastal Areas: The Experience of Britain and The Netherlands, Henk Smit and John S. Pethick, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3740-3745.

Tidal waters

Applicability of Scour Equations in Tidal Areas, J. R. Richardson, E. V. Richardson and B. L. Edge, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1980-1989.

Effect of Acceleration on Bottom Shear Stress in Tidal Estuaries, A. Y. Kuo, J. Shen and J. M. Hamrick, WW Mar./Apr. 96, p75-83.

Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996, 0-7844-0165-9, 730pp.

Flushing and Recharge of Inlet Channel for an Ephemeral Coastal River, Howard H. Chang and Daniel Pearson, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p659-668.

Formation and Propagation of Tidal Bore, Nitish C. Mazumder and Somnath Bose, WW May/June 95, p167-

Modeling the Periodic Stratification and Gravitational Cir-culation in San Francisco Bay, California, Ralph T. Cheng and Vincenzo Casulli, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p240-254.

Scour Monitoring at Johns Pass and Nassau Sound, Florida, J. D. Schall, G. A. Fisher and G. R. Price, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1990-1998.

Significance of Lateral Elevation Gradients in Tidally Affected Tributaries, Frederick E. Schuepfer, Guy A. Apicella and Vincent J. DeSantis, (Estuarine and Coast-Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p229-239.

Southern Boundary Experimental Forecasts with the NOAA East Coast Ocean Model, Richard A. Schmalz, Jr., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p442-453.

Application of Kalman Filter to Short-Term Tide Level Prediction, Pei-Hwa Yen, Chyan-Deng Jan, Youe-Ping Lee and Hsiu-Fang Lee, WW Sept./Oct. 96, p226-231.

An Evaluation of Tidal Predictions in the Yellow and East China Seas, Cheryl Ann Blain, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p429-441.

Groundwater Dynamics in Beaches and Coastal Barriers, Peter Nielsen and Hong-Yoon Kang, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p521-532.

The Influence of Turbulence Closure Strategy on Numeri-cal Modeling of Shallow Water Tides, Roger R. Grenier, Jr. and Richard A. Luettich, Jr., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p143-155.

Nested Three-Dimensional Hydrodynamic Modeling of the Delaware Estuary, John S. Ramsey, Robert P. Hamilton, Jr. and David G. Aubrey, (Estuarine and Coastal Model-ing, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p53-65.

Tide-Induced Ground-Water Flow in Deep Confined Aquifer, Ko-Fei Liu, HY Feb. 96, p104-110.

Strength of Struts and Nodes in Strut-Tie Model, Young Mook Yun and Julio A. Ramirez, ST Jan. 96, p20-29.

Ultimate Behavior of Tie Plates at High-Speed Tension, Makoto Obata, Yoshiaki Goto, Sei Matsuura and Hideyuki Fujiwara, ST Apr. 96, p416-422.

Wind-Resistant Tie-Downs for Mobile Homes, Anatol Lon-ginow, Donald F. Meinheit and John E. Pearson, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p966-973.

Meter Helps Rescuers Keep Level Heads After Roof Col-lapse, CE Aug. 96, p78.

Seismic Analysis and Model Studies of Bridge Abutments, K. L. Fishman and R. Richards, Jr., (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p77-99.

Contradictions in Use of Collar Beams, Jonathan Ochshorn, AE Mar. 96, p20-25. A Copied Design? Patrick J. Murray, CE Nov. 96, p32.

Dynamic Behavior of Glued Laminated Timber Girder Bridges, Terry J. Wipf, Michael A. Ritter and Douglas L. Wood, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p260-267.

An Expert System for Wind-Resistant Residential Conn Expert System for wind-resistant Residential Con-struction, James R. McDonald, Douglas A. Smith and Kishor C. Mehta, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p982-988.

Field Performance of Stress-Laminated T and Box Beam Bridges, Barry Dickson and Hota GangaRao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p253-259

Long-Span Timber Trusses—Evaluating a Repair Method, Thomas E. Forsberg, SC May 96, p89-92.

Parameter Study of an Internal Timber Tension Connection, Stephen F. Duff, R. Gary Black, Stephen A. Mahin and Marcial Blondet, ST Apr. 96, p446-452.

Performance Monitoring of Three Stress-Laminated Timber Bridges in Leon County, Nur Yazdani and Joy Orlando Bridges III Leading an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p268-275.

Quality Control in Seismic Design and Construction, G. G.

Schierle, CF Aug. 96, p90-95.
Reinforced Glued Laminated Timber, Bruce D. Pooley,

P.E., CE Sept. 96, p50-53.

Seismic Behavior of Structures with Flexible Diaphragms Arturo Tena-Colunga and Daniel P. Abrams, ST Apr. 96, p439-445. Service Life of Timber Trestles, William G. Byers, (Proba-

bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p720-723.

Serviceability System Factor for Design of Wood Floors, K. J. Fridley, D. V. Rosowsky and P. Hong, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p792-797

Strengthening Requirements of Old, Timber Warren Truss-es, H. C. Foo and G. Akhras, CF Aug. 96, p127-134.

es, rt. C. Poo and G. Akhras, CF Aug. 96, p127-134. Stress-Laminated Timber Decks Using Glass FRP Tendons, H. J. Dagher, B. Abdel-Magid, S. Iyer and W. Lu, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1458-1468.

Structural Design Forum, SC Aug. 96, p62-68.

Structural Forum, SC Nov. 96, p95-98.

Swimming in Style, Gary Steficek, P.E., CE Aug. 96, p36-

System Effects and Uplift Capacity of Roof Sheathing Fas-teners, S. Murphy, S. Schiff, D. Rosowsky and S. Pye, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p765-770.

Three Year Evaluation of a Metal-Plate Connected Wood Truss Bridge, Michael H. Triche and Michael A. Ritter, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p276-281.

Timber Trestle Stars at Costner-Owned Resort, CE Mar.

"Banding" Timber Crossties Using Composite Fabrics for Improving Their Performance, S. S. Sonti and H. V. S. GangaRao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), pl449-1457.

Comparing Three Techniques for Finding the Overall Lengths of Installed Timber Piles, Shunyi Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Marine Borers Date Back 60 Million Years, Raymond C. Oliger, CE Dec. 96, p31.

Nonstructural Evaluation of Competing Bridge Materials, Robert L. Smith and Robert J. Bush, MT May 96, p88-

Time dependence
Algebraic Methods For Creep Analysis of Continuous
Composite Beams, Luigino Dezi, Graziano Leoni and
Angelo Marcello Tarantino, ST Apr. 96, p423-430.
Analytical and Measured Strains in Sunshine Skyway
Bridge. II, Mohsen A. Shahawy and M. Arockiasamy,
p3. May 96, p87-97.

BE May 96, p87-97.

Analytical Solutions for Two-Dimensional Transport Equa-tion with Time-Dependent Dispersion Coefficients, Mus-tafa M. Aral and Boshu Liao, HE Jan. 96, p20-32.

Drained Creep Behavior of Marine Clays, Armand J. Silva and Horst G. Brandes, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and

Victor N. Kaliakin, ed., 1996), p228-242.

Evaluation of Long-Term Time-Rate Parameters of Subglacial Till, C. L. Ho, J. C. Vela, P. U. Clark and J. W. Jenson, (Measuring and Modeling Time Dependent Soil Be-havior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, havior, Thomas C. ed., 1996), p122-136.

Field Instrumentation to Study the Time-Dependent Behavior in Sunshine Skyway Bridge. I, Mohsen A. Shahawy and M. Arockiasamy, BE May 96, p76-86.

Formulation for Viscoelastic Response of Pavements under Moving Dynamic Loads, A. T. Papagiannakis, N. Amoah and R. Taha, TE Mar/Apr. 96, p140-145.

Local Scour Downstream of Hydraulic Structures, Gijs J. C. M. Hoffmans and Krystian W. Pilarczyk, HY Apr. 95,

p326-340.

Long-Term Deflection Control in Cantilever Prestressed Concrete Bridges. I: Control Method and Algorithm, Hui-Sheng Chiu, Jenn-Chuan Chern and Kuo-Chun Chang, EM June 96, p489-494.

Long-Term Deflection Control in Cantilever Prestressed Concrete Bridges. II: Experimental Verification, Hui-Sheng Chiu, Jenn-Chuan Chern and Kuo-Chun Chang,

EM June 96, p495-501.

Measuring and Modeling Time Dependent Soil Behavior, Geotechnical Special Publication No. 61, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996, 0-7844-0205-1, 288pp.

Model Formulations for Numerical Creep Calculations for Concrete, Akihiko Kawano and Robert F. Warner, ST

Mar. 96, p284-290.

Mail 70, p.264-290.

Modeling Aspects Associated with Time Dependent Behavior of Soils, Toshihisa Adachi, Fusao Oka and Mamoru Mimura, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p61-95.

Prediction of Time-Dependent Behaviour of Remolded Soft Marine Clay in Axi-Symmetric Undrained Conditions, Satoshi Murakami, Kazuya Yasuhara and Kaoru Bessho, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p181-194.

Rate-dependent Deformation of Structured Natural Clays, Kenichi Soga and James K. Mitchell, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p243-257

Reliability of Underground Pipelines Subject to Corrosion, M. Ahammed and R. E. Melchers, TE Nov/Dec. 94, p989-1002.

Stochastic BEM-Random Excitations and Time-Domain Analysis, Sunil Saigal and Igor Kaljević, EM Apr. 96, p342-349.

Strain Rate and Structuring Effects on the Compressibility of a Young Clay, Serge Leroueil, Didier Perret and Jacques Local, (Measuring and Modeling Time Depend-ent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p137-150.

Strength and Reliability of Reinforced Concrete Columns with Sustained Loading, Stuart G. Reid, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p234-237.

Time-Dependent Reliability Analysis of Redundant Brittle Systems, Animesh Dey and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p700-703. Turbulence Model for Depth-Averaged Flows in Naviga-tion Installations, Hector R. Bravo and Forrest M. Holly, Jr., HY Dec. 96, p718-727.

Response Surface Method for Time-Variant Reliability Analysis, Timothy H.-J. Yao and Y.-K. Wen, ST Feb. 96, p193-201.

Robust Stabilization of Systems with Time Delays, Mohammad Hosseini and Firdaus Udwadia, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p438-441

Spatiotemporal Stochastic Open-Channel Flow. I: Model and Its Parameter Data, Timothy K. Gates and Muhammad A. Al-Zahrani, HY Nov. 96, p641-651.

Spatiotemporal Stochastic Open-Channel Flow. II: Simulation Experiments, Timothy K. Gates and Muhammad A. Al-Zahrani, HY Nov. 96, p652-661.

Spectral Relative Motion of Two Structures due to Seismic Travel Waves, Van Jeng and Kazuhiko Kasai, ST Oct. 96, p1128-1135.

Temporal Variation of Sediment Yield, U. C. Kothyari, A. K. Tiwari and Ranvir Singh, HE Oct. 96, p169-176

Time Effects on Pile Skin Resistance, Juan M. Antorena and G. Thomas McDaniel, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p582-589.

Twinning Time and Cost in Incentive-Based Contracts, A. Jaafari, ME July/Aug. 96, p62-72.

ne series analysis

Atmospheric Flow Indices and Interannual Great Salt Lake Variability, Young-Il Moon and Upmanu Lall, HE Apr. 96, p55-62.

Comparison of Some Simulation Algorithms on Basis of Distribution, Marc P. Mignolet and Maruvada V. Harish, EM Feb. 96, p172-176.

Disaggregation Modeling Process for Climatic Time Series, Susan Firor, Brad A. Finney, Robert Willis and John A. Dracup, WR May/June 96, p205-212.

Graphical Methods for Assessing Changes in Water Quali-ty, Karen Cozzetto and P. M. Berthouex, EE July 96,

Looking for Evidence of Climatic Change in Streamflow Time Series, K. H. Hamed and A. R. Rao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1459-1464.

Methodological Framework for Air-Travel Demand Fore-casting, Matthew G. Karlaftis, Konstantinos G. Zografos, Jason D. Papastravrou and John M. Charnes, TE Mar. Apr. 96, p96-104.

Non-Gaussian Elliptically Contoured ARMA Models, Mir-cea Grigoriu, EM Apr. 96, p334-341.

On the Origin of Infragravity Waves in the Surf Zone of a Dissipative Multiple Bar System, B. G. Ruessink, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p33-104.

Results of the Probabilistic Volcanic Hazard Analysis Project, Robert R. Youngs, Kevin J. Coppersmith and Roseanne C. Perman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p61-63.

Runoff Forecasting Using a Local Approximation Method, A. W. Jayawardena, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2535.

SAMS: Software for Simulating Streamflow Series, J. D. Salas, N. Saada, D. Frevert and W. Lane, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3387-3392.

Strange Attractors and Chaos in Wastewater Flow, Donald I. Angelbeck and Rafic Y. Minkara, EE Jan./Feb. 94, p122-137

Suspended-Solids Flux at a Shallow-Water Site in South San Francisco Bay, California, Jessica R. Lacy, David H. Schoellhamer and Jon R. Burau, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3357-3362.

Synthesis of Correlated and Vector-Valued Time Series Based on Random Vibration for Nuclear Piping, Yong Zhao and D. A. Gasparini, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p748-751.

Time Series Analysis of Long-Term Beach Level Data from Lincolnshire, UK, Howard N. Southgate and Luisa M. Beltran, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1006–1017.

Time studies

Time studies

The Application of Time Domain Electromagnetics to a Regional Groundwater Investigation in Western Washington, Rory Retzlaff and Robert H. Anderson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p27-41.

Fast and Robust Algorithm for General Inequality/Equality Constrained Minimum Time Problems, B. Driessen and

Constrained minimum time Problems, B. Driessen and N. Sadegh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1215-1224. Methodologies for the Analytic Definition of Uniform Travelling Time-Shifts of an Urban Public Transporta-tion Service, Severo Pace and Graziana Ghio, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p139-143.

pi, ed., 1996, p. 139-143.
Modeling the Dynamic Nonlinear Response of Single Piles, Deepak Badoni and Nicos Makris, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p. 1091-1098.

Behavior of Crumb Rubber Modified Hot Mix Asphalt, Anil Misra, H. P. Niu and Yi-Herng Lee, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p144-

Big Tires Stabilize a Canal Bed, CE Jan. 96, p22,24.

A Corotational Total Lagrangian Finite Element Analysis with Application to the Aircraft Tire, James M. Greer, Jr. and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl 108-1114

Fly Ash and Tire Chips for Highway Embankments, M. Basheer, C. Vipulanandan and M. W. O'Neill, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

p593-602. A New Kind of Rubber Drive, CE Nov. 96, p94-95.

Sand Reinforced with Shredded Waste Tires, Gary J. Foose, Craig H. Benson and Peter J. Bosscher, GT Sept. 96, p760-767.

Slope Stabilization Using Old Rubber Tires and Geotex-tiles, Paul S. H. Poh and Bengt B. Broms, CF Feb. 95, p76-79

Studded Tire Research in Norway, Finland and Sweden, Eric Johnson, Tony Barter and David Sterley, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p676-687.

Vehicle Traction Performance Comparison for Alaska Win ter Seasons, J. John Lu, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Impera-tive for the 21st Century, Robert F. Carlson, ed., 1996), p664-675.

Titanium

Photocatalytic Degradation of Formic Acid via Metal-Supported Titania, Heung Yong Ha and Marc A. Ander-son, EE Mar. 96, p217-221.

Tobin, L. Thomas

Tobin Preaches 'Covenant' for Seismic Safety, NE July 96, p15.

Tolerances

Tolerances
Design Synthesis: Transcending to Stochastic Realm Part
3: Optimization, Jean M. Parks, (Probabilistic Mechanics & Structural Reliability, Dan M. Franspopol, ed. and
Mircea D. Grigoriu, ed., 1996), p130-133.
Statistical Analysis of S-N Fatigue Data; Design Curve
Based on Tolerance, C. L. Shen, P. H. Wirsching and G.
T. Cashman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,
ed., 1996), p470-473.

Toll roads

SI Billion Texas Tollway, CE May 96, p8.
California State Route 91 Variable Toll Express Lanes: Operational Aspects and Impact Assessment, Edward C. Sullivan and Jerry C. Porter, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p547-551.

The Gaudi-Marseille Experiment: An Example of a Multiservice Remote Payment System, D. Danflous and G. Coquet, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p542-546.

Largest California Highway Design-Build Project Opens, 65 Oct. 66 cp65 28.

CE Oct. 96, p26,28.

New Public/Private Highway, CE Aug. 96, p10. Private Company Bypasses Clogged Highway, CE Mar. 96, p10.

Stormwater Management for San Joaquin Hills Transporta-tion Corridor, Orange County, California, Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2826-2830.

Technology Standards and Deployment of Advanced Transportation Technologies: A Comparative Case Study of Electronic Toll and Traffic Management (ETTM) in the United States and France, Jonathan L. Gifford and Jean-Luc Ygnace, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p535-541.

Tolks

California State Route 91 Variable Toll Express Lanes: Operational Aspects and Impact Assessment, Edward C. Sullivan and Jerry C. Porter, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p547-551.

Electronic Coin, CE Sept. 96, p11.

The Gaudi-Marseille Experiment: An Example of a Mul-tiservice Remote Payment System, D. Danflous and G. Coquet, (Applications of Advanced Technologies in

Coquet, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p542-546. Technology Standards and Deployment of Advanced Transportation Technologies: A Comparative Case Study of Electronic Toll and Traffic Management (ETTM) in the United States and France, Jonathan L. Gifford and Jean-Luc Ygnace, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p535-541.

Tolls Ready to Roll, ET Mar./Apr. 96, p7.

Topographic surveys

Verification of the Bruun Rule for the Estimation of Shoreline Retreat Caused by Sea-Level Rise, Nobuo Mimura and Hisamichi Nobuoka, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p607-616.

Topography

Behaviour-Oriented Models of Shoreface Evolution, Marcel J. F. Stive, Huib J. De Vriend, Peter J. Cowell and Alan Wm. Niedoroda, (*Coastal Dynamics* '95, William R. Dully, ed. and Ryszard B. Zeidler, ed., 1996), p998-

Development of Islandwide Groundwater Pollution Potential for Taiwan, Wen-Sen Chu, Chin-Hwa Chiang, Mei-Hui Chang and Cheh-Ming Lee, (North American Water

and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3164-3169. Flood Damage Estimates Using GIS Spatial Analysis, Craig R. Wilkening, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3405-3410.

Flood Trends in Austria, F. Nobilis and P. Lorenz, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p917. Grading Design of Side Slopes Fitting Roadside Topogra-phy, George Kanelladis, TE Jan./Feb. 96, p87-90.

Influence of Seabed Topography and Roughness on Long-shore Wave Processes, Terry M. Hume, Brett Beamsley, Malcolm O. Green, Willem P. de Lange and D. Murray Hicks, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p975-986.

Modeling Microtopography in Basin Irrigation, E. Playán, J. M. Faci and A. Serreta, IR Nov./Dec. 96, p339-347.

A Radiological Disadvantage for Siting a Repository at Yucca Mountain, Peter Spiegler, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p178-180.

Signatures of Coastal Change at Mesoscales, Timothy W. Kana, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p987-997

Simulation of Catchment Response Using RC Network, M. J. Abedini, W. T. Dickinson and R. P. Rudra, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3381-3386.

An Assessment of Wind Damage to Wood-Frame Houses, Maher Jaafari and Henry Liu, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p347-348.

The Car as a Wind Shelter for Mobile Home Residents, Thomas W. Schmidlin and Paul S. King, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p137-138.

Education: Pathway to Mitigation, James W. Russell, (Nat-ural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p35-36.

Flood Hazard Zonation in a Multihazard Environment, James E. Beavers and Frank H. Thomas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p345-346.

Institutional Issues in Natural Hazard Mitigation, Daniel J. Alesch, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p367-368.

Mitigation of Windstorm Disasters, Kishor C. Mehta and Ernst W. Kiesling, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p205-206

Tornado and Hail Risk Modeling: An Event Based Approach, Khalid I. Bouzina, Mohan Sharma, Auguste Boissonnade and Surya Gunturi, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p19-20.

Tornadoes and Severe Storms in Russia, Nikolay A. Popov, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p133-134.

Wind Hazards for Low-Rise Structures and Single Family Dwellings: A Possible Mitigation, H. W. Tieleman, T. A. Reinhold and M. R. Hajj, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p389-390.

Nonlinear Dynamics of Unidirectional, Fiber-Reinforced Tori, Raouf A. Raouf and Anthony N. Palazotto, EM Mar. 96, p271-276.

Buckling Analysis of Elastic Space Rods under Torsional Moment, Yoshiaki Goto, Xiao-Song Li and Toshihiro Kasugai, EM Sept. 96, p826-833.

Dynamic Response of Box Tubes to Combined Shear and Torsion, Y. L. Mo and R. Y. Yang, ST Jan. 96, p47-54.

Inelastic Behavior of Asymmetric Multistory Buildings, Juan C. De la Llera and Anil K. Chopra, ST June 96.

Lateral-Torsional Buckling of Nonprismatic I-Beams, Pra-tyoosh Gupta, S. T. Wang and G. E. Blandford, ST July 96, p748-755.

Membrane Analogy for Saint-Venant Torsion: New Results, S. M. Heinrich, EM Nov. 96, p1110-1112.

Seismic Torsional Provisions: Influence on Element Energy Dissipation, Adrian M. Chandler, Joseph C. Correnza and Graham L. Hutchinson, ST May 96, p494-500.

Semicontinuous Mathematical Model for Bending of Multi-layered Wire Strands, Claude Jolicoeur and Alain Car-dou, EM July 96, p643-650.

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Torsion in Symmetric Structures due to Ground-Motion Spatial Variation, Ernesto Heredia-Zavoni and Federico Barranco, EM Sept. 96, p834-843.

Yield-Interaction Relationships for Curved I-Girders, Charles G. Schilling, BE Feb. 96, p26-33.

Torsional vibration

Assessments of Lateral and Torsional Structural Responses Induced by Incoherent Ground Motions, G. D. Hahn and X. Liu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p188-191.

Malpractice Suit Against Engineer, CE May 96, p24.

Concrete Reinforcement with Recycled Fibers from Carpet Industrial Waste, Youjiang Wang, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p792-798.

onstitutive and Structural Behavior of Siliceous High-Strength Concretes After a Thermal Cycle at High Tem-perature, Roberto Felicetti and Pietro G. Gambarova, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p583-592. Constitutive and Structural Behavior of Siliceous High-

Copper Precipitation Hardened, High Strength, Weldable Steel, Semyon Vaynman, Morris E. Fine, Gautam Ghosh and Shrikant P. Bhat, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1551-1560.

Development of High Performance Steels for Commercial and Military Applications, Eric M. Focht and Thomas W. Montemarano, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p91-99.

Dissipated Energy as a Function of Material Microstruc-ture, Mark J. Meisner and George N. Frantziskonis, (En-gineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p1030-1033.

Fabrication and Testing of High Performance Steel I-Girders Research in Progress, William Wright, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1571-1578.

Fracture Mechanics Modeling with Fracture Surface Image Data, Anne B. Abell and David A. Lange, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p741-

High-Performance Metals for Civil and Marine Structures, John W. Fisher, Richard Sause and Robert J. Dexter, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p23-37.

Material Development for High-Performance Bridge Steels, J. M. Chilton and S. J. Manganello, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p100-107.

Mode-I Fracture Toughness of Composite/Wood Interface Bond, Julio F. Davalos, Prabhu Madabhusi-Raman and Pizhong Qiao, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1469-1478.

Performance Characteristics of Polyolefin Fiber Reinforced Concrete, V. Ramakrishnan, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), p93-102.

Statistical Aspects of Toughness in Brittle Fracture, A. Chudnovsky and M. Gorelic, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p346-349.

Japanese Rocket Society's Space Tourism Study Program, Patrick Collins, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p399-

Collapse of Transmission Line Towers in Typhoon Gay, Panitan Lukkunaprasit, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p351-352.

Design of the Inlet/Outlet Tower for the Eastside Reservoir Project, Robert P. McBean and Clifford D. Dillon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1783-1788.

Dynamic Behaviour of Masonry Church Bell Towers, Alan R. Selby and John M. Wilson, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p188-199.

An Electro-Optical Accelerometer for Civil Structural Applications, Maria Q. Feng, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p877-886.

Fatigue Failures of Hexa'lliptical Steel Davit Arms Induced by Aeolian Vibrations at Resonant Conditions, Markus Ostendorp, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p874-877.

Hazards to Personnel from Tower EMFs, James B. Hatfield, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-

madi, ed., 1996), p499-504.

High Over Shanghai, Stan Korista, P.E., Mark Sarkisian, P.E. and Ahmad Abdelrazaq, CE Dec. 96, p58-61.

Instability Analysis of an Inclined Tower in Waves, Subrata K. Chakrabarti, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p836-839.

Resonance Induced Steel Cross-Arm Fatigue Failures, Markus Ostendorp, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p983-986.

Robust H_ Control Considering Actuator Saturation. II: Applications, J. Geoffrey Chase, H. Allison Smith and Tet-suo Suzuki, EM Oct. 96, p984-993.

Rock 'N' Roll in Cleveland, Rita Robison, CE Feb. 96, p48-49.

Seismic Risk Assessment for Environmentally Sensitive Facilities in Northern Maine, Elizabeth A. Champeon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1052-1067.

Tall Buildings Triumph, CE June 96, p21-22.

Effects of Tow Sequencing on Capacity and Delay at a Waterway Lock, Ching-Jung Ting and Paul Schonfeld, WW Jan./Feb. 96, p16-26.

Geochemical Modeling of Lead in Vadose Zone, K. V. Nedunuri, R. S. Govindaraju, A. P. Schwab and L. E. Erickson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1221-1226.

Hazardous Soil Remediation: A Cooperative Effort Be-tween Industry and Government, Wendy L. Cohen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1203-1208

Monitor Well Design, Installation, and Documentation at Hazardous and/or Toxic Waste Sites, U.S. Army Corps of Engineers, 1996, 0-7844-0150-0, 51pp.

Recycling of Spent Abrasive Media in Nonstructural Concrete, Matthew T. Webster and Raymond C. Loehr, EE Sept. 96, p840-849.

River Dnister Pollution with Toxic Waste as a Result of Accident at Potassium Fertilizers Factory, Valeriu Ropot, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3499.

Take-Home Toxin Pathway, John Zirschky, EE May 96, p430-436.

Anaerobic Removal of Pentachlorophenol in Presence of Zinc, Peikang Jin and Sanjoy K. Bhattacharya, EE July

90, p.590-598.
Beneficial Aspects of Flood and Rain in Countries Where the Drinking Water is Naturally Contaminated with Fluoride Where Fluorosis is a Major Public Health Problem, Susheela Andezhath Kumaran, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2191.

Critical Issues in the Monitoring and Control of Toxic Air Contaminants at POTWs, Federico G. A. Vagliasindi and Vincenzo Belgiorno, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p81-86.

Degradation and Toxic Effects of Acrylic Acid on Anaerobic Systems, Mingbo Qu and Sanjoy K. Bhattacharya, EE Aug. 96, p749-756.

Environmental Engineers Take Aim at Firing Range, CE Aug. 96, p18.

Field Investigation of Potential Contamination by Bitu-men-Coated Piles, Albert T. Yeung, Rajan Viswanathan and Jean-Louis Briaud, GT Sept. 96, p736-744.

A Framework for Sanitation and Health Risk Assessment, Charles G. Gunnerson, (North American Water and En-vironment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p2390-2395.

Hazardous Soil Remediation: A Cooperative Effort Be-tween Industry and Government, Wendy L. Cohen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1203-1208.

Retention of Multiple Heavy Metal Ions by Fly Ash, A. Sridharan, N. S. Pandian and C. Rajasekhar, American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1608-1613.

Risk Assessment of Vapors in Cold Regions, Robert A. Perkins, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p360-371.

Surface Thermodynamics of an Organoclay, Muniram Budhu and Rossman Giese, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p17-30.

Toxicity of Organic Chemicals and Their Mixtures to Activated Sludge Microorganisms, E. Hall, B. Sun, J Prakash and N. Nirmalakhandan, EE May 96, p424-429.

Trace elements

Predicting the Concentration of Trace Metals in Natural Waters: Application of Co-Precipitation and Co-Dissolution Models, Jordi Bruno and Lara Duro, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p64-66.

Investigation of Interwell Tracer Tests Used with Cosolvent Flooding, Charles Wright, Cindy M. Lee, John T. Coates and Ronald W. Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p151-162.

Modelling of El Berrocal Field Tracer Tests, J. P. Humm, J. Guimera, P. Grindrod and S. P. Crompton, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p114-116.

Moment Analysis of Tracer Experiments, Charles N. Haas, EE Dec. 96, p1121-1123.

A Network Transfer Function Model with a Markovian Prior for Tracer Tests Evaluation, Nela Zavaljevski and Alvin Shapiro, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p70-72.

Pollution Transport in Karst, C. Warren Campbell and Mohamed Abd El Latif, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4269-4274.

Innovative Technology Development for Safe Excavation, Xiaodong Huang, Daniel Bernd and Leonhard E. Ber-nold, CO Mar. 96, p91-96.

Three Dimensional Particle Tracking Model for the Sacramento-San Joaquin Delta, Tara A. Smith and Gilbert V. Bogle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4329-4334.

Tractive forces

Large Strain Finite-Element Analysis of Snow, Günther Meschke, Changhong Liu and Herbert A. Mang, EM July 96, p591-602.

First Smart Bridge Tested, CE June 96, p18. First Smart Bridge Tested, ET Apr./May 96, p1.6. Hydrodynamic Changes Associated with Navigation Traffic on the Upper Mississippi River System, Nani G. Bhowmik, Ta-Wei David Soong and Renjie Xia, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2849-2854. Practitioners' Forum, Georges Jacquemart, P.E., TE Nov./

Dec. 96, p411-413.

722

Traffic accident analysis CCATS and CCIDS Technologies for Traffic Data and Incident Detection. An Overview of the Technology and the Main Applications, V. Picciolo and F. Lemaire, (Ap-plications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p183-187.

Filippi, ed., 1970), p163-167.
The Highway Safety Expert System: A New Approach to Safety Programs, Tarek Sayed and Frank Navin, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p346-362.

Negative Binomial Analysis of Intersection-Accident Frequencies, Mark Poch and Fred Mannering, TE Mar/Apr. 96, p105-113.

Traffic accidents

Trame accidents
Advanced Traveller Information Systems: Experience from
the PLEIADES and ROMANSE Projects, D. J. Jeffery
and R. J. Meekums, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J.
Stephanedes, ed. and Francesco Filippi, ed., 1996).

Aid-to-Decision for Variable Message Sign Control in Mo-torway Networks during Incident Condition, Jean-Marc Morin, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p378-382.

Automated On-Scene Management of Traffic Accidents, George M. Vasilakis and Yorgos J. Stephanedes, (Applications of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p292-295.

Development and Application of Urban Information Strate-gies, E. G. Shinakis, M. McDonald and A. Richards, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p310-314.

Negative Binomial Analysis of Intersection-Accident Frequencies, Mark Poch and Fred Mannering, TE Mar/Apr. 96, p105-113.

Risk Management Principles of Transportation Facility De-sign Engineering, Andrew G. Cooley, TE May/June 96,

School Children as Pedestrians in Cairo: Proxies for Improving Road Safety, Khaled A. Abbas, Ibrahim Mabrouk and Khaled A. El-Araby, TE July/Aug. 96, p291-

A Sequential Hypothesis-Testing Based Freeway Incident Response Decision-Making System, Samer M. Madanat, Hua-Liang Teng and Pen-Chi Liu, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p286-291.

Technologies for a Multimedia Based Highway Information System in the Gigabit Networking Environment, Kelvin C. P. Wang, Robert P. Elliott and James P. Turner, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p490-499.

Traffic analysis Longitudinal Analysis of Bicycle Count Variability: Results and Modeling Implications, Debbie A. Niemeier, TE May/June 96, p200-206.

Traffic Dynamics: Method for Estimating Freeway Travel Times in Real Time from Flow Measurements, Do H. Nam and Donald R. Drew, TE May/June 96, p185-191.

Traffic Engineering Recurrent Spatial Knowledge Base: Design and Implementation, Pawan Lingras, CP Jan. 96, p50-59.

Traffic capacity
Traffic Engineers Get Loopy with Colorado Interchange, CE June 96, p12,14.

Traffic congestion

Advanced Traveller Information Systems: Experience from the PLEIADES and ROMANSE Projects, D. J. Jeffery and R. J. Meekums, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), Stephaned p296-304.

An Analysis of Effect of Dynamic Traffic Information Considering Driver's En-Route Route Switches, Yasunori lida, Nobuhiro Uno and Tetsuro Hasegawa, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-

pi, ed., 1996), p604-608

An Architecture Integrating Symbolic and Connectionist Models for Traffic Management Center Decision Sup-port, Martin Molina, Filippo Logi. Stephen G. Ritchie and Jose Cuena, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p320-324.

Autonomous Intelligent Cruise Control Using the Fuzzy Logic, Kwang Soo Chang and Jae Sung Choi, (Applications of Advanced Technologies in Transportation Engineering, 1906), p644-655.

California State Route 91 Variable Toll Express Lanes: Operational Aspects and Impact Assessment, Edward C. Sullivan and Jerry C. Porter, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Equilibrium Network Traffic Signal Setting under Condi-tions of Queuing and Congestion, Hai Yang. (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-

pi, ed., 1996), p578-582.

Equilibrium/Control Results and the Approach to Near-Equilibrium of a New Dynamic Micro-Simulation/ Assignment Model on a Network Model of York, R. Clegg, M. O. Ghali and M. J. Smith, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p568-572.

Green Light for Whom? Hermann Zutraun, P.E., CE Sept. 96, p38.

Image Monitoring on Motorway: Pedestrian Detection Using Image Processing, Salah Bouzar, Roland Glachet, Jean-Marc Blosseville and François Lenoir, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p124-128.

Improved Path Selection in Congested Networks by Al Techniques, Amaranto Lopes Pereira and Félix Mora-Camino, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p639-643.

Largest California Highway Design-Build Project Opens, CE Oct. 96, p26,28.

Preliminary Features of a Decision Support System for Incident Detection, John Hourdakis and Athanassios P. Chassiakos, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p227-232.

Private Company Bypasses Clogged Highway, CE Mar. 96,

p10.

REGIT Project: An Advanced Transportation Management System for the City of Terni, C. Galli, A. Mattucci and G. Righetti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p676-679.

Restaurants and Roadways: Food for Thought, John E. Abraham, CE Apr. 96, p6.

SCOOT Control of a Simulated Road Network, J. P. Sil-cock and D. A. Crosta, (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Single-Station Incident Detection Algorithm (SSID) for Sparsely Instrumented Freeway Sites, Charalambos N. Antoniades and Yorgos J. Stephanedes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p218-221.

Solid-Waste Management System Analysis with Noise Control and Traffic Congestion Limitations, Ni-Bin Chang, Y. C. Yang and S. F. Wang, EE Feb. 96, p122-

Traffic Congestion Leads to Innovative Funding, CE Sept. 96, p14.

Trip Mode Recommendation Using Travel Time Prediction, Michael Cremer, Carsten Holtmann and Stefan Schrieber, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p330-334.

Use of Traffic Information System in Congested Area, A. Pauzié, A. Sarpedon and G. Saulnier, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p305-309.

Using Artificial Intelligence to Reduce High Fuel Conmption in Congested Cities, Ken Fox, Roy Clarke and Howard Kirby, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p520-524.

Aid-to-Decision for Variable Message Sign Control in Motorway Networks during Incident Condition, Jean-Marc Morin, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p378-382.

Analysing Road Traffic Movement Patterns by Image Analysis Using an Array of Transputers, X. Zhang, R. E. Allsop and M. R. B. Forshaw, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), 130-131.

Analysis of Data Collected from Two Italian Freeways, E. Volta, T. Vernazza, C. Ardemagni and S. Grosso, (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p243-247.

An Analysis of Effect of Dynamic Traffic Information Cona Analysis of Effect of Dynamic Trainer interests of Enrich Sidering Driver's En-Route Route Switches, Yasunori lida, Nobuhiro Uno and Tetsuro Hasegawa, (Application Final tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p604-608.

Application of Discrete Event Methodologies to Urban Multimodal Transportation Systems, Angela Di Febbraro and Simona Sacone, (Applications of Advanced Technologies in Transportation Engineering, Yogos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p154-158.

Applications of Predictive Numerical Simulations Using Calibrated Macroscopic Traffic Flow Models, Ronald Cambraneu Macroscopic Traffic Flow Models, Ronald Kates, Marcus Hoops and Hartmut Keller, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p394-397.

Automated Constructibility Analysis of Work-Zone Traffic-Control Planning, Deborah J. Fisher and Naveen Rajan, CO Mar. 96, p36-43.

An Automatic System for the Definition of the Setting Rules for Speed Diagrams, Francesco Saverio Capaldo and Rodolfo Grossi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Bus Gate, Pre-Signal and Queue Relocation: The Park View Road Bus Priority Scheme, Daniel D. G. T. Metz-ger, (Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p81-86.

724

CCATS and CCIDS Technologies for Traffic Data and Incident Detection. An Overview of the Technology and cuent Detection. An Overview of the Technology and the Main Applications, V. Picciolo and F. Lemaire, (Ap-plications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p183-187.

Classifying Vehicles Using Their Auditory Signature Based on an Auditory Model, Denis McKeown, Stephen Had-land, Howard Kirby, Mark Dougherty, Luke Ibbetson, Louis Lopes and Peter Roach, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p711-715.

Communication Strategies for Distributed Traffic Systems, Norman Hunt, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p.256-270.

Computational Experiments with a Combined Traffic As-signment and Control Model with Asymmetric Cost Functions, Claudio Meneguzzer, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p609-614.

Cost Benefit Analysis of Video-Based Vehicle Detection, Panos G. Michalopoulos, Craig A. Anderson and Richard D. Jacobson, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p176-182.

Customer Oriented Train Scheduling in Underground Rail-way Systems, Riccardo Minciardi, Massimo Paolucci and Raffaele Pesenti, (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p149-153.

Delay Estimation and Optimal Length for Four-Lane Divided Freeway Workzones, David R. Martineli and Danquing Xu, TE Mar/Apr. 96, p114-122.

Development of a Decentralized Traffic Control System Based on Logic Programming, Giovanni Felici, Giovanni Rinaldi and Klaus Truemper, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p573-577.

Enhanced Movements Estimation Methods for High Reso-lution Airport Surface Radar Images, P. F. Pellegrini, A. Boccellari, E. Piazza and R. Valenti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p92-98.

Equilibrium/Control Results and the Approach to Near-Equilibrium of a New Dynamic Micro-Simulation/ Assignment Model on a Network Model of York, R. Clegg, M. O. Ghali and M. J. Smith, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p568-572.

Estimation of the Potential Benefits from an ATT System Using a Multiple User Class Stochastic User Equilibrium Assignment Model, M. J. Maher and P. C. Hughes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p700-704.

Estimation of Turning Movement Proportions from Partial Sets of Traffic Counts at Intersections, Gary A. Davis and Chang-Jen Lan, (Applications of Advanced Techno-ogies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

The EURATN Project, Jean-Michel Crenais, (Applications of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996, p159-165.

Evaluation of a Real-Time Expert System for Surface Street Traffic Management and Control, Stephen G. Ritchie, Filippo Logi, Seungmin Kang and Craig Rindt, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996, p276-280. A Flexible Machine-Vision System for Traffic Monitoring Applications, James F. Alves, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p171-175.

Flow Propagation Description in Dynamic Network Loading Models, Vittorio Astarita, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p599-603.

Fuzzy Drivers Make Good Models, Monica Maldonado, ET June/July 96, p1,9.

June/July 96, pl.9.
Improved Path Selection in Congested Networks by Al Techniques, Amaranto Lopes Pereira and Félix Mora-Camino, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p639-643.
Improvement of Road Network Reliability under Different Route Choice Principles, Shinji Nakagawa, Hiroshi Wakabayashi and Yasunori lida, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p594-598 p594-598.

Intrusion Detection by Linear Active Cameras, J.-P. DeParis, L. Duvicubourg and J.-G. Postaire, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filip-

neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996, p114-118. A Log-Linear Model for Path Flow Estimation, Michael G. H. Bell and Caroline M. Shield, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p695-699.

LP Type Dynamic On-Ramp Traffic Control Model for Urban Expressway, Yasuo Asakura, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p434-438.

Modeling Freeway Lane Changing Behavior, Haris N. Koutsopoulos, Moshe E. Ben-Akiva, Rabi G. Mishalani and Kazi I. Ahmed, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p455-459

Multicriteria Traffic Control with Video Feedback, Andrzej Adamski, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p620-627.

Path-Storing Equilibration Algorithms for Several Traffic Assignment Models, Fabien Leurent, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p633-638.

1996), p633-638.

Pedestrian Flow Estimation in Urban Environment by Image Processing. P. Vannoorenberghe, C. Motamed, J.-M. Blosseville and J.-G. Postaire, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p119-123.

PRIMAVERA: A Best Practice Manual for Innovative UTC Schemes, F. O. Montgomery, A. D. May, K. A. Fox, F. Biora, V. Mauro and S. Jones, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p680-684.

Public Transport Priority in Real-Time Traffic Control Sys-tems, N. B. Hounsell and J. P. Wu, (Applications of Ad-wanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed.,

Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p71-75.
The Rapid Simulation of a Signalised Road Network, Gordon Russell, Neil Ferguson, Paul Shaw and John McInnes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p449-454.
Real-Time Traffic Control for Alternative Route Guidance Systems. Based on the Dynamic Assignment Model.

Systems Based on the Dynamic Assignment Model, Reinhart D. Kühne, (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p563-567.

REGIT Project: An Advanced Transportation Management System for the City of Terni, C. Galli, A. Mattucci and G. Righetti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p676-679.

Results from the PLEIADES Automatic Traffic Surveil-lance System in the Kent Sector of the Paris-London Corridor, Neil Hoose and Nigel Cox, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p233-237.

A Short Term Forecasting Model for Freeway Traffic Monitoring, and Control, R. Camus, G. Longo and F. Santorini, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p418-422.

Single-Station Incident Detection Algorithm (SSID) for Sparsely Instrumented Freeway Sites, Charlambos N. Antoniades and Yorgos J. Stephanedes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p218-221.

A Study of Traffic Estimation Using Neural Networks, Masafumi Iwata, Shirou Hikita and Kiyotoshi Komaya, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p203-207.

System Integration in Traffic Management Centres, Jorge Navas, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p485-489.

Traffic Control System for Metropolitan Areas Based on Radio Links between Vehicles and Infrastructure, Andrea Borella and Giovanni Cancellieri, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p.398-402.

The Tram Simulation in Helsinki - A New Research Meth-od, Jarkko Niittymäki and Kari J. Sane, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed.,

A Two-Level Approach for the Control of Freeways, A. Alessandri, A. Di Febbraro and A. Ferrara, (Applications) of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p429-433.

An User Behaviour Analysis in Signalized Urban Intersec-tions by Artificial Neural Network, Lorenzo Mussone, Giuseppe Reitani and Savino Rinelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p208-212.

Vehicle Detection Using Radial Basis Neural Network, Suryanarayana Mantri and Darcy Bullock, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi,

ed., 1996), p188-192.

Vision Technique for Platoon Driving, Michel Parent, Pas-cal Daviet and Sofiane Abdou, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p666-675.

VMS Control in Aalborg, Peder Jensen, Lone Jensen, Mar-kos Papageorgiou, Albert Messmer, Habib Haj-Salem and Said Mammar, (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p373-377.

Traffic control devices

Reexamining Vehicle-Actuation Strategies at Isolated Sig-nalized Intersections, Michael Cassidy, Yu-Hao Chuang and Jeff Vitale, TE May/June 96, p235-540.

Simple and Efficient Traffic Vision Algorithms, T. N. Tan, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p129-133. Using Artificial Intelligence to Reduce High Fuel Consumption in Congested Cities, Ken Fox, Roy Clarke and Howard Kirby, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996, p520-524.

VARIA - Variable Message Sign Control Based on OD-Estimation in a Motorway Network, Thomas Sachse and Hubert Schmid, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p383-387.

California State Route 91 Variable Toll Express Lanes: Op-erational Aspects and Impact Assessment, Edward C. Sullivan and Jerry C. Porter, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p547-551.

Delay Estimation and Optimal Length for Four-Lane Divided Freeway Workzones, David R. Martineli and Danquing Xu, TE Mar/Apr. 96, p114-122.

Equilibrium/Control Results and the Approach to Near-Equilibrium of a New Dynamic Micro-Simulation/ Assignment Model on a Network Model of York, R. Clegg, M. O. Ghali and M. J. Smith, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p568-572.

Reexamining Vehicle-Actuation Strategies at Isolated Sig-nalized Intersections, Michael Cassidy, Yu-Hao Chuang and Jeff Vitale, TE May/June 96, p235-540.

Traffic Congestion Leads to Innovative Funding, CE Sept. 96, p14.

VMS Control in Aalborg, Peder Jensen, Lone Jensen, Mar-kos Papageorgiou, Albert Messmer, Habib Haj-Salem and Said Mammar, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p373-377.

Traffic engineering

Fuzzy Drivers Make Good Models, Monica Maldonado, ET June/July 96, p1,9.

GIS-T Design for its Applications, Edmond Chin-Ping Chang, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p174-178.

HOV Fix on I-66, Peter F. Bonaccorsi, CE July 96, p64-66.

Analysing Road Traffic Movement Patterns by Image Anal-ysis Using an Array of Transputers, X. Zhang, R. E. Allsop and M. R. B. Forshaw, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Applications of Predictive Numerical Simulations Using pplications of redictive Numerical simulations of Signature Calibrated Macroscopic Traffic Flow Models, Ronald Kates, Marcus Hoops and Hartmut Keller, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p394-397.

Cost Benefit Analysis of Video-Based Vehicle Detection, Panos G. Michalopoulos, Craig A. Anderson and Richard D. Jacobson, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p176-182.

Density and Conditioning Characteristics of Motorway Vehicular Traffic Flow, V. Torrieri, D. Gattuso, G. Musolino and A. Vitetta, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

An Enhanced Kalman Filtering Algorithm for Dynamic Freeway OD Matrix Estimation and Prediction, Samer Madanat, James Krogmeier and Shou-Ren Hu, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p423-428.

Estimation of Turning Movement Proportions from Partial Sets of Traffic Counts at Intersections, Gary A. Davis and Chang-Jen Lan, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p628-632

Florida DOT Applies Gravity Sealer to Seaway Bridges, CE Sept. 96, p96.

CE Sept. 90, 1990.

A Framework for Dynamic Network Traffic Simulation on Distributed Systems, Mithilesh Jha, Anupam Joshi and Kumares Sinha, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p388-393.

Fuzzy Drivers Make Good Models, Monica Maldonado, ET

June/July 96, p1,9.

Improved Path Selection in Congested Networks by Al Techniques, Amaranto Lopes Pereira and Félix Mora-Camino, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p639-643. Improving the Speed of Double Lockages, Mary K. Spence,

(North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2867-2872.

LP Type Dynamic Congress Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2867-2872.

Urban Expressway, Yasuo Asakura, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p434-438.

Mobility Forecast in an Urban Area through the Use of Neural Networks, Maria Nadia Postorino and Giuseppe M. L. Samè, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p213-217. Probabilistic Model for the Simulation of Traffic Flows

over Highway Bridges, Cesar Crespo-Minguillon and Juan R. Casas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-

goriu, ed., 1996), p26-29.

Real-Time Traffic Control for Alternative Route Guidance Systems Based on the Dynamic Assignment Model, Reinhart D. Kühne, (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p563-567.

A Short Term Forecasting Model for Freeway Traffic Mon-itoring, and Control, R. Carnus, G. Longo and F. San-torini, (Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p418-422.

Single-Station Incident Detection Algorithm (SSID) for Sparsely Instrumented Freeway Sites, Charalambos N. Antoniades and Yorgos J. Stephanedes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p218-221.

Site-Specific Live Load Models for Bridge Evaluation, Michel Ghosn and Dan M. Frangopol, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p30-33.

Traffic Action Effect Reduction Factors, Simon F. Bailey and Rolf Bez, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p22-25.

Traffic Dynamics: Method for Estimating Freeway Travel Times in Real Time from Flow Measurements, Do H. Nam and Donald R. Drew, TE May/June 96, p185-191.

Trip Mode Recommendation Using Travel Time Predic-tion, Michael Cremer, Carsten Holtmann and Stefan tion, Michael Center, Carbon State Hollmann and Sterian Schrieber, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Flippi, ed., 1996, p.330–354.

A Two-Level Approach for the Control of Freeways, A. Alessandri, A. Di Febbraro and A. Ferrara, (Applications

of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p429-433.

Uniform Criteria for Level-of-Service Analysis of Free-ways, Feng-Bor Lin, Chang-Wei Su and Hsin-Hsiun Huang, TE Mar/Apr. 96, p123-130.

Use of Traffic Information System in Congested Area, A. Pauzié, A. Sarpedon and G. Saulnier, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p305-309.

An User Behaviour Analysis in Signalized Urban Intersec-tions by Artificial Neural Network, Lorenzo Mussone, Giuseppe Reitani and Savino Rinelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p208-212.

VARIA - Variable Message Sign Control Based on OD-Estimation in a Motorway Network, Thomas Sachse and Hubert Schmid, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p383-387.

Traffic flow pattern

Aid-to-Decision for Variable Message Sign Control in Mo-torway Networks during Incident Condition, Jean-Marc Morin, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p378-382.

Estimation of the Potential Benefits from an ATT System Using a Multiple User Class Stochastic User Equilibrium Assignment Model, M. J. Maher and P. C. Hughes, (Ap-Pilications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p700-704.

Flow Propagation Description in Dynamic Network Load-ing Models, Vittorio Astarita, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

A Log-Linear Model for Path Flow Estimation, Michael G. H. Bell and Caroline M. Shield, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p695-699.

A Study of Traffic Estimation Using Neural Networks, Masafumi Iwata, Shirou Hikita and Kiyotoshi Komaya, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p203-207.

Wavelet Transforms for Incident Detection on Motorway Simon Cohen and Bian-shun Jing, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p222-226.

Traffic management

Analysis of Data Collected from Two Italian Freeways, E. Volta, T. Vernazza, C. Ardemagni and S. Grosso, (Appli-cations of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p243-247.

Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996, 0-7844-0146-2, 730pp.

An Architecture Integrating Symbolic and Connectionist n Architecture Integrating Symbolic and Connectionist Models for Traffic Management Center Decision Sup-port, Martin Molina, Filippo Logi, Stephen G. Ritchie and Jose Cuena, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p320-324.

Communication Strategies for Distributed Traffic Systems, Norman Hunt, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p256-270.

DGT Architecture for Traffic Data Management Systems Adrián Marín Puigpelat and Jesús López López, (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p238-242.

DRACULA - Microscopic, Day-to-Day Dynamic Model-ling of Traffic Assignment and Simulation, Ronghui Liu, Dirck Van Vliet and David Watling, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p444-448. Estimation of Turning Movement Proportions from Partial Sets of Traffic Counts at Intersections, Gary A. Davis and Chang-Jen Lan, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p628-632.

Evaluation of a Real-Time Expert System for Surface Street Traffic Management and Control, Stephen G.

Street Traffic Management and Control, Stephen G. Ritchie, Filippo Logi, Seungmin Kang and Craig Rindt, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p276-280.

A Framework for Dynamic Network Traffic Simulation on Distributed Systems, Mithilesh Jha, Anupam Joshi and Kumares Sinha, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p388-393.

Geographic Database for Traffic Operations Data, Cesar A. Quiroga and Darcy Bullock, TE May/June 96, p226-234.

HOV Fix on 1-66, Peter F. Bonaccorsi, CE July 96, p64-66.

An Integrated Model for Network Traffic Management for Long Term Disruptions, Mithilesh Jha, Srinivas Peeta and Samer Madanat, (Applications of Advanced Technol-

Long Term Disruptions, Mithilesh and, Samer Madanat, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Intelligent Transportation Education, Steven P. Scalici, CE Apr. 96, p52-54.

An Interception by Boston, Dennis J. Doherty, P.E. and Irene McSweeney Woodfall, P.E., CE Oct. 96, p45-47.
Multicriteria Traffic Control with Video Feedback, Andrzej

Multicriteria Iramic Control with Video Feedback, Andrzej Adamski, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p620-627. Package System for Supporting Decisions in a County Area, Quinto Riccardo Bertini and Pietro Antonio Cappa, (Applications of Advanced Technologies in Transporta-

(applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p408-412.
PRIMAVERA: A Best Practice Manual for Innovative UTC Schemes, F. O. Montgomery, A. D. May, K. A. Fox, F. Biora, V. Mauro and S. Jones, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), 680-684. PRIMAVERA: Integrated ATT Strategies for Urban Arteri-

als, F. O. Montgomery, A. D. May, K. A. Fox, F. Biora, V. Mauro and S. Jones, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p685-689.

po85-089.

A Sequential Hypothesis-Testing Based Freeway Incident Response Decision-Making System, Samer M. Madanat, Hua-Liang Teng and Pen-Chi Liu, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1002-1003 1996), p286-291.

A Short Term Forecasting Model for Freeway Traffic Mon-itoring, and Control, R. Carnus, G. Longo and F. San-torini, (Applications of Advanced Technologies in Trans-

torini, (Applications of Advanced Technologies in Frans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p418-422. System Integration in Traffic Management Centres, Jorge Navas, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p485-489. Traffic Control System for Metropolitan Areas Based on Radio Links between Vehicles and Infrastructure, An-drea Borella and Giovanni Cancellieri (Andications of drea Borella and Giovanni Cancellieri, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p398-402.

Uniform Criteria for Level-of-Service Analysis of Free-ways, Feng-Bor Lin, Chang-Wei Su and Hsin-Hsiun Huang, TE Mar/Apr, 96, p123-130. The Use of Artificial Neural Networks in Advanced Travel-

re Use of Artificial Neural Networks in Avanced Traver for Information and Traffic Management Systems, Gae-tano Fusco and Stefano Gori, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p341-345.

Use of Traffic Information System in Congested Area, A. Pauzié, A. Sarpedon and G. Saulnier, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p305-309.

Traffic management standards
Technology Standards and Deployment of Advanced
Transportation Technologies: A Comparative Case Study
of Electronic Toll and Traffic Management (ETTM) in the United States and France, Jonathan L. Gifford and Jean-Luc Spance, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p535-541.

Traffic planning

Traffic planning
International Space Station Traffic Model Development,
Clare T. Kingsford and Neil W. Lemmons, (Engineering,
Checations in Space, Stewart W. Construction, and Operations in Space, Stewart Johnson, ed., 1996), p443-449.

Maintenance: Diamante Project, Antonio Marqués, Vi-cente Sebastián, Vicente Macián and Ma. José Lerma, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p19-23.

Analysis of Rules and Regulations for Metal Coil Truck Transport, W. Bradford Cross, Richard Romick-Allen, Nader Panahshahi and Steven J. Hanna, TE Nov/Dec.

96, p475-480.

School Children as Pedestrians in Cairo: Proxies for Improving Road Safety, Khaled A. Abbas, Ibrahim Mabrouk and Khaled A. El-Araby, TE July/Aug. 96, p291-

Speed Is In Your Head, CE Sept. 96, p12.

Traffic signal controllers

Evaluation of Vehicle-Specific Information in Traffic Control Systems, Alireza Kamyab, T. H. Maze and Reginald R. Souleyrette, TE Nov./Dec. 96, p421-429.

Recxamining Vehicle-Actuation Strategies at Isolated Sig-nalized Intersections, Michael Cassidy, Yu-Hao Chuang and Jeff Vitale, TE May/June 96, p235-540.

The Tram Simulation in Helsinki - A New Research Meth-od, Jarkko Niittymäki and Kari J. Sane, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p76-80.

Traffic signals

Another Person Cures Galloping, Ray G. Barney, CE June 96, p27-28.

BALANCE - A Method for Traffic Adaptive Signal Control Field Trial and Simulation Studies, Bernhard Friedrich and Hartmut Keller, (Applications of Advanced Technol-ogies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p615-619.

Bus Gate, Pre-Signal and Queue Relocation: The Park View Road Bus Priority Scheme, Daniel D. G. T. Metz-ger, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p81-86.

Computational Experiments with a Combined Traffic Assignment and Control Model with Asymmetric Cost Functions, Claudio Meneguzzer, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p609-614.

Development of a Decentralized Traffic Control System Based on Logic Programming, Giovanni Felici, Giovanni Rinaldi and Klaus Truemper, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), 672-673.

Equilibrium Network Traffic Signal Setting under Condi-tions of Queuing and Congestion, Hai Yang, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p578-582.

Equilibrium/Control Results and the Approach to Near-Equilibrium of a New Dynamic Micro-Simulation/ Assignment Model on a Network Model of York, R. Clegg, M. O. Ghali and M. J. Smith, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p568-572.

The Rapid Simulation of a Signalised Road Network, Gordon Russell, Neil Ferguson, Paul Shaw and John McInnes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p449-454.

SCOOT Control of a Simulated Road Network, J. P. Silcock and D. A. Crosta, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p583-587

Texas DOT Wants Damper on Galloping, CE Mar. 96, p10. An User Behaviour Analysis in Signalized Urban Intersec-tions by Artificial Neural Network, Lorenzo Mussone, Giuseppe Reitani and Savino Rinelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p208-212.

"Marriage" of Fiber Optic and Wireless Communications Supporting Intelligent Transportation Systems, Bruce C. Abernethy, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p248-255.

Traffic signs

Aid-to-Decision for Variable Message Sign Control in Mo-torway Networks during Incident Condition, Jean-Marc Morin, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p378-382.

Design of a Freeway Control System Based on Artificial In-telligence Methods for Travel Time Detection, Reinhart D. Kühne, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p439-443.

Field Trial Results of VMS Travel Time Display on the Corridor Peripherique of Paris, H. Haj Salem, S. Cohen, E. Sididki and M. Papageorgiou, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p368-372.

VARIA - Variable Message Sign Control Based on OD-Estimation in a Motorway Network, Thomas Sachse and Hubert Schmid, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p383-387.

VMS Control in Aalborg, Peder Jensen, Lone Jensen, Mar-kos Papageorgiou, Albert Messmer, Habib Haj-Salem and Said Mammar, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p373-377.

Traffic speed

Uniform Criteria for Level-of-Service Analysis of Free-ways, Feng-Bor Lin, Chang-Wei Su and Hsin-Hsiun Huang, TE Mar/Apr. 96, p123-130.

DGT Architecture for Traffic Data Management Systems, Adrian Marin Puigpelat and Jesús López López, (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p238-242.

Results from the PLEIADES Automatic Traffic Surveillance System in the Kent Sector of the Paris-London Corridor, Neil Hoose and Nigel Cox, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p233-237.

Statewide Traffic Volume Studies and Precision of AADT Estimates, Satish C. Sharma, Brij M. Gulati and Saman-tha N. Rizak, TE Nov./Dec. 96, p430-439.

Traffic volun

Average and Peak Traffic Volumes: Neural Nets, Regression, Factor Approaches, Pawan Lingras and Mario Adamo, CP Oct. 96, p300-306.

Longitudinal Analysis of Bicycle Count Variability: Results and Modeling Implications, Debbie A. Niemeier, TE May/June 96, p200-206.

Statewide Traffic Volume Studies and Precision of AADT Estimates, Satish C. Sharma, Brij M. Gulati and Saman-tha N. Rizak, TE Nov/Dec. 96, p430-439.

Train derailments

South Korea Stabilizes Commuter Bridge, CE Apr. 96, p16,18.

ACEC Launches Executives Institute, ME Jan./Feb. 96, p7. Can A/E Grads Do Facility Design and Construction?, ME Sept./Oct. 96, p10-11.

CII offers "Framework" for Supervisory Education, ME Sept./Oct. 96, p6.

Construction for Tomorrow and the Day After, William R. Nash, SC May 96, p67.

Design—Cornerstone of Your Career: Advice for Young Engineers, Rodney Attwood, El July 94, p241-245.

An Empirical Assessment of Continuing-Education Needs, S. Dowlatshahi, ME Sept./Oct. 96, p37-44. Firehouse Becomes Building-Trade Classroom for Women,

CE June 96, p10. Guest Editorial, F. Lawrence Bennett, CR Sept. 96, p119-

How Crane Safety on Construction Sites Has Changed in 25 Years, Harlan W. Fair, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p84-92.

Just-In-Time Training on E-Mail, John F. Marron, (Con puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p931-936.

Leadership Development, Jim Krug, ME Nov/Dec. 96, p15-16.

p13-16.

Learning and Shaping in Emergent Hierarchical Control Systems, Bruce L. Digney, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p114-121.

Minnesota Intelligent Transportation Systems' Laboratory, Lowell A. Benson, Dennis L. Foderberg and Yorgos Stephanedes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p525-534.

Multimedia Development Software, Object-Oriented Inter-

Multimedia Development Software: Object-Oriented Inter-face-Based Simulation, Hossam El-Bibany, CP Oct. 96, p295-299.

New Educational Course "Sustainable Development Eco-City", Alexandr Tetior, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p31-32.

1997), poi-32.
The New Madrid Earthquake: Preparing Nurses, Stephanie K. VanArsdale and Roy B. VanArsdale, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p97-98.
OSHA May Use Administrative Subpoena, CE Dec. 96,

Practitioners' Forum, AE Sept. 96, p85-87.

nality People at Heart of the Corps, Donald M. Liddell, CE Apr. 96, p36.

Retaining Generation X Employees, Joan Lloyd, ME Nov./ Dec. 96, p5-6.

Rethinking Training in the 1990s, John V. Farr and James F. Sullivan, Jr., ME May/June 96, p29-33.

Seismic Sleuths: A Grades 7-12 Materials Development and Teacher Enhancement Project, M. Frank Watt Íreton (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p33-34.

Solving Aviation and Intermodal Transportation Related Issues — "A New Prototype for the 21st Century", Clifford Bragdon and Carl Berkowitz, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p212-222.

Training as a Potential Profit Center, Matt O'Connell, ME Sept./Oct. 96, p25-27.

Training Dropouts to Build Houses, CE Feb. 96, p20,22.

Training for Bridge Inspectors in Stream Stability and Scour, P. F. Lagasse and E. V. Richardson, (North Amer-ican Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p499-505.

raining for the Big One - A Proactive Approach, Andrew M. Hui and David R. Putnam, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p43-44.

Training of Highway Maintenance Personnel for Hazmat Incident Response, Eugene R. Russell, Sr., EI Apr. 96, p83-85

Using Computers Effectively in Today's Civil Engineering Office, John P. Menniti, CP Oct. 96, p261-262.

WIPP TRU Waste Transportation— A Circle of Safety, J. J. Winkel and O. R. Spooner, (High Level Radioactive Waste Management, Technical Program Committee, 1996), 360-362.

Women Engineers Get Leadership Training, CE Dec. 96, p8.

Transducers

Development of a Wireless Global Bridge Evaluation and Monitoring System (WGBEMS), Kenneth Maser, Robert Egri, Abba Lichtenstein and Steven Chase, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p734-

Developments in the Use of Infrasound for Protecting Fish at Water Intakes, E. P. Taft, N. A. Brown, T. C. Cook, J. P. Ronafalvy and M. W. Haberland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p171-176.

Field Evaluation of a Wireless Global Bridge Evaluation and Monitoring System (WGBEMS), Kenneth Maser, Robert Egri, Abba Lichtenstein and Steven Chase, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

A New, Low-Cost Ice Control Structure. Part 2: Construc-tion and Performance, J. H. Lever, G. Gooch and C. Clark, (Cold Regions Engineering: The Cold Regions In-frastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p629-639.

Transfer functions

HF Interference in Space from Terrestrial Sources, Marisa McCoy, John P. Basart and Monte Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), 9854-860.

Performance of Multiple Mass Dampers Under Random Loading, Ahsan Kareem and Samuel Kline, ST Feb. 95, p348-361.

Use of Quadratic Transfer Functions to Predict Response of Tension Leg Platforms, Inyeol Paik and Jose M. Roesset, EM Sept. 96, p882-889.

Transformations

Biotransformation of Trichloroethylene by a Phenol-Induced Mixed Culture, Mathew M. Shurtliff, Gene F. Parkin, Lenly J. Weathers and David T. Gibson, EE July 96, p581-589.

A Comparative Study of the Transformed Methods for Solving Richards' Equation, M. Rashidul Islam, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1748-1753.

Concentration Effects on Chlorinated Aliphatic Transfor-mation Kinetics, J. B. Hughes and G. F. Parkin, EE Feb. 96, p92-98.

Editor's Note, Thomas L. Theis, EE Feb. 96, p91.

Individual Biotransformation Rates in Chlorinated Aliphat-ic Mixtures, J. B. Hughes and G. F. Parkin, EE Feb. 96,

On Translation Processes and Upcrossing Probabilities, Mi-chael Macke and Christian Bucher, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p608-611

Simplified Transformation between NAD27 and NAD83 in Southeastern Wisconsin, Kurt W. Bauer and Earl F. Burkholder, SU Feb. 96, p26-39.

Transforms for Runoff and Sediment Transport, Pierre Y. Julien, HE July 96, p114-122.

Experimental Study of One-Dimensional Immiscible Fluid Drainage in Layered Sands, Calvin D. Miller and Deanna S. Durnford, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p628-638.

Modeling of Flow Through Fractured Tuff at Fran Ridge, Roger R. Eaton, Clifford K. Ho, Robert J. Glass, Michael J. Nicholl and Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p76-78.

Numerical Modeling of Anhui Debris Flow, Guoqi Han and Deguan Wang, HY May 96, p262-265.

Unsteady Flow in Hydraulic Capsule Pipeline, C. W. Lenau and M. M. El-Bayya, EM Dec. 96, p1168-1173.

Transient loads

Nonlinear Performance of Offshore Platforms in Extreme Storm Waves, R. G. Bea, WW Mar./Apr. 96, p68-74.

Shock and Transient Loading on Anaerobic Reactor Coup-led with Adsorber, Peter Fox and Makram T. Suidan, EE Jan. 96, p18-24.

Transients

Inverse Transient Analysis in Pipe Networks, James A. Liggett and Li-Chung Chen, HY Aug. 94, p934-955.

Transition points

Analysis Tools of Transitioning and Turbulent Flows, M. R. Hajj, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p434-437.

Effect of Transition Zone on the Pre-Peak Mechanical Behavior of Mortar, G. Ramesh, E. D. Sotelino and W. F. Chen, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1238-1245.

Inhomogeneous Interfacial Transition Zone Model for the Hollogereds international Hollogered P. Lutz, Paulo J. M. Monteiro and Robert W. Zimmerman, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1246-1255.

Analysis of Fatalities and Injuries Due to Powerline Con-tacts, Jimmie Hinze and David Bren, CO June 96, p177-

Another Person Cures Galloping, Ray G. Barney, CE June 96, p27-28.

Capacity Predictions for Full Scale Transmission Line Test Foundations, Robert E. Kondziolka and Peter M. Kandaris, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p695-

Collapse of Transmission Line Towers in Typhoon Gay, Panitan Lukkunaprasit, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p351-352.

Environmental Concerns for High-Voltage Transmission Lines in UNIPEDE Countries, E. C. Kalkani and L. G. Boussiakou, EE Nov. 96, p1042-1045.

New Transmission Line Lets Power Come Cheaper, CE Aug. 96, p14,16.

On the Response of Transmission Structures to High Winds, Acir Mércio Loredo-Souza and Alan Garnett Davenport, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p272-273.

Optimal Design of Steel Transmission Poles, Fatma Y. Kocer and Jasbir S. Arora, ST Nov. 96, p1347-1356.

Reducing the Vulnerability of Transmission Lines in Hurri-cane Regions by Choosing Minimum Life Cycle Cost Designs, Peter J. Vickery and Lawrence A. Twisdale, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p245-246.

Rocket Experiments and Demonstrations for Microwave Power Transmission (MPT), Nobuyuki Kaya, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p280-286.

Transmission towers

Design of Prestressed Concrete Transmission Poles: Opti-mization Approach, Fatma Y. Kocer and Jasbir S. Arora, ST July 96, p804-814.

Evaluation of Dynamic Analysis Results using Full-Scale Lattice Tower Tests, Markus Ostendorp, (Building an In-ternational Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p518-525

Optimal Design of Prestressed Concrete Transmission Poles, Fatma Y. Kocer and Jasbir S. Arora, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p111-122.

Reliability Analysis and Full-Scale Testing of Transmission Tower, M. J. Alam and A. R. Santhakumar, ST Mar. 96, p338-344.

Transport phenomena
A 3-D NAPL Flow and Biodegradation Model, Phillip C.
de Blanc, Daene C. McKinney, Gerald E. Speitel, Jr.,
Kamy Sepehrnoori and Mojdeh Delshad, (Non-Aqueous
Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed.,
1996), p478-489.

Accidental Pollution Simulation System and Polluta Transboundary Transport Problems for Tura River, N. N. Shagalova, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p714.

Alachlor Transport in Laboratory Soil Columns, Mutasem El-Fadel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p199-2004.

Analytical Model for Heterogeneous Reactions in Mixed Porous Media, K. Hatfield, D. R. Burris and N. L. Wolfe,

EE Aug. 96, p676-684.

Analytical Solutions for Two-Dimensional Transport Equa-tion with Time-Dependent Dispersion Coefficients, Mus-tafa M. Aral and Boshu Liao, HE Jan. 96, p20-32.

Bayesian Decision Analysis for Contaminant Travel Time, Marian W. Kemblowski and Hewa A. Wijedasa, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p207-218.

Bayesian Model for Fate and Transport of Polychlorinated Biphenyl in Upper Hudson River, Laura J. Steinberg, Kenneth H. Reckhow and Robert L. Wolpert, EE May

96, p341-349.

Bed-Load Transport. I: Mechanical Characteristics, Chunhong Hu and Yujia Hui, HY May 96, p245-254.

ed-Load Transport. II: Stochastic Characteristics, Chunhong Hu and Yujia Hui, HY May 96, p255-261.

Behavior of DNAPLs in Fractured Bedrock, David Foster, Salvatore Priore and Kevin Brewer, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lukshmi N. Reddi, ed., 1996), p583-

Biodegradation Modeling of a Closed Landfill Site, Sai K. R. Edavally, Lawrence H. Woodbury and G. Pad-manabhan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2510-2515.

Chance-Constrained Optimal Monitoring Network Design for Pollutants in Ground Water, Bithin Datta and Sanjay

D. Dhiman, WR May/June 96, p180-188.

Characterizing In Situ DNAPL Distribution, Mobility State, and Dissolution, Timothy J. Peck, Joy E. Ligé, Ian D. MacFarlane and Frank T. Barranco, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p103-114.

Chloride Migration through Clayey Silt Underlain by Fine Sand or Silt, R. Kerry Rowe and Kazem Badv, GT Jan.

96, p60-68.

- Comparisons of Site Characterization Methods Using Mixed Data, Donna M. Rizzo, Theodore P. Lillys and David E. Dougherty, (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p167-179.
- Computational Tools for Subsurface Conceptualization, Earl V. Edris and Eileen Poeter, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2577-2582.

Contaminant Transport in Nonisothermal Fractured Porous Media, Mao Bai, Jean-Claude Roegiers and Hilary I. In-yang, EE May 96, p416-423. Critical Concepts for Column Testing, Charles D. Shackel-ford, GT Oct. 94, p1804-1828.

Cumulants-Based Analysis of Concentration Data from Soil-Column Studies for System Identification, Rao S. Govindaraju, Bhabani S. Das and Gerard J. Kluitenberg,

Govindaraju, Bhabani S. Das and Gerard J. Kiunenberg, HE Jan. 96, p41-48.
Deciphering LNAPL Migration Pathways in a Heterogeneous Hydrogeologic Setting, Mark K. Levorsen and Christine Dreier Bynum, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p836-847.

Delineation of a Dielectric Fluid LNAPL Using Discrete Sampling Methods, Michael J. Pierdinock, Spence S. Smith, Christopher L. Kingma and John Seferiadis, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p139-150.

Reddi, ed., 1999), p139-130.
Diffusive Transport of Organic Colloids from Sediment Beds, K. T. Valsaraj, S. Verma, I. Sojitra, D. D. Reible and L. J. Thibodeaux, EE Aug. 96, p722-729.
Dimensional Analysis of Colloid-Facilitated Ground-Water Contaminant Transport, M. Yavuz Corapcioglu and Shiyan Jiang, HE Oct. 96, p139-143.

yan Jiang, He Oct. 30, p.137-143. Discussions of a 3D Numerical Simulation of Transient Re-gional Groundwater Flow and Transport, Bernard B. Hsieh, Mansour Zakikhani and William D. Martin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2218-2223.

Dissolution of Toluene Residuals: 3-D Laboratory Experiments, David A. Reynolds, Philippe Lamarche and ments, David A. Reynouss, Phinppe Lannacte and Michel Tetreault, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remedia-tion, Lakshmi N. Reddi, ed., 1996), p607-618. Distribution and Nutrient Limitations of Heterotrophic Bac-

teria from Yucca Mountain, D. L. Haldeman, L. Ragatz

teria from Yucca Mountain, D. L. Iratueriani, L. Faggara and P. S. Amy, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p30-32. Dose Rates from Repository Performance Assessment, Robin K. McGuire and John A. Vlasity, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p325-326.

Drying of a Heated Porous Medium at Sub-Residual Saturations, Y.-T. Chen, A. K. Sathappan and R. Boehm, (High Level Radioactive Waste Management, Technical

(High Level Radioactive Waste Management, Technical Program Committee, 1996), p119-121.

Effect of Divergent Flow on Mass Conservation in Eulerian-Lagrangian Transport Schemes, Ling Tang and E. Eric Adams, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p106-115.

Effects of Transport Model Alternatives Incorporating Pre-

cipitation on the Performance of Engineered Barriers, Takao Ohi, Kaname Miyahara, Morimasa Naito and Hiroyuki Umeki, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p274-275.

Evaluating Strategies to Manage Seawater Intrusion, Tracy Nishikawa and Eric G. Reichard, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4323-4328. Examination of Exploration Options of the Yucca Mountain CHn Unit, Kurt E. Suchsland, Jerry L. King and Richard D. Memory, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p300-302. Experimental Study of One-Dimensional Immiscible Fluid Drainage in Layered Sands, Calvin D. Miller and Deanna S. Durnford, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p628-638. Factors Limiting Microbial Activity in Volcanic Tuff at Yucca Mountain, Thomas L. Kieft, William P. Kovacik and Jennifer Taylor, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p36-38.

Post St. De Proposition of Pathogenic Organisms in Mamala Bay, John P. Connolly and Alan F. Blumberg. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pd090-4095.

Framework for a Screening Model for DNAPL Contamina-tion of Porous Media, Clinton S. Willson, James W. Weaver, Tissa Illangasekare and Randall J. Charbeneau, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p407-418.

Geochemical Modeling of Lead in Vadose Zone, K. V. Nedunuri, R. S. Govindaraju, A. P. Schwab and L. E. Erickson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p1221-1226.

Hydrodynamic Simulations in Sediment-Carried Contami-nant Modeling for the Buffalo River, New York, Ruo-chuan Gu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1039-1044.

1793), Publish Toron. In Situ Characterization of the Microbiota in Yucca Mountain Sediments, David B. Ringelberg, Julia O. Stair, David C. White and Larry H. Hersman, (High Level Radioactive Waste Management, Technical Program Communication).

mittee, 1996), p33-35.

Institute, 1990, p.52-53.
Investigating the Non-Convexity of the Groundwater Quality Management Response Function, David P. Ahlfeld and Mary Palumbo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p854-856.

Laboratory Experiments with Heterogeneous Reactions in Mixed Porous Media, David R. Burris, Kirk Hatfield and

N. L. Wolfe, EE Aug. 96, p685-691.

Leaching of PCBs from a NAPL Entrapped in Porous Media, Zafar Adeel, Richard G. Luthy and David A. Dzombak, (Non-Aqueous Phase Liquids (NAPLs) in Sub-surface Environment: Assessment and Remediation, surface Environment: Assessment an Lakshmi N. Reddi, ed., 1996), p649-660. and Remediation,

Lakshmi N. Reddi, ed., 1996), p649-660.
Linked Lists for Transport Simulations Using Lagrangian Parcels, Poojitha D. Yapa, Li Zheng and Tomonao Kobayashi, CP Jan. 96, p88-90.
LNAPL Detection, Measurement, and Distribution in the Subsurface Environment, David W. Ostendorf, Alan J. Lutenegger, Russell J. Suchana, Paul S. Cheever and Samuel J. Pollock, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p91-102.
Mathematical Modeling of Electrochemical Steal Corroging.

Mathematical Modeling of Electrochemical Steel Corrosion in Concrete, G. Balabanić, N. Bićanić and A. Dureković,

EM Dec. 96, p1113-1122.

Microbial Studies in the Canadian Nuclear Fuel Waste Management Program, Simcha Stroes-Gascoyne, (High Level Radioactive Waste Management, Technical Pro-

gram Committee, 1996), p4-6.

Microbiological Sorption and Transport: Field and Laboratory Experiments, Larry E. Hersman, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p27-29.

Model for Efficiency of Soil Flushing Using PVD-Enhanced System, M. A. Gabr, J. Wang and J. J. Bowders, GT Nov. 96, p914-919.

Model of Electrodialysis Process Associated with Organic Adsorption, Thawach Chatchupong and Robert J. Mur-phy, EE Feb. 96, p154-161.

Model Uncertainty for the Advection-Dispersion Equation, Wade E. Hathhorn, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p881-896.

Modeling Groundwater Contaminant by Unstructured FVM, Jinglian J. Liu, Bharat K. Soni and Victor L. Zitta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2212-2217.

p2212-2217.

Modeling Low Velocity/High Dispersion Flow in Water Distribution Systems, David H. Axworthy and Bryan W. Karney, WR May/June 96, p218-221.

Modeling of Contaminant Transport in Groundwater in Areas of Discontinuous Permafrost, Ron Johnson, Doug Kane, Larry Hinzman, Greg Light and Ann Farris, Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p82-93.

Modeling of NOM-Facilitated PAH Transport Through Low-f., Sediment, William P. Johnson, Gary L. Amy and Steven C. Chapra, EE June 95, p438-446.
Modeling of Possible Outflow of Radionuclides from Deep

Burials into Biosphere, V. M. Shestopalov, B. D. Stet-senko and A. S. Boguslawski, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p176-177.

Modeling Transport of Bromide in Furrow-Irrigated Field, Behzad Izadi, Bradley King, Dale Westermann and Ian McCann, IR Mar./Apr. 96, p90-96.

Modelling of El Berrocal Field Tracer Tests, J. P. Humm, J. Guimera, P. Grindrod and S. P. Crompton, (High Level Radioactive Waste Management, Technical Program Committee, 1996), pl14-116.

Naturally-Occurring Chemical Analogues for Repository-Derived Radionuclides, Bill Miller, (High Level Radio-active Waste Management, Technical Program Commit-

tee, 1996), p50-52.

Overview of DoD Research in Groundwater Modeling, J. P. Holland, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2565-2570.

Pollutant Transport Across Porous Stream Beds, C. Mendo-za and D. Zhou, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p1581-1586.

Pollution Transport in Karst, C. Warren Campbell and Mohamed Abd El Latif, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4269-4274.

Predicting THM Formation with Artificial Neural Net-works, Paul H. Hutton, Nicky Sandhu and Francis I. Chung, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3551-3556.

Predicting Transport of Organics through Soil Columns using Distributed Mass-Transfer Rates, Teresa B. Culver and Stephen P. Hallisey, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2005-2010.

A Program to Assess Microbial Impacts on Nuclear Waste Containment, Joanne Horn and Annemarie Meike, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p1-3.

Radwaste Disposal in Clay—E. C. Everest Project, IPSN Contribution, Catherine Certes, Patrick Goblet and André Levassor, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p170-171.

Relating the Wettability of Contaminated Sands to NAPL Composition, William H. Anckner, Jr. and Susan E. Powers, (Non-Aqueous Phase Liquids (NAPLs) in Sub-surface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p502-512.

Research to Application: Network Models to Simulate Flow and Transport in Heterogeneous Media, John F. Peters and Stacy E. Howington, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2571-2576.

The Role of Capillary Pressure Curve Selection in Modeling LNAPL Transport in the Vadose Zone, Jason L. Buesing and Marina Pantazidou, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p490-501

Salt Transport Characteristics of Pak Phanang Estuary, Somboon Pornpinatepong and Malcolm L. Spaulding, (Estuarine and Coastal Modeling, Malcolm L. Spaulding

and Ralph T. Cheng, 1996), p92-105.

and kapp 1. Cheng, 1990, pp2-180.

SEAM2D: A Numerical Model for Two-Dimensional Solute Transport and Sequential Electron Acceptor-Based Bioremediation of LNAPL-Contaminated Aquifers, Dan W. Waddill, Mark A. Widowson and J. Steven Brauner, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p466-477.

Simulating Atrazine Transport with HSPF in an Agricultur-al Watershed, Anne-Marie Laroche, Jacques Gallichand, Robert Lagacé and Alain Pesant, EE July 96, p622-630.

Simulating DBP Precursor Transport in Sacramento Delta, Paul H. Hutton, Nirmala Makadevan and Francis I. Chung, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., gress & Destructiv 1996), p3557-3562.

Simulating the Transport of an Algae Bloom off the West Coast of Vancouver Island, M. G. G. Foreman, J. F. R. Gower, R. E. Thomson and J. Y. Cherniawsky, (Estua-rine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p180-191.

Simulation of Pesticide Transport for Verification of the DWRDSM, Christopher Enright and Paul Hutton, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3563-3568.

The water, Concenhaya Bantania, ed., 1990, p.3503-3506. Site Characterisation of a Complex DNAPL Site—An Australian Experience, J. M. Duran and J. A. Grounds, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p800-811.

Solute Breakthrough Curves for Processed Kaolin at Low Flow Rates, Charles D. Shackelford and Patrick L. Red-

mond, GT Jan. 95, p17-32.

Solution of the Advection-Dispersion Equation: Continuous Lond of Finite Duration, Robert L. Runkel, EE Sept. 96,

p830-832.

posto-52.

Durce Characterization at Contaminated Sites, Sudhakar R. Kondisetty, Priyantha W. Jayawickrama and Kenneth A. Rainwater, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1965. 1996), p927-943.

State-of-the-Art Review of Modeling Transport and Fate of Oil Spills, ASCE Task Committee on Modeling of Oil Spills of the Water Resources Engineering Division, HY

Nov. 96, p594-609.

Stochastic Analysis for Movement of Fine Particles in Porous Media, Rao S. Govindaraju, HE Oct. 96, p161-168.

Strategy for Rapid Evaluation of Waste Containment and Isolation at the Yucca Mountain Site, Larry D. Rickert-sen, Edward C. Taylor, Janet A. Docka and Jean L. Younker, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p303-304.

Testing of Abstractions for Total System Performance Assessment, Vinod Vallikat, Srikanta Mishra, Yanyong Xiang and David Sevougian, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p293-294.

A Three Dimensional Oil Spill Model, Li Zheng and Pooji-tha D. Yapa, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3764-3769.

Three-Dimensional Numerical Simulation of Soil Vapor Extraction, Albert T. Yeung and Hui-Tsung Hsu, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p442-453.

Threshold Precipitation Events and Potential Ground-Water Recharge, Richard H. French, Roger L. Jacobson and Brad F. Lyles, HY Oct. 96, p573-578.

Transport Modeling of the Coastal Waters of Oahu, Hawaii, Alan F. Blumberg and John P. Connolly, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4084-4089.

Transport of Aqueous Organic Compounds in Thermoplas-tic Geomembranes. II: Mass Flux Estimates and Practi-cal Implications, Jae K. Park, Joni P. Sakti and John A. Hoopes, EE Sept. 96, p807-813.

Transport of Fine Sands by Currents and Waves. II, Leo C. Van Rijn and Fred J. Havinga, WW Mar JApr. 95, p123-

Transport of Organic Compounds in Thermoplastic Geomembranes. I: Mathematical Model, Jae K. Park, Joni P. Sakti and John A. Hoopes, EE Sept. 96, p800-

Two- and Three-Dimensional Hydrodynamic Modeli the Salion Sea, California, Christopher B. Cook and Ger-ald T. Orlob, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3752-3757.

Under Cover Transport and Accumulation of Frazil Granules, Hung Tao Shen and De Sheng Wang, HY Feb. 95, p184-195.

Unsteady Finite-Analytic Method for Solute Transport in Ground-Water Flow, Whey-Fone Tsai and Ching-Jen Chen, EM Feb. 95, p230-243.

Upscaling of Pore-Scale Concepts to Develop Models of NAPL Ganglion Dynamics, Rao S. Govindaraju and Lakshmi N. Reddi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p454-465.

Uranium Dioxide Dissolution under Acidic Aqueous Con-ditions, S. A. Steward and E. T. Mones, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p388-389.

732

An Adaptive Finite Element Model for Saturated and Un-saturated Porous Media, D. W. Pepper, M. L. Lytle and D. B. Carrington, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), p105-

Transport of Fine Sands by Currents and Waves. II, Leo C. Van Rijn and Fred J. Havinga, WW Mar / Apr. 95, p123-

Transportation 1997 Budget, Casey Dinges, CE May 96, p98.

Accelerated Evaluation of New Materials in Transportation Applications Using Advanced Technologies, Mark B. Snyder, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p505-509.

Analytic Approach Helps Firm Expand Business, CE Dec. 96, p22.

Autonomous Intelligent Cruise Control Using the Fuzzy Logic, Kwang Soo Chang and Jae Sung Choi, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p644-655.

Calling All Civil Engineer Inventors, CE Feb. 96, p68. Crop Growth and Water Use Model for Lettuce, M. Gallar-do, R. L. Snyder, K. Schulbach and L. E. Jackson, IR Nov./Dec. 96, p354-359.

Evaluating the Potential of ATT Technologies in Hazardous Materials Transportation Risk Management, Konstan-tinos G. Zografos and George M. Vasilakis, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p480-484.

pi, cu., 1990, pseu-sea.

A Framework for Dynamic Network Traffic Simulation on Distributed Systems, Mithilesh Jha, Anupam Joshi and Kumares Sinha, (Applications of Advanced Technologies in Transportation Engineering, Yogos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p388-393.

Getting to Know ArcView by Environmental Systems Re-search Institute, Wayne Sarasua, TE Sept./Oct. 96, p409. Grants Aid South American Development, CE Dec. 96,

High-Speed Rail Moves Ahead, CE Jan. 96, p8.

Iowa Touts Transportation, CE Nov. 96, p24. Minnesota DOT Pursues Privatization Projects, CE Feb. 96,

p10. Multimode Before Green Line, Robert J. Camillone, CE Sept. 96, p38.

New Public/Private Highway, CE Aug. 96, p10.

Reader Says Feds Overspend on Highways, Kirk R. Barrett, P.E., CE Oct. 96, p32,37.

Rough Road Ahead, CE Aug. 96, p10.

SOCRATES - From Research Towards Commercial Implementation, Ian Catling and Richard Harris, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p588-593.

Taxing Matters for Trust Funds, Casey Dinges, CE July 96, p100.

TDA Profiles Opportunities in European Market, CE July 96, p8.

Technology Standards and Deployment of Advanced Transportation Technologies: A Comparative Case Study of Electronic Toll and Traffic Management (ETTM) in the United States and France, Jonathan L. Gifford and Jean-Luc Ygnace, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p535-541.

p335-341.

Transportation of Alaska North Slope Natural Gas to Mar-ket, Donald A. Lannom, David O. Ogbe, Akanni S. Lawal and F. Lawrence Bennett, (Cold Regions Engi-neering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), p226-237.

Transportation Shortcuts Exist, J. F. Koenen, P.E., CE Oct. 96, p37-38.

Transportation Update, Casey Dinges, CE Jan. 96, p98. Trust Fund Vote in House, Casey Dinges, CE June 96,

Tunnelers Probe Policy Ponder Baseline Reports, CE June 96, p16-18.

Turnkey Procurement Speeds Highway Work, ME May/ June 96, p10.

Women Engineers Take High Road in California's Trans-portation Scene, NE July 96, p11.

World and Lunar Solar Power Systems Costs, David R. Criswell, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p293-301.

Transportation corridors

Development and Application of Urban Information Strategies, E. G. Shinakis, M. McDonald and A. Richards, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p310-314.

rinppi, ed., 1996), p310-314.
Electronic Coin, CE Sept. 96, p11.
Field Trial Results of VMS Travel Time Display on the Corridor Peripherique of Paris, H. Haj Salem, S. Cohen, E. Sididki and M. Papageorgiou, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p368-372.

Largest California Highway Design-Build Project Opens,

CE Oct. 96, p26,28.

CE Oct. 96, p20,28.

Modeling the Blue Ridge, CE Aug. 96, p20,22.

PRIMAVERA: A Best Practice Manual for Innovative UTC Schemes, F. O. Montgomery, A. D. May, K. A. Fox, F. Biora, V. Mauro and S. Jones, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p680-684.

Stormwater Management for San Joaquin Hills Transporta-tion Corridor, Orange County, California, Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2826-2830.

Transportation engineering Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996, 0-7844-0146-2, 730pp.

Artificial Intelligence and Intelligent Transportation Sys-tems, Brian L. Smith, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p978-984.

Florida Department of Transportation's MastArm Program—Placing the Engineer in Control, Andre V. Pavlov, (Computing in Civil Engineering, Joge Vanegas, ed. and Paul Chinowsky, ed., 1996), p473-479.

Grant Mickle Dies; Held Top Highway Posts, NE Feb. 96,

Green Light, John Casey, CE May 96, p56-59.

Green Light for Whom? Hermann Zutraun, P.E., CE Sept.

96, p38.

90, p.ss. The Use of Digital Geographic Information in Transportation Engineering, Patrice Boursier, Bernard Allouche, Laurent Coudercy and Yonnel Gardes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p403-407.

Use of OMT in a Transport Human Engineering Prospect, T. Bellet and H. Tattegrain-Veste, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p363-367.

Transportation management
Artificial Intelligence and Intelligent Transportation Sys-Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p978-984.

Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996, 0-7844-0190-X, 965pp.

DBMS Implementation of a Linear Referencing Model, Nancy K. Wiegand, Teresa M. Adams and Alan P. Vonderohe, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p179-185.

GIS-T Design for its Applications, Edmond Chin-Ping Chang, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p174-178.

Houston Transtar: Total Traffic Control, CE July 96, p12. Medical Service Routing and Location Analysis for Free-way Emergency Needs, Kevin P. Hwang, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p281-285.

EG., 1990), p.261-263.
REGIT Project: An Advanced Transportation Management System for the City of Terni, C. Galli, A. Mattucci and G. Righetti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p676-679.
Returning Veteran, Charles A. Baumgartner and William E.
Returning Veteran, Charles A. Baumgartner and William E.

Beyer, CE Apr. 96, p68-71.

Validating Expert Systems in Transportation Practice, Gary S. Spring, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p985-991.

Transportation networks

GIS-T Design for its Applications, Edmond Chin-Ping Chang, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p174-178.

Transportation planning
The Analysis of Freeway Reconstruction Impacts on Travellers, Vittorio Astarita, (Applications of Advanced Technologies in Transportation Engineering, Yorgos Stephanedes, ed. and Francesco Filippi, ed., 1996), p460-464. Austin Brant, Retired Chairman of TAMS, Dies at 66, NE

Feb. 96, p14.

Comparison of High-Speed Rail and Maglev Systems, Fazil T. Najafi and Fadi Emil Nassar, TE July/Aug. 96, p276-

PERMES: An Integrated Environment for the Design of On-Line Decision Support Systems, Franco Arcieri and Ettore Apolloni, (Applications of Advanced Technologies in Transportation Engineering, Yogos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p315-319.

Improved Path Selection in Congested Networks by Al Techniques, Amaranto Lopes Pereira and Félix Mora-Camino, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p639-643.

Minimum Risk Route Model for Hazardous Materials, B. Ashtakala and Lucy A. Eno, TE Sept./Oct. 96, p350-357. Multijurisdictional Project Evaluation in Chattanooga Urban Area, Catherine L. Ross and W. Jeffrey Davis, UP

June 96, p71-81.

Nonurbanized Public Transportation Needs Assessment, M. Moussavi, M. Al-Turk and J. Albeck, TE Nov./Dec. 96, p447-453.

Statewide Programming: Implementing Transportation-Policy Objectives, Debbie A. Niemeier, Tracy L. Reed, G. Scott Rutherford and Pat Morin, IS Mar. 96, p30-39. Washington Buildup, John Casey, CE Oct. 96, p64-67.

Transportation safety
Analysis of Rules and Regulations for Metal Coil Truck Transport, W. Bradford Cross, Richard Romick-Allen, Nader Panahshahi and Steven J. Hanna, TE Nov./Dec. 96, p475-480.

Civil Engineer Named to Transportation Safety Board, NE Apr. 96, p15.

Apr., 70, p.13.

A Minimum Risk Evaluation Methodology for Fault Tolerant Automotive Control Systems, P. Borodani, L. Gortan, R. Librino and M. Osella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Transportation studies

Nonurbanized Public Transportation Needs Assessment, M. Moussavi, M. Al-Turk and J. Albeck, TE Nov./Dec. 96, p447-453.

Advanced Control Systems for Integrated Transportation by LIM Devices, R. Di Stefano, G. Gentile, S. Meo, N. Ro-tondale and M. Scarano, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p49-

Cleveland Extends Light Rail on the Waterfront, CE Nov. 96, p20.

Computer Modelling and Simulation for High Speed Rail-way Applications, C. Ianniello, S. Savio and G. Sciutto, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p54-58.

Cesso Frippi, et al. 1996, part-6.
A Decision Support System for Dynamic Pre-Trip Route Planning, Nagui M. Rouphail, S. Ranji Ranjithan, Wael El Dessouki, Timothy Smith and E. Downey Brill, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p325-329.

Dense Organic Liquids Reduce GA-4 Reactivity Margin, B. Snyder, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p333-335

Design Tools for Public Cars Transportation Systems, Chafik Allal, François Dumontet and Michel Parent, (Ap-plications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p6-18.

Dynamic Analysis of Resilient Crosstie Track for Transit System, M. J. Fatemi, M. F. Green, T. I. Campbell and A. Moucessian, TE Mar./Apr. 96, p173-180.

Editorial, Chris Hendrickson, TE Mar./Apr. 96, p95. An Elevated Train Rises Again, CE Nov. 96, p10.

Enhancing AVM Systems by Operator Support DRS Func-tionalities, G. Ambrosino, M. Boero and P. Sassoli, (Ap-Pilications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p413-417.

Evaluation of Logit and Probit Models in Mode-Choice Sit-uation, Ahmed Hamdy Ghareib, TE July/Aug. 96, p282-

A Flexible Machine-Vision System for Traffic Monitoring Applications, James F. Alves, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p171-175.

Further Future Thinking, Dan H. Pletta, P.E., CE Aug. 96, p29-30.

Geographic Information Systems for Emergency Response Management of Transportation Systems, Anne Kirem-idjian, Nesrin Basoz, Kincho Law and Stephanie King, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p355-356.

GIS Application for Miami Transportation System Hurri-cane Emergency Preparedness, Kangming Xu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p107-108.

GIS-T Design for its Applications, Edmond Chin-Ping Chang, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p174-178.

HERMES: An Integrated Environment for the Design of On-Line Decision Support Systems, Franco Arcieri and Ettore Apolloni, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p315-319.

High-Capacity Bus Systems Based on Transit Centres and Convoying, P. Delle Site and F. Filippi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p1-5.

Impact of Commuter-Rail Services in Toronto Region, Sarah Stewart Wells and Bruce G. Hutchinson, TE July/

Aug. 96, p270-275.
Impacts of SNF Burnup Credit on the Shipment Capability
of the GA-4 Cask, Amir S. Mobasheran, William Lake and John Richardson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p330-332.

p.330-332. Interport Modelling with State Automata, Maurizio Maz-zucchelli, Valerio Recagno and Giuseppe Sciutto, (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p104-108.

Minnesota Featured State at Bridge Conference, CE Aug.

96, p16.

Minnesota Intelligent Transportation Systems' Laboratory, Lowell A. Benson, Dennis L. Foderberg and Yorgos Stephanedes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p525-534.

Mehlitir, Ecroport, in History Library
Mobility Forecast in an Urban Area through the Use of Neural Networks, Maria Nadia Postorino and Giuseppe M. L. Sarnè, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p213-217.

A Model for the Design and Control of Urban Electric Traction Systems, O. Bottauscio and G. Farina, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p39-43.

Reducing Environmental Impacts through Non-Uniform Loading of Casks, N. Barrie McLeod, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p372-373

Restaurants and Roadways: Food for Thought, John E. Abraham, CE Apr. 96, p6.

Risk Management Principles of Transportation Facility De-sign Engineering, Andrew G. Cooley, TE May/June 96, p207-209

Process for Guided Transport Systems, G. Cosulich, P. Firpo, S. Savio and G. Sciutto, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p558-562.

Route Assessment Using Comparative Risk Factors Integrated through a GIS, Douglas M. Toth and William J. O'Connell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p363-365.

Spent Nuclear Fuel Dry Transfer System, Leroy Stewart and Stephen Agace, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p471-473.

A Strategy for Solving Static Multiple-Optimal-Path Tran-sit Network Problems, Nicholas Koncz, Joshua Greenfeld and Kyriacos Mouskos, TE May/June 96, p218-225.

A Study of Traffic Estimation Using Neural Networks, Masafumi Iwata, Shirou Hikita and Kiyotoshi Komaya, Masafumi Iwata, Shirou Hikita and Kiyotoshi Komaya, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p203-207.

WIPP TRU Waste Transportation— A Circle of Safety, J. J. Winkel and O. R. Spooner, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p360-362.

1990), p300-302.
Marriage of Fiber Optic and Wireless Communications Supporting Intelligent Transportation Systems, Bruce C. Abernethy, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p248-255.

Transverse shear

Rectangular Plates Resting on Tensionless Elastic Founda-tion: Some New Results, Ramesh C. Mishra and Sekhar K. Chakrabarti, EM Apr. 96, p385-387.

Transverse strength

Estimating Transverse Strength of Masonry Infills, Richard Angel and Joseph Uzarski, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p101-111.

Ultimate Transverse Strength and Reliability Analysis of Offshore Production Ships, Xiaozhi Wang and Lars M. Sørhaug, (Probabilistic Mechanics & Structural Reliabil-ity, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p146-149.

Sediment Removal from Stormwater Runoff, Ashok Pandit and Ganesh Gopalakrishnan, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2439-2444.

Trapezoidal channels

Optimal Sizing of Width- and Depth-Constrained Trapezoi-dal Channels, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4294-4299.

Stochastic Determination of Wave Heights for Flood Control Channels, Scott E. Stonestreet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4058-4063.

Travel costs

Different Travel Patterns: Interzonal, Intrazonal, and External Trips, Ahmed Hamdy Ghareib, TE Jan./Feb. 96, p67-75

Travel demand

Methodological Framework for Air-Travel Demand Fore-casting, Matthew G. Karlaftis, Konstantinos G. Zografos, Jason D. Papastravrou and John M. Charnes, TE Mar J Apr. 96, p96-104.

Nonurbanized Public Transportation Needs Assessment, M. Moussavi, M. Al-Turk and J. Albeck, TE Nov./Dec. 96,

p447-453.

Travel Modeling with and without Feedback to Trip Distribution, Robert A. Johnston and Raju Ceerla, TE Jan./ Feb. 96, p83-86.

Trip Characteristics of Travelers without Vehicles, V. Thamizh Arasan, V. R. Rengaraju and K. V. Krishna Rao, TE Jan/Feb. 96, p76-81.

Modeling of Stratified Urban Trip Distribution, V. Thamizh Arasan, M. Wermuth and B. S. Srinivas, TE Sept./Oct. 96, p342-349.

Trip Characteristics of Travelers without Vehicles, V. Thamizh Arasan, V. R. Rengaraju and K. V. Krishna Rao, TE Jan./Feb. 96, p76-81.

Different Travel Patterns: Interzonal, Intrazonal, and Exter-nal Trips, Ahmed Hamdy Ghareib, TE Jan./Feb. 96, p67-75.

A Strategy for Solving Static Multiple-Optimal-Path Tran-sit Network Problems, Nicholas Koncz, Joshua Green-feld and Kyriacos Mouskos, TE May/June 96, p218-225.

A Decision Support System for Dynamic Pre-Trip Route Planning, Nagui M. Rouphail, S. Ranji Ranjithan, Wael El Dessouki, Timothy Smith and E. Downey Brill, (Ap-plications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p325-329.

Design of a Freeway Control System Based on Artificial In-telligence Methods for Travel Time Detection, Reinhart D. Kühne, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p439-443.

and Francesco Filippi, ed., 1990), p439-443.
Evaluation of a Real-Time Expert System for Surface Street Traffic Management and Control, Stephen G. Ritchie, Filippo Logi, Seungmin Kang and Craig Rindt, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p276-280.

Field Trial Results of VMS Travel Time Display on the Corridor Peripherique of Paris, H. Haj Salem, S. Cohen, E. Sididki and M. Papageorgiou, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p368-372.

1970), p.508-5/2.
A Log-Linear Model for Path Flow Estimation, Michael G.
H. Bell and Caroline M. Shield, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p695-699.

1990), p093-0994.
Methodologies for the Analytic Definition of Uniform Travelling Time-Shifts of an Urban Public Transportation Service, Severo Pace and Graziana Ghio, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filipation. pi, ed., 1996), p139-143.

Modeling Reliability of Train Arrival Times, L. Ferreira and A. Higgins, TE Nov./Dec. 96, p414-420.

and A. Higgins, TE Nov/Dec. 96, p414-420.
Traffic Dynamics: Method for Estimating Freeway Travel
Times in Real Time from Flow Measurements, Do H.
Nam and Donald R. Drew, TE May/June 96, p185-191.
Travel Modeling with and without Feedback to Trip Distribution, Robert A. Johnston and Raju Ceerla, TE Jan/Feb. 96, p83-86.

Feb. 96, p83-86.

Trip Characteristics of Travelers without Vehicles, V. Thamizh Arasan, V. R. Rengaraju and K. V. Krishna Rao, TE Jan./Feb. 96, p76-81.

Trip Mode Recommendation Using Travel Time Prediction, Michael Cremer, Carsten Holtmann and Stefan Schrieber, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p330-334.

The Use of Artificial Neural Networks in Advanced Traveler Information and Traffic Management Systems, Gaetano Fusco and Stefano Gori, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p341-345. p341-345.

Trees

The Dying of the Trees: The Pandemic in America's For-ests by Charles E. Little, Brian R. Brenner, El July 96,

Sims Bayou: The Public Speaks - The Corps Listens, Don R. Allen, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3314-3319.

Trenches

Active Isolation of Machine Foundations by In-Filled Trench Barriers, T. M. Al-Hussaini and S. Ahmad, GT Apr. 96, p288-294.

Factors Affecting the Selection of a Crossing Method, David E. Hairston, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p214-221.

Immobilization of Metals and Solids Transported in Urban Pavement Runoff, John Sansalone, Steven Buchberger and Joseph Koran, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3115-3120.

Investigation on Active Isolation of Machine Foundations by Open Trenches, S. Ahmad, T. M. Al-Hussaini and K. L. Fishman, GT June 96, p454-461.

Estimating Trenching Productivity Using Neural Networks, Simaan AbouRizk, Brenda McCabe and Wissam Saadi, Siman Adoutzik, Brenda McCabe and Wissam Saadi, (Computing in Civil Engineering, 10rge Vanegas, ed. and Paul Chinowsky, ed., 1996), p220-226. Honolulu's Street Relief, Gregory L. Raines, P.E. and James K. Honke, P.E., CE Sept. 96, p70-72. Performance of Chain Trenchers in Mixed Ground, Ian W.

Farmer, CO June 96, p115-118.

68,000 New Jobs Projected for CEs over Next 10 Years, NE May 96, p5.

ASCE's Biannual Salary Index, CE Aug. 96, p64,66,67.

Big Business, Paul J. Zofnass, CE May 96, p52-55.

Communication Breakdown, Felix S. Wong and Jeremy Isenberg, CE Jan. 96, p52-54. Construction Megatrends, ME July/Aug. 96, p13.

Editorial, Thomas L. Theis, EE Nov. 96, p955. Environmental Engineering Forum, Steven I. Safferman, Vivek P. Utgikar and Sarwan S. Sandhu, EE Sept. 96,

Graphical Methods for Assessing Changes in Water Quali-ty, Karen Cozzetto and P. M. Berthouex, EE July 96, p667-668.

Identifying Trends from Streamflow Records--A Case Study, Joseph A. Van Mullem, (North American Water Study, Joseph A. Van Mullem, (North American Water, and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), pl675-1680. Rethinking Training in the 1990s, John V. Farr and James F. Sullivan, Jr., ME May/June 96, p29-33.

A Copied Design? Patrick J. Murray, CE Nov. 96, p32.

Service Life of Timber Trestles, William G. Byers, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p720-723.

Timber Trestle Stars at Costner-Owned Resort, CE Mar.

Triaxial tests

Triastal tests
Behavior of a Sand in Frozen and Unfrozen States, Christopher W. Swan, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Cenury, Robert F. Carlson, ed., 1996), p483-493.
Behavior of Crumb Rubber Modified Hot Mix Asphalt, Anil Misra, H. P. Niu and Yi-Herng Lee, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p144-153.

153.

Drained Creep Behavior of Marine Clays, Armand J. Silva and Horst G. Brandes, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p228-242. Elastic Properties of Soils, Pierre-Yves Hicher, GT Aug.

96, p641-648.

Elasto-Plasticity of Sand Deformation, Egramul Hoque and Fumio Tatsuoka, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p547-550.

Geotechnical Properties of Oil-Contaminated Kuwaiti Sand, Hasan A. Al-Sanad, Walid K. Eid and Nabil F. Is-mael, GT May 95, p407-412.

Liquefaction and Postliquefaction Behavior of Sand, Y. P. Vaid and J. Thomas, GT Feb. 95, p163-173.

Measurement of the Undrained Pore Pressure Response of

a Shale in Triaxial Tests, Tomoyuki Aoki, Chee P. Tan, Rory H. T. Cox and William E. Bamford, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1086-1089.

Micromechanical Simulation of Geotechnical Problems using Massively Parallel Supercomputers, David W. Washington and Jay N. Meegoda, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p717-721.

Non-Linear Models for Resilient Modulus Characterization

of Granular Soils, Anand J. Puppala, Louay N. Mohammad and Aaron Allen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p559-562.

Postlesting Correction Procedure for Membrane Compli-ance Effects on Pore Pressure, Atilla M. Ansal and Ayfer

Erken, GT Jan. 96, p27-38. Prediction of Time-Dependent Behaviour of Remolded Soft Marine Clay in Axi-Symmetric Undrained Conditions, Satoshi Murakami, Kazuya Yasuhara and Kaoru Bessho, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p181-194.

Rate-Dependent Undrained Shear Behavior of Saturated Clay, Thomas C. Sheahan, Charles C. Ladd and John T.

Germaine, GT Feb. 96, p99-108. Germaine, GT Feb. 96, p99-108.
Simulation of Pore Pressures in Triaxial Creep Tests, Horst G. Brandes and Armand J. Silva, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p96-108.
Stress-Strain Modeling of Sands Using Artificial Neural Networks, G. W. Ellis, C. Yao, R. Zhao and D. Penumadu, GT May 95, p429-435.

An Extended Relaxation Technique for Unsteady Flows in Networks, J. M. Lewis, D. L. Fread and Ming Jin, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p195-200.

Screening-Level Approach for Estimating Contaminant Ex-port from Tributaries, Mark Velleux, Joseph Gailani and Doug Endicott, EE June 96, p503-514.

Significance of Lateral Elevation Gradients in Tidally Affected Tributaries, Frederick E. Schuepfer, Guy A. Apicella and Vincent J. DeSantis, (Estuarine and Coast-Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p229-239.

Siting of Grade Control Structures, Chester C. Watson, John Smith and David S. Biedenharn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p286-291.

Trichloroethylene

Biotransformation of Trichloroethylene by a Phenol-Induced Mixed Culture, Mathew M. Shurtliff, Gene F. Parkin, Lenly J. Weathers and David T. Gibson, EE July 96, p581-589.

Enhanced Trichloroethene Desorption from Long-Term Contaminated Soil Using Triton X-100 and pH Increases, Dipak Sahoo, James A. Smith, Thomas E. Imbrigiotta and Heather M. McLellan, (North American Water and Environment Congress & Destructive Water, Chencher and Environment Congress & Destructive Water, Chencher and Congress & Congress & Destructive Water, Chencher and Congress & Congress & Congress & Congress & Congress & Congress & Congress & Congress & Congress & Congress & Congress & Congress & Congress & Congress & Congress & Congress & Congress & Congress & Congress & Con chayya Bathala, ed., 1996), p1215-1220.

Enhancement of In Situ Zero-Valent Metal Treatment of Contaminated Groundwater, D. R. Reinhart, C. Clausen, C. Geiger, N. Ruiz and G. Afiourny, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p323-332

Evaluation of a Bedrock DNAPL Pool Site, Daekyoo Hwang, Christopher Reitman and William Richardson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface En-vironment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p731-742.

Performance Evaluation of the Aeration Curtain at Hill Air Force Base, Utah, Paul R. Bitter and David A. Hoffman, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p776-787.

Successful Free Product Removal of NAPLs, Daniel S. Sauvé and Jeffrey L. Pintenich, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p233-

Swelling of DNAPL by Cosolvent Flooding to allow its Re-moval as an LNAPL. Eberhard Roeder, Scott Eppes Brame and Ronald William Falta, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p333-344.

Trickle irrigation

Irrigation Methods Used in California: Grower Survey, R. Snyder, M. A. Plas and J. I. Grieshop, IR July/Aug. 96, p259-262.

Optimum Design and Operation of Multiple Subunit Drip Irrigation Systems, G. C. Dandy and A. M. Hassanli, IR Sept./Oct. 96, p265-275.

Soil-Limiting Flow from Subsurface Emitters. I: Pressure Measurements, U. Shani, S. Xue, R. Gordin-Katz and A. W. Warrick, IR Sept./Oct. 96, p291-295.

Soil-Limiting Flow from Subsurface Emitters. II: Effect on Uniformity, A. W. Warrick and U. Shani, IR Sept/Oct. 96, p296-300.

Trickling filters

Editor's Note, Thomas L. Theis, EE July 96, p556.

Oxygen Utilization of Trickling Filter Biofilms, Steven W. Hinton and H. David Stensel, EE Sept./Oct. 94, p1284-

VOCs in Fixed Film Processes. I: Pilot Studies, Wayne J. Parker, Hugh D. Monteith and Henryk Melcer, EÉ July 96, p557-563.

VOCs in Fixed Film Processes. II: Model Studies, Wayne J. Parker, Hugh D. Monteith and Henryk Melcer, EE July 96, p564-570.

Tribulomethanes

Artificial Recharge of a Buried Glacial Aquifer in South Dakota, Vernon R. Schaefer and Delvin E. DeBoer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Modified Jar Test Studies for Removal of Disinfection By Products (DBPs) and Color Compounds from Ground-water, Mark Williams, Badri Badriyha, Shih-Chieh Tu, Jamal Awad and Massoud Pirbazari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1009-1014.

Predicting THM Formation with Artificial Neural Net-works, Paul H. Hutton, Nicky Sandhu and Francis I. Chung, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3551-3556.

Simulating DBP Precursor Transport in Sacramento Delta, Paul H. Hutton, Nirmala Mahadevan and Francis I. Chung, (North American Water and Environment Conress & Destructive Water, Chenchayya Bathala, ed.,

1996), p3557-3562.

Trip distribution models

Different Travel Patterns: Interzonal, Intrazonal, and Exter-Trips, Ahmed Hamdy Ghareib, TE Jan./Feb. 96, p67-75.

Modeling of Stratified Urban Trip Distribution, V. Thamizh Arasan, M. Wermuth and B. S. Srinivas, TE Sept/Oct. 96, p342-349.

Travel Modeling with and without Feedback to Trip Distri-bution, Robert A. Johnston and Raju Ceerla, TE Jan./ Feb. 96, p83-86.

Tropical cyclones

Flood Destruction and Abatement in China, Zhixin Liang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Hurricane Disaster Mitigation Through Real-time Wind Analysis, Mark D. Powell, Samuel H. Houston and Igna-cio Ares, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p289-290.

ner, ed. and Riley M. Chung, ed., 1997), p289-290.
A Quantitative Skill Assessment of Numerical Hydrodynamic Models of Coastal Currents, Timothy R. Keen and Scott M. Glenn, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p26-40.
Vulnerability Curves for Buildings in Tropical-Cyclone Regions, John Holmes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p78-81.
Wind Hazards in the United States, Pater I. Vickery, Low.

Wind Hazards in the United States, Peter J. Vickery, Law-rence A. Twisdale and Andrew C. Steckley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p139-140.

Tropical regions

Effect of Degree of Weathering on Dynamic Properties of Residual Soils, Emir José Macari and Laureano Hoyos, Jr., GT Dec. 96, p988-997.

Modeling Coliform Mortality in Waste Stabilization Ponds, Aloice W. Mayo, EE Feb. 95, p140-152.

Geo-data System for Landslide Hazard Assessment, Cassandra T. Rogers, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p70-

Soil Creep and Creep Testing of Highly Weathered Tropi-cal Soils, Peter G. Nicholson, Philip W. Russell and Clint F. Fujii, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p195-213.

Analysis of Rules and Regulations for Metal Coil Truck Transport, W. Bradford Cross, Richard Romick-Allen, Nader Panahshahi and Steven J. Hanna, TE Nov./Dec.

A Bridge Live Load Model Including Overloads, Gongkang Fu and Osman Hag-Elsafi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p34-37.

Constraint Logic Programming Contribution for Fleet Man-agement System in Freight Transport, Etienne Gaudin and Gérard Scémama, (Applications of Advanced Technologies in Transportation Engineering, Yorgos Stephanedes, ed. and Francesco Filippi, ed., 199 p470-474.

Controlled Semiactive Hydraulic Vibration Absorber for Bridges, William N. Patten, Ronald L. Sack and Qiwei He, ST Feb. 96, p187-192.

Fatigue-Load Models for Girder Bridges, Jeffrey A. Larnan and Andrzej S. Nowak, ST July 96, p726-733.

IFMS: Evaluation of Pilot Projects, Marco Monticelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p475-479.

Verification of Site-Specific Live Load on Bridges, Sangjin Kim, Andrzej S. Nowak and Roger Till, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p214-217.

Construction Forum, SC Nov. 96, p99-103.

Design Methodology for Strengthening of Continuous-Span Composite Bridges, H. A. El-Arabaty, F. W. Klaiber, F. S. Fanous and T. J. Wipf, BE Aug. 96, p104-111.

Distributed Control for Serial Assembly in Space, Frank McQuade and Colin R. McInnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1169-1175.

Finite Actuator VGT Manipulator Shape Control Paradigm, William C. Farrow, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p86-92.

If I Had Not Seen It, I Would Not Have Believed It! John E. Meeks, P.E., SC Nov. 96, p119-121.

Influence of Imperfections on Nonlinear Dynamic Re-sponse of Trusses, Aslam Kassimali and Khalil Rabiei, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p534-541.

Investigating and Repairing of Wood Bowstring Trusses, Richard J. Kristie and Arne P. Johnson, SC Feb. 96.

Investigation of Bridge Floor-Truss Behavior in Tied-Arch Span, Thomas E. Cousins, J. Michael Stallings and Brad-ley P. Christopher, CF May 96, p79-86.

Long-Span Timber Trusses—Evaluating a Repair Method, Thomas E. Forsberg, SC May 96, p89-92.

NPC Integrator and Its Unconditional Stability for Re-Begg and Xiaojian Liu, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pi237-1244

Probabilistic Modeling of Metal Plate Connections, Robert N. Emerson and Kenneth J. Fridley, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p330-333.

Proposed Specification and Commentary for Composite Joists and Composite Trusses, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Apr. 96, p350-358.

Steel Tops Off Chicago Orchestra Hall, CE Dec. 96, p17.

Stochastic Parallel-Brittle Networks for Modeling Materials, D. A. Gasparini, P. Bonacuse, L. Powers and A. Romeo, EM Feb. 96, p130-137.

Strengthening Requirements of Old, Timber Warren Trusses, H. C. Foo and G. Akhras, CF Aug. 96, p127-134.
Vibration Confinement in Trusses, Muhammad A. Hawwa and Reyolando M. Brasil, EM Mar. 96, p286-290.

Forces on a Vertical Wall due to Long Waves, Bores, and Dry-Bed Surges, Jerald D. Ramsden, WW May/June 96, p134-141.

Numerical Simulation of 1993 Southwest Hokkaido Earth quake Tsunami around Okushiri Island, Shinji Sato, WW Sept./Oct. 96, p209-215.

Observations of Seiche Forcing and Amplification in Three Small Harbors, Michele Okihiro and R. T. Guza, WW Sept./Oct. 96, p232-238.

Peru's Program for Disaster Mitigation 1992-1995, Julio Kuroiwa and Dusan Zupka, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p84-85.

Water in the International Decade for Natural Disaster Reduction, A. J. Askew, (North American Water and Enviment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl.

Tube joints
Boston's Third Harbor Tunnel (Available only in Focus on Geo/Environmental Special Issue), Axel J. Pollak and V. Peter Lalas, CE Mar. 96, p3A-6A.
A Parametric Study of Strength of Tubular Multiplanar KK-Joints, M. M. K. Lee and S. R. Wilmshurst, ST Aug.

96, p893-904.

Tubes

Analysis of Liquid-Core Cylindrical Acoustic Waveguides Embedded in Solid Media, Hung-Liang (Roger) Chen and Yidong He, EM Jan. 96, p1-9.

Behavior of Cold-Formed SHS Beam-Columns, Raef M. Sully and Gregory J. Hancock, ST Mar. 96, p326-336.

Bending Instability of Composite Tubes, Long-yuan Li, AS Apr. 96, p38-61.

Boston's Third Harbor Tunnel (Available only in Focus on Geo/Environmental Special Issue), Axel J. Pollak and V. Peter Lalas, CE Mar. 96, p3A-6A.

Concrete and Sand Confined with Composite Tubes, Srinivasa L. Iyer, A. Kortikere and A. Khubchnadani, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1308-1319.

Doubly Symmetric Tube Structures. I: Static Analysis.

Doubly Symmetric Tube Structures. I: Static Analysis, Hideo Takabatake, Hisao Mukai and Tadato Hirano, ST

July 93, p1981-2001.

Doubly Symmetric Tube Structures. II: Dynamic Analysis, Hideo Takabatake, Hisao Mukai and Tadato Hirano, ST July 93, p2002-2016.

Dynamic Response of Box Tubes to Combined Shear and Torsion, Y. L. Mo and R. Y. Yang, ST Jan. 96, p47-54. A Framing System for a Lunar/Martian Inflatable Structure,

Jenine E. Abarbanel, Ted A. Bateman, Marvin E. Criswell and Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1069-1075.

Geosynthetic Tubes for Confining Pressurized Slurry: Some Design Aspects, Dov Leshchinsky, Ora Leshchin-sky, Hoe I. Ling and Paul A. Gilbert, GT Aug. 96, p682-

Growt Repair of Dent-Damaged Steel Marine Tubulars, James Ricles and Troy Gillum, WW May/June 96,

Implementation of Variance Reduction Techniques Using Monte Carlo Stratified Sampling in the COMPROMIS Code Version 2, Emmanuel Ardillon, Patrice Pitner and Bernard Lapeyre, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p692-695.

Nailed Tubular Connections under Axial Loading, Jeffrey A. Packer, ST Aug. 96, p867-872.

Negative Shear Lag in Framed-Tube Buildings, Y. Singh and A. K. Nagpal, ST Nov. 94, p3105-3121. Reliability Based Design for Oil Country Tubular Goods, P. R. Brand, D. B. Lewis and M. A. Maes, (*Probabilistic* Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p534-537.

Representation of Concrete-Filled Steel Tube Cross-Section Strength, Jerome F. Hajjar and Brett C. Gourley, ST Nov. 96, p1327-1336.

Response of MMC Tubes with Internal Fiber Cracks, Sarah C. Baxter and Marek-Jerzy Pindera, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p412-415.

Simulation of Suspended Particles Transport in the En-trance Region of Tube Flow, Shi-kang Wang and N. H. C. Hwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p462-465.

Tubular Members. I: Stability Analysis and Preliminary Results, Spyros A. Karamanos and John L. Tassoulas, EM Jan. 96, p64-71.

Tubular Members. II: Local Buckling and Experimental Verification, Spyros A. Karamanos and John L. Tassou-las, EM Jan. 96, p72-78.

738

Improving the Speed of Double Lockages, Mary K. Spence, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2867-2872.

Tuned liquid dampers

Experimental Investigation of Tuned Liquid Dampers, Dorothy A. Reed, Harry Yeh, Jinkyu Yu and Sigurdar Gar-darsson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p215-216.

Tuned mass dampers

Rule-Based Control Algorithm for Active Tuned Mass Dampers, Masato Abé, EM Aug. 96, p705-713.

Simple ATMD Control Methodology for Tall Buildings Subject to Wind Loads, Seshasayee Ankireddi and Henry

T. Y. Yang, ST Jan. 96, p83-91.

A Strategy for Active Control of Tall Civil Structures Using Regenerative Electric Actuators, A. C. Nerves and R. Krishnan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p503-506.

Tuned Mass Dampers for Structures with Bilinear Hystere-sis, Masato Abé, EM Aug. 96, p797-800.

Tunnel construction

Boston Blockbuster, Virginia Fairweather, CE Dec. 96, p40-43

Boston's Home Run, Rita Robison, CE July 96, p36-39. Boston's Third Harbor Tunnel (Available only in Focus on

Boston 8 Intel ratio frume (Avanable Only III Pocus and Geo/Environmental Special Issue), Axel J. Pollak and V. Peter Lalas, CE Mar. 96, p3A-6A. Central ArteryTunnel (CAT) Project Environmental Permitting, Jeffrey M. Paul, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2236-2241.

Geologic Uncertainties in Tunneling, Herbert H. Einstein, Vijaya B. Halabe, Jean-Paul Dudt and François Descoeudres, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p239-253

Groundwater Monitoring For a Tunneling Project, James C. Burton and John e. Shamma, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p691-696.

On Target: The Arrowhead East and West Tunnels, Jim

Gallanes, Tobin Tellers and Victor Romero, CE Dec. 96, p50-53.

Portland's Light Rail Goes Underground, Philip M. Rice and Joseph P. Gildner, CE Dec. 96, p32-35.

Turnback Project Moves Ahead, David A. Sutter, James P. Connolly and Ching Wu, CE Jan. 96, p36-39.

Behavior of Pressure Tunnels and Guidelines for Liner Design, Gabriel Fernández, GT Oct. 94, p1768-1791.

Fault Crossing Design and Seismic Considerations for the South Bay Ocean Outfall, Jon Y. Kaneshiro, Gregory E. Korbin and James D. Hart, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p477-486.

A Fracture Mechanics Based Design Method for SFRC Tunnel Linings, Pruettha Nanakorn and Hideyuki Horii, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p819-828.

Tunneling

Comparison of Construction Alternatives Using Matched Simulation Experiments, Photios G. Ioannou and Julio C. Martinez, CO Sept. 96, p231-241. Geologic Uncertainties in Tunneling, Herbert H. Einstein,

Vijaya B. Halabe, Jean-Paul Dudt and François Descoeudres, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p239-253.

Technological Advances in the Design and Construction of Water Mains for Crossing Under Rivers and Other Barriers, Donald E. Eckmann and William F. Nabak, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p403-408

Tunnelers Probe Policy Ponder Baseline Reports, CE June 96, p16-18.

Tunneling Progress on the Yucca Mountain Project, William H. Hansmire and Richard J. Munzer, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p385-387.

Tunneling Under Pressure, Stephen J. Navin, Jon Y. Kaneshiro, Larry J. Stout and Gregory E. Korbin, CE Feb. 96, p64-67.

Author Responds to Accusations of Carelessness, Mark L. Peckham and David A. Sutter, CE July 96, p28-29.

Behavior of Pressure Tunnels and Guidelines for Liner Design, Gabriel Fernández, GT Oct. 94, p1768-1791.

Big Tunnel Talk, CE Jan. 96, p8.

Bugs Clean Tunnels, CE Aug. 96, p22.

Bugs Chail Tulliers, CE Aug. 30, p.22.
Canal Road Water Treatment Plant Intake Tunnels, Joel Moskowitz, Robert T. Wisniewski, II, Vincent Tirolo and Peter Evensen, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p322-331.

Central Artery Utility Crossings, Brian Brenner, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996),

p130-138.

Composite Holds Back Seawater at 13 Fathoms, CE June 96, p87.

Concrete Pavements in Tunnels, J. S. Berg and P. M. Noss, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p911-922.

Danish Suspension Bridge is World's Largest, CE June 96, p18,21.

Design and Construction of the Santa Ana River Wash Crossing of the Inland Feeder, Burt Yu, Jay Arabshahi, Birger Schmidt and Roy Cook, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1789-1795.

Design of the Santa Ana River Wash Crossing of the Inland Feeder, Birger Schmidt and Roy Cook, (Pipeline Cross-ings 1996, Lawrence F. Catalano, ed., 1996), p373-378.

Estimation of Leakage Quantity for Long Auxiliary Venti-lation Systems, Felipe Calizaya and Pierre Mousset-Jones, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p429-431.

Gene McMaster, Seattle Consultant, Was ASCE National

Officer, NE Apr. 96, p7

Generalized Plane Strain Finite Element Analysis: Geome-chanical Applications, V. N. Kaliakin, L. Cui and A. H-D Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p289-292.

1996), p.299-292.
Geotechnical Instrumentation for Boston's Central Artery/Tunnel Project: An Overview, John Dunnicliff, Charles Daugherty and Thom Neff. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p727-733.
Ground Response of Circular Tunnel in Poorly Consolidated Rock, Yarlong Wang, GT Sept. 96, p703-708.
Influence of Avial Street and Dilutancy on Rock Tunnel

Influence of Axial Stress and Dilatancy on Rock Tunnel Stability, Xiao-Dong Pan and Edwin T. Brown, GT Feb. 96, p139-146.

Intrusion Detection by Linear Active Cameras, J.-P. DeParis, L. Duvieubourg and J.-G. Postaire. (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filipation.) pi, ed., 1996), p114-118.

pl, ed., 1996), pl 14-118.

Just One More Boring, and We'll Know for Sure! Sam S.
C. Liao, David L. Druss, Thom L. Neff and Brian R.
Brenner, (Uncertainty in the Geologic Environment:
from Theory to Practice, Charles D. Shackelford, ed.,
Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996),

p119-133.

Morphological Impact Assessment of Artificial Islands for the Øresund Link Between Denmark and Sweden, Karsten Mangor, Andrew M. Driscoll, Ida Brøker and Ann Skou, (Coastal Dynamics' 95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p939-950.

Particle Dynamics in the Sound Between Denmark and Sweden, Jens R. Valeur, Morten Pejrup and Anders Jensen, (Coastal Dynamics' 95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p951-962.

Perry Michener, Engineer of Chesapeake Rridges, Dies of

Percy Michener, Engineer of Chesapeake Bridges, Dies at 92, NE Apr. 96, p7.

San Diego's Historic Dulzura Conduit: New Solutions, Hans H. Torabi and Harold B. Tennant, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p340-347.

Seepage Stoppers, V. J. Hebert, P.E., Juan Lelito, P.E. and A. Naudts, CE Oct. 96, p68-70.

Tunnel Boring Records Set, CE May 96, p15-16.

Tunnel Tops Record Field of 22 to Claim This Year's Outstanding Civil Engineering Achievement Award, NE May 96, p16.

Under-Harbor Sewage Tunnel Holes Through, CE Apr. 96, p10.

Turbidity

30-Inch Gas Pipeline Crossing of the San Juan River: Open Cut Excavation in Quality Water Area, James D. Evanoff and Neil P. Stockholm, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p186-193.

Dynamics of Turbidity Current with Reversing Buoyancy, B. E. Hürzeler, J. Imberger and G. N. Ivey, HY May 96.

Expert System for Water Treatment Plant Operation, Xin X. Zhu and Angus R. Simpson, EE Sept. 96, p822-829. Numerical Modeling of Turbidity Currents, Scott F. Brad-

ford and Nikolaos D. Katopodes, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p404-415.

Particle Dynamics in the Sound Between Denmark and Sweden, Jens R. Valeur, Morten Pejrup and Anders Jensen, (Coastal Dynamics '95, William R. Dally, ed. and

sen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p951-962.

Remote Monitoring and Technical Support for Drinking Water Systems in Remote Communities, Daniel W. Smith, Stephen J. Stanley and Dennis S. Prince, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p545-557.

The Role of Macroflocs in Estuarine Sediment Dynamics and its Numerical Modeling, A. Malcherek and W. Zielke, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p695-706.

Turbines

Turbines
Application of a Reliability-Based Fatigue Life Model to a
Gas Turbine Engine Structure, Robert G. Tryon, Thomas
A. Cruse and Sankaran Mahadevan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed.
and Mircea D. Grigoriu, ed., 1996), p636-639.

Deformation, Alignment, and Vibration in Large Turbine-Generator Set, W. F. Teskey, J. W. Lovse and N. N. Al-Hanbali, SU May 96, p65-79.

Hanbali, SU May 96, p65-79.
 Effect of Load Models and Limited Data on Load and Resistance Factors for Fatigue Design, Clifford H. Lange and Steven R. Winterstein, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p58-61.
 Local Damage Assessment of Metal Barriers under Turbine Missile Impacts, Amde M. Amde, Amir Mirmiran and Thomas A. Walter, ST Jan. 96, p99-108.
 On Silt Abrasion Erosion of Three Gorges Hydraulic Turbine in the Future, Shehua Huang, Wei Li and Liangjun Cheng, (North American Water and Environment Congress & Destructive Water, Chenchavya Bathala, ed.

gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3856-3862.

Parametric Study on Performance of Cross-Flow Turbine, C. B. Joshi, V. Seshadri and S. N. Singh, EY Apr. 95,

p28-45

p28-45.
Plans for Testing and Evaluating the New Autoventing Turbines at TVA's Norris Hydro Project, Paul Hopping, Patrick March, Thomas Brice and Joseph Cybularz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1299-1304.
Smooth Modelling of Oblique Contact with Friction of Turbing Blacker, Babanican Analysis (Light Pandage Evoltace)

tion, Erick Tournu, Sergio Bellizzi and Béatrice Costa, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p760-763. bine Blades: Behaviour Analysis Under Random Excita-

Turbulence

3D Model of Estuarine Circulation and Water Quality In-duced by Surface Discharges, Wenrui Huang and Mal-colm Spaulding, HY Apr. 95, p300-311.

740

Aerobic Fluidized Bed Reactor with Internal Media Cleaning, Steven I. Sufferman and Paul L. Bishop, EE Apr. 96, p284-291.

The Aerodynamic Forces on Low-Rise Structures: The Effects of Incident Turbulence, H. W. Tieleman, M. R. Hajj and T. A. Reinhold, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p975-978.

Application of Vertical Turbulence Closure Schemes in the Chesapeake Bay Circulation Model — A Comparative Study, Harry V. Wang and Raymond S. Chapman, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p283-297.

Breaking Waves in Surfzones, Ke Yu and Ib A. Svendsen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p329-340.

Buoyant Plumes from Multiport Diffuser Discharge in Deep Coflowing Water, María M. Méndez-Díaz and Gerhard H. Jirka, HY Aug. 96, p428-435.

Characterization of Turbulent Scales in Atmospheric Wind by Orthonormal Wavelets, M. R. Hajj, H. W. Tieleman and M. Bikdash, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p971-974.

Comparison of Flow Around Circular Cylinder Using FE and FD Procedures, R. Panneer Selvam, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1021-1028.

Computation of Shallow Recirculating Flow Dominated by Friction, S. Babarutsi, M. Nassiri and V. H. Chu, HY July 96, p367-372.

Direct Measurement of Turbulence Structures in a Standard Jar Test Tank Using PIV System, Chen-Yu Cheng, Joseph F. Atkinson and Marcus I. Bursik, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3746-3751.

Distribution of Reynolds Stress above a Packed Bed in Open Channel Flow, Mahesh Balakrishnan, Clinton Dancey, Thanais Papanicolaou and Panos Diplas, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p665-668.

Effect of Finite Source on Vertical Round Dense Jets, Hua Zhang and Raouf E. Baddour, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p919-922.

Effects of Bed Discordance on Flow Dynamics at Open Channel Confluences, Pascale Biron, James L. Best and André G. Roy, HY Dec. 96, p676-682.

Experimental Investigation of the Temporal Intermittency in the Transition to Turbulence of a Plane Mixing Layer, A. L. W. Bokde, D. A. Jordan, Jr. and R. W. Miksad, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1070-1073.

Flow Over Vortex Ripples: Models and Experiments, Lewis A. W., E. Hitching, G. Perrier, E. Asp Hansen, H. Earnshaw, K. Eidsvik, C. Greated, M. Sumer and A. Temperville, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p686-697.

General Integral Formulation of Turbulent Buoyant Jets in Cross-Flow, Vincent H. Chu and Joseph H. W. Lee, HY Jan. 96, p27-34.

Hydraulic Jump in Sloping Channels, Mustafa Gunal and Rangaswami Narayanan, HY Aug. 96, p436-442.

Hydrodynamic Behavior of Partly Vegetated Open Channels, Dan Naot, Iehisa Nezu and Hiroji Nakagawa, HY Nov. 96, p625-633.

The Influence of Turbulence Closure Strategy on Numerical Modeling of Shallow Water Tides, Roger R. Grenier, Jr. and Richard A. Luettich, Jr., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p143-155.

Lift Off and Entrainment of Sediments, J. M. Redondo, M. A. Sánchez and R. Castilla, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), 2202 (21).

Mixing of a Bent-over Jet in Crossflow, Paul C. K. Chu and Joseph H. W. Lee, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p910-913.

A Model for Bed Surface Shear Stress Fluctuations, César Mendoza, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p669-672. Modeling Natural Hydrodynamic Systems with a Differential-Turbulence Column, Brett Brunk, Monroe Weber-Shirk, Anna Jensen, Gerhard Jirka and Leonard W. Lion, HY July 96, p373-380.

Modeling Two-Dimensional Turbulent Offset Jets, Ruochuan Gu, HY Nov. 96, p617-624.

The Modelling of Plunging Breakers by the Introduction of a K-I Turbulence Closure Model, Michele Drago and Luigi Iovenitti, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p317-328.

On the Relationship between Net-Momentum Fluxes and Wall-Normal Velocity Fluctuations, Fabián López and Marcelo García, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p661-664.

Permeable Pile Groins, Arved J. Raudkivi, WW Nov./Dec. 96, p267-272.

Physically Based Hydraulic Jump Model for Depth-Averaged Computations, Abdul A. Khan and Peter M. Steffler, HY Oct. 96, p540-548.

A Quasi-3D Model of Longshore Currents, A. F. Garcez Faria, E. Thornton and T. Stanton, (*Coastal Dynamics* '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p389-400.

The Role of Macroflocs in Estuarine Sediment Dynamics and its Numerical Modeling, A. Malcherek and W. Zielke, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p695-706.

Sediment Transport Fluxes as Determined from Wave Breaker Induced Suspended Sediment and Flow Fields, G. Smith, G. Mocke and L. Engelbrecht, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p783-794.

namics 95, william R. Dauly, ed. and Ryszard B. Zeidler, ed., 1996), p783-794.

Sediment Transport Mechanism Over Rippled Sand Beds, S. G. Sajjadi, J. N. Aldridge and D. J. Nicholas, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p669-680.

Simulation of Ergodic Multivariate Stochastic Processes, George Deodatis, EM Aug. 96, p778-787.

Stably-Stratified Surface Thermal Jet in a Current: Cold Climate Condition, A. M. Zaghloul, R. Martinuzzi and R. E. Baddour, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1062-1065.

Study of Surf-Zone Macroturbulence and Mixing Using Delta '93 Field Data, A. Rodriguez, A. Sánchez-Arcilla, J. Gomez and E. Bahia, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p305-316.

Turbulence in Open-Channel Flows by Iehisa Nezu and Hiroji Nakagawa, Ching-Jen Chen, EM June 96, p590. Turbulence Measurements in Saline Gravity Current Fronts, Jeffrey D. Parsons and Marcelo H. García, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Turbulence Model for Depth-Averaged Flows in Navigation Installations, Hector R. Bravo and Forrest M. Holly, Jr., HY Dec. 96, p718-727.

Turbulent Line Momentum Puffs, Joseph H. W. Lee, Wolfgang Rodi and C. F. Wong, EM Jan. 96, p19-29.

Turbulent Transport Effect on Hydrocyclone Performance, Michio Nonaka and Hisami Tashiro, EE Apr. 96, p306-313.

Unstable Patterns in Partly Vegetated Channels, Dan Naot, Iehisa Nezu and Hiroji Nakagawa, HY Nov. 96, p671-673

Velocity Measurements of Post-Breaking Turbulence Generated by Plunging Breakers, Paul A. Quinn, Timothy C. D. Barnes, Simon T. Lloyd, Clive A. Greated and D. Howell Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p293-304.

Turbulent boundary layers

On a Conceptual Model for Turbulent Skin Friction, Chao Si and Manhar Dhanak, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p293-296.

Turbulant diffusio

Lift Off and Entrainment of Sediments, J. M. Redondo, M. A. Sánchez and R. Castilla, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), n709-719.

Turbulent Transport Effect on Hydrocyclone Performance, Michio Nonaka and Hisami Tashiro, EE Apr. 96, p306-

An Analysis of Characteristics of Basset Force on Particles Accelerating in Arbitrary Flow Field, Shehua Huang, Liangjun Cheng and Wei Li, (North American Water and Environment Congress & Destructive Water, Chen-

Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p448-453.

Analysis Tools of Transitioning and Turbulent Flows, M. R. Hajj. (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p434-437.

Bifurcation of Line Thermals, M. Dehghani and V. H. Chu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996).

(Engineering mechanics).

p446-449.

Determining Rehabilitated Sewer Flow Capacity, Joseph Barsoom. (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p97-104.

Discussion of Some Grid-Independence Issues in the Context of κ—€ and κ—ω Models of Turbulence, Nabil Elkouh, Simone Sebben and B. Rabi Baliga, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p297-300.

Dominant Eddy Simulation in Turbulent Flow, J.-B. Zhang and V. H. Chu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p438-441. Interactive RANS/Laplace Method for Nonlinear Free Sur-

face Flows, Hamn-Ching Chen and Sing-Kwan Lee, EM Feb. 96, p153-162.

A Method to Study Suspended Sediment Induced Flow Characteristics Changes, D. Zhou and C. Mendoza, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1447-1452.

Numerical Model of Flow Ice-Covered Channel, J. Y. Yoon, V. C. Patel and R. Ettema, HY Jan. 96, p19-26.

Numerical Model of Turbulent Flow over Sand Dune, J. Y. Yoon and V. C. Patel, HY Jan. 96, p10-18.

Optimal Fitting of a Model to Observations of Sediment Concentration in the Irish Sea, J. N. Aldridge, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p416-428.

Simulation of Dibte Ges-Solid Flows in Horizontal Chanseling and Patel Pat

T. Cheng, 1990), p410-420.
Simulation of Dilute Gas-Solid Flows in Horizontal Channels, Cliff K. K. Lun and Hong S. Liu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p390-393.

cmancs, 1. N. Lin and T. C. Su, 1996), p390-393.

Submerged Flow Regimes of Rectangular Sharp-Crested Weirs, S. Wu and N. Rajaratnam, HY July 96, p412-414.

Thermohaline Buoyancy Effects on Turbulent Flows, R. E. Baddour, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p454-457.

Turbulent Line Momentum Puffs, Joseph H. W. Lee, Wolfgang Rodi and C. F. Wong, EM Jan. 96, p19-29.

Velocity Distribution in Compound Channel Flows by Numerical Modeling, Giuseppe Pezzinga, HY Oct. 94, p1176-1198.

Part grasses

Neural Networks Predict Pesticide Leaching, Steven K.
Starrett, Shelli K. Starrett, Yacoub M. Najjar and Judy
C. Hill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1693-1698.

Dynamic Response of Hagia Sophia, A. S. Cakmak, C. L. Mullen and M. N. Natsis, (Worldwide Advances in Strucmannen anu M. N. Natsis, (Worldwide Advances in Struc-tural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p.200-210. Optimal Management of a Coastal Aquifer in Southern Tur-key, Khosrow Hallaji and Hasan Yazicigil, WR July/ Aug, 96, p.233-244.

Organizing and Managing a Finance-Design-Build Project in Turkey: Fourth Roebling Lecture, 1995, Donald K. Stager, CO Sept. 96, p199-204.

Grager, C.O. Sept. 90, p199-204.
Seismic Microzonation and Development of an Earthquake Damage Scenario for Istanbul, Turkey, Mustafa Erdik and Jennifer N. Swift-Avci, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p341-342.

Turnkey projects
Innovative Design/Build Approach: Ambassador Bridge
Project, Jay B. Shah, ME July/Aug. 96, p58-61.

Turnkey Procurement Speeds Highway Work, ME May/ June 96, p10.

Turtles

Saved by the Net, CE Sept. 96, p22.

Two phase flow

An Analysis of Characteristics of Basset Force on Particles An Analysis of Characteristics of Basset Force on Particles
Accelerating in Arbitrary Flow Field, Shehua Huang,
Liangjun Cheng and Wei Li, (North American Water and
Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p448-453.

Deposition of Particles from a Vertical Jet, M. J. Neves, H.

J. S. Fernando and A. A. Neves, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p442-445.

Error Estimate in Einstein's Suspended Sediment Load
Method, Nadim M. Aziz, HY May 96, p282-285.

On Silt Abesign Engiser of Three Geners Hydraulic Tur-

On Silt Abrasion Erosion of Three Gorges Hydraulic Tur-bine in the Future, Shehua Huang, Wei Li and Liangjun Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3856-3862.

Potential Flow Instability Theory and Bed Forms, Stephen E. Coleman and John D. Fenton, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p442-447.

Simulation of Dilute Gas-Solid Flows in Horizontal Chan nels, Cliff K. K. Lun and Hong S. Liu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p390-393.

Analysis of Disjoint Two-Dimensional Particle Assemblies, Tuong X. Tran and Richard B. Nelson, EM Dec. 96, p1139-1148.

Two-Dimensional Parallel Computing Solution of Coupled Heat and Moisture Flow in Unsaturated Soil, Hywel Rhys Thomas and Chi Leung Welkin Li, CP July 96, p236-247.

Two-dimensional analysis Analysis of Eigenvalue Variability for 2D Stochastic Strucnalysis of Eigenvalue Variability for AD Stochasue Sauc-tural Systems Using Variability Response Functions, George Deodatis and Lori Graham, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed.

Approximate Riemann Solvers in FVM for 2D Hydraulic Shock Wave Modeling, D. H. Zhao, H. W. Shen, J. S. Lai and G. Q. Tabios, III, HY Dec. 96, p692-702.

High Performance Computing: Application to Highway Bridges, T. E. Fenske, Z. Yu, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p444-452.

Practical Advanced Analysis for Steel Frame Design, Seung-Eock Kim and Wai-Fah Chen, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p19-30.

Two-dimensional flow

2-D Experimental Investigation of Surfactant Mobilization of Light Nonaqueous Phase Liquid, Lizette R. Chevalier, Roger B. Wallace, David C. Wiggert and Mohsen D. Shabana, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p357-368.

Application of One- and Two-Dimensional Flow Models for an Evaluation of Riverine Wetland Hydrologic Functions, C. Charles Tai, Chou Fang and Apurba K. Borah, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p46-51.

put-5-1.
Dissolution of NAPLs Entrapped in Heterogeneous Porous Media, Indumathi Manivannan, Susan E. Powers and Garrey W. Curry, Jr., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p563-574.

Effect of Divergent Flow on Mass Conservation in Eulerian-Lagrangian Transport Schemes, Ling Tang and E. Eric Adams, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p106-115.

Loss of Contaminants from Soil During Runoff Events, A.

Parr, S. Zou and B. McEnroe, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p70-81.

Numerical Modeling of Flows in Ultraviolet Disinfection Channels, D. A. Lyn, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3005-3009.

Numerical Simulation of Hydraulic Jump, Anand Raman and M. Hanif Chaudhry, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4052-4057.

Seepage from Surface Canals by Boundary Element Meth-od, Alexander C. Demetracopoulos and Christos Had-jitheodorou, IR Jan/Feb. 96, p40-48.

Two-dimensional models

Analysis of Bank Stabilization in Steep Complex Streams Using A Two-Dimensional Model, Raymond Walton, Wilfredo A. Moneda and Jeffrey B. Bradley, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p352-357.

Analysis of Masonry Structures with Elastic/Viscoplastic Models, Teymour Manzouri, P. Benson Shing and Bernard Amadei, (Worldwide Advances in Structural Con-crete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p61-71.

Assessment of Risks of Flooding by Use of a Two-Dimensional Model, A. Paquier and P. Farissier, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3915-3916.

Biodegradation Modeling of a Closed Landfill Site, Sai K.
R. Edavally, Lawrence H. Woodbury and G. Padmanabhan, (North American Water and Environment
Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2510-2515. A Combined Physical and Mathematical Modeling Scheme

for Kapichira Hydropower Project, Malawi, K. Sivakumaran and E. Cole, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3806-3811.

Design of a Floodplain Road Crossing Using Two Dimen-sional Modeling, Nathan R. South, Andrzej J. Kosicki and Michael A. Ports, (North American Water and Envinent Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4300-4305.

Finite-Volume Two-Dimensional Unsteady-Flow Model for River Basins, D. H. Zhao, H. W. Shen, G. Q. Tabios, III, J. S. Lai and W. Y. Tan, HY July 94, p863-883.

A Graphical Environment for Multi-Dimensional Surface Water Modeling, Alan K. Zundel and Norman L. Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p207-212.

Implicit Scheme for Estuarine Water-Quality Models Byung-Gi Hwang and Wu-Seng Lung, EE Jan. 96, p63-

Interdependence of Beach Fill Volumes and Repetition In-tervals, Hans-H. Dette, Alfred Fuehrboeter and Arved J. Raudkivi, WW Nov./Dec. 94, p580-593.

Raudkivi, www.nov.lice. 3-, poor-3-3.
Mobile Bay Scour Analysis for Mobile and Baldwin Counties, Alabama, Bryan Hancock, Charles D. Powell and Conor Shea, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p719-728.

Model Study of a Roller Compacted Concrete Stepped Spillway, Charles E. Rice and Kem C. Kadavy, HY June 96, p292-297.

Modeling Microtopography in Basin Irrigation, E. Playán, J. M. Faci and A. Serreta, IR Nov./Dec. 96, p339-347.

Modeling the Fate of Copper Discharged to San Francisco Bay, Carl W. Chen, Daniel Leva and Adam Olivieri, EE Oct. 96, p924-934.

Modeling Two-Dimensional Turbulent Offset Jets, Ruo-chuan Gu, HY Nov. 96, p617-624.

Modelling of El Berrocal Field Tracer Tests, J. P. Humm, J. Guimera, P. Grindrod and S. P. Crompton, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p114-116.

Numerical Model of Flow Ice-Covered Channel, J. Y. Yoon, V. C. Patel and R. Ettema, HY Jan. 96, p19-26.

Numerical Model of Turbulent Flow over Sand Dune, J. Y. Yoon and V. C. Patel, HY Jan. 96, p10-18.

Peculiarities of the Mode Shapes of Two-Dimensional Spinning Bodies, Marc P. Mignolet and Chris D. Eick, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996). p1001-1004

ismic Response of Flexibly Supported Coupled Shear Walls, O. Chaallal and N. Ghlamallah, ST Oct. 96, p1187-1197.

mulation of Regional Ground-Water Flow on a Trans-boundary Flowline; Trans-Pecos, Texas and Chihuahua, Mexico, Barry J. Hibbs, Bruce K. Darling, John M. Sharp, Jr. and John B. Ashworth, (North American Water

Sharp, Jr. and John B. Ashworth, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1323-1330.
Testing of Abstractions for Total System Performance As-sessment, Vinod Vallikat, Srikanta Mishra, Yanyong Xi-ang and David Sevougian, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p293-294.
Three-Dimensional Numerical Model for Fish Purpose

Three-Dimensional Numerical Model for Fish Bypass Studies, E. A. Meselhe, A. J. Odgaard and V. C. Patal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p159-164.

p159-164.
Two Dimensional Modeling of the Mobile River Delta and the Mobile Bay System, Conor C. Shea, Charles D. Powell and Michael A. Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3662-3667.
Two- and Three-Dimensional Hydrodynamic Modeling of the Charles of Colifornia Chericapher B. Cook and German Conference of Colifornia Chericapher B. Cook and German Chericapher B.

the Salton Sea, California, Christopher B. Cook and Ger-ald T. Orlob, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3752-3757.

ed., 1996), p3752-3757.
Two-Dimensional Boundary-Fitted Circulation Model in Spherical Coordinates, Muslim Muin and Malcolm Spaulding, HY Sept. 96, p512-521.
Two-Dimensional Modeling of River Dynamics for the Expansion of Clover Island, Kennewick, Washington, Thomas S. Wang, David P. Simpson and Raymond Watton, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3961-3266. p2861-2866.

Two-dimensional Sheetflow Modeling for Wetland Restoration, Robert A. Laura and Ananta K. Nath, (North

ration, Robert A. Laura and Ananta R. Nath., (vortice Mater and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p263-267. Two-Dimensional Simulation of Basin Irrigation. I: Theory, E. Playán, W. R. Walker and G. P. Merkley, IR Sept./ Oct. 94, p837-856.

Unsaturated Zone Flow Modeling for GWTT-95, Clifford K. Ho, Susan J. Altman, Sean A. McKenna and Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p184-186.
The Use of an Equivalent Porosity Method to Model Flow

in Marshes, Ian P. King and Lisa C. Roig, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3734-3739.

Typhoons
Collapse of Transmission Line Towers in Typhoon Gay, Panitan Lukkunaprasit, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p351-352.

A Predicting Method of Typhoon Wind Damages, Yasushi Mitsuta, Takeshi Fujii and Ichiro Nagashima, (Probabi-listic Mechanics & Structural Reliability, Dan M. Fran-

gopol, ed. and Mircea D. Grigoriu, ed., 1996), 970-973. Wind-Induced Failure of Buildings and Structures Caused by Typhoons in Japan, Yukio Tamura, (*Probabilistic* Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p62-65.

U.S. Air Force

Acoustic Efficiency Analysis Using Infrasound from NEOs, Douglas O. ReVelle and Rodney W. Whitaker, (Engi-neering, Construction, and Operations in Space, Stewart neering, Construction, and Operate W. Johnson, ed., 1996), p102-108.

W. Johnson, ed., 1990, pi22-10s.
Air Force Planetary Defense System: Initial Field Test Results, Grant Stokes, Robert Weber, Frank Shelly, David Beatty, Herbert Viggh, Eugene Rork and Byron Hays, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p46-53.

Air Force Planetary Defense Technology, J. Darrah, S. Worden and G. H. Stokes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p32-45.

Space Applications of Surplus Ballistic Missiles, Matthew A. Bille, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p406-412.

Space Debris Hazard to Defense Systems, Gregory H. Canavan, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p20-25.

U.S. Army Corps of Engineers

1997 Budget, Casey Dinges, CE May 96, p98. Anatomy of a Wetland, Jim Renner, CE Jan. 96, p58-60.

Ballard Picked as Army Engineers Chief, NE Sept. 96, p15. Computing Flood Damage Reduction Accomplishment, Jo Ann Duman and Donna Lydon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2318-2323.

A Constructive Act, CE Dec. 96, p13.

Corps Begins Work on California Dam, CE Feb. 96, p17,19.

Corps Comes Back from Difficult Year, Michael Charles, CE Feb. 96, p98. Corps Estimates \$4 Billion in Flood Protection Savings, CE

Apr. 96, p8. Corps Moves Closer to Bid Shopping, Allen W. Hatheway, CE June 96, p35.

Corps Opens Dam Center, CE June 96, p8.

Corps Public Works In Jeopardy, Hugh Converse, CE June 96, p35.

Shoreline Work Assessed, CE Oct. 96, p11. Corps

Design Information Evolution in a Collaborative Engineering Software Environment, Beth A. Brucker and Annette L. Stumpf, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p732-738. Ed Groff: A "Muddy Boots" President, Virginia Fairweath-er, CE Dec. 96, p66-68.

Flood Control Studies for Arizona Communities, Philip O. Lowe and Sam Arrowood, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1870-1874.

The HEC NexGen Software Development Project, Darryl W. Davis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3770-3775.

Largest Roller Gate Dam Gets New Chain, CE July 96, p8. Local Sponsorship and Floodplain Management, Herb Nakasone, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2350-2351.

A Modified Dam for Fish Up the River, CE Dec. 96, p16-

Montgomery C. Meigs: The Eclectic Engineer, Dean A. herrin, (Civil Engineering History: Engineers Make His-tory, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p66-

New Faces in Familiar Places, NE Nov. 96, p15.

Non-Federal Flood Control Works Inspection Program, Jim Crum, Ruh-Ming Li and Henry M. Fehlman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1796-1800.

On the Web, CE Dec. 96, p20.

Overview of the US Army Corps of Engineers Flood Control Channels Research Program, Ronald R. Copeland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Pipeline Crossings and the Corps Regulatory Process in New England, Karen Kirk Adams and David H. Killoy, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p409-417.

Probabilistic Assessment of Miter Gates, Nathan M. Kathir, (Probabilistic Mechanics & Structural Reliability, Dan Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p866-869

Quality People at Heart of the Corps, Donald M. Liddell, CE Apr. 96, p36.

Reliability Analysis in the Rehabilitation of Corps Structures with Time-Dependent Needs, Mary Ann Leggett, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p134-141.

Room for Engineers in Corps? Angelo F. Coniglio, CE Apr. 96, p32,36.

Room for Nonengineers in the Corps of Engineers, John

Zirschky, CE Jan. 96, p6.
Scientific Visualization Techniques for Wave Transformation Models, David A. Leenknecht and Wayne W. Tanner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p704-710. Sound Way to Save Fish, John Nestler and Gene Ploskey.

CE Sept. 96, p58-61.

Spheres of Influence: Federalism, Politics, and Engineering Design, Todd Shallat, (Civil Engineering History: Engi-neers Make History, Jerry R. Rogers, ed., Donald Ken-non, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p136-143.

Towards Lessons-Learned Systems in the US Army, Corps of Engineers, Donald K. Hicks, Jeffrey G. Kirby and E. William East, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p112-117.

Under Way: Decontamination Pilots for Dredged Material, CE Nov. 96, p10,12.

Why the Corps Needs Engineers, Louis L. Guy, Jr., CE May 96, p28. William Claire, 84, Editor of ASCE's Urban Planning

Guide, NE July 96, p15.

'Meigs Among the Ruins': Montgomery C. Meigs and the Construction of the United States Capitol Extension", Dean A. Herrin, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p96-97.

U.S. Geological Survey

1997 Budget, Casey Dinges, CE May 96, p98.
Detailed Measurements of Scour at Bridges, David S.
Mueller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2541-2549.

Potential-Scour Assessments at 130 Bridges in Iowa, Ed-Potential-Scoti Assessments at 130 Bridges in Iowa, 250 ward E. Fischer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1149-1155.
Supermaps Help Fight Fires, CE Dec. 96, p20.

Evaluation of Geological Formations of West Ukraine from the Standpoint of Raw Disposal, Olga V. Shestopalova, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p79-80.

Geological and Geophysical Studies of Sites in the Ukrainian Shield Rock Series Suitable for Construction of Underground Laboratories, L. S. Galetsky, D. P. Khrush-chov and A. P. Volik, (*High Level Radioactive Waste Management*, Technical Program Committee, 1996), p81-82.

Modeling of Possible Outflow of Radionuclides from Deep Burials into Biosphere, V. M. Shestopalov, B. D. Stet-senko and A. S. Boguslawski, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p176-177.

The Part of Precipitation in Some Ecological Problems of the Dnister Basin, L. Gueiko, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2447-2448.

System of River Floods Warning in Ukraine, V. Manukalo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1340.

Ukrainian Program of Radioactive Waste Disposal in Geo-logical Formations, Dmitri P. Khrushchov, Michail A. Pavlovsky and Valeri M. Starodoumov, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p25-26.

Concrete Shear Failure in Reinforced-Concrete Elements, Prodromos D. Zararis, ST Sept. 96, p1006-1015.

Ultimate strength

Experiments for Ultimate Strength of Reinforced Concrete Cylindrical Panels under Lateral Loading and Comparison with FEM Analysis, Makoto Takayama, Kazuhiko Mashita, Shiro Kato, Yasuhiko Hangai and Haruo Kunieda, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 10056-211-221. 1996), p310-321.

Load Capacity of Nested, Laterally Braced, Cold-Formed Steel Z-Section Beams, Ahmad A. Ghosn and Ralph R. Sinno, ST Aug. 96, p968-971.

Reliability of Jackets: Beyond-Static-Capacity, D. G. Schmucker and C. A. Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p578-581

Transition from Brittle to Quasi-Brittle Behavior in Fiber Reinforced Brittle Matrix Composites, Claudia P. Oster-tag, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1219-1227.

Ultimate Strength of Steel Outstands in Compression, Han-bin Ge and Tsutomu Usami, ST May 96, p573-578.

Ultimate Strength of Underwater Pipe-Soil Systems, Mehdi S. Zarghamee, (Pipeline Crossings 1996, Lawrence F.

Catalano, ed., 1996), p230-236.

Ultimate Transverse Strength and Reliability Analysis of Offshore Production Ships, Xiaozhi Wang and Lars M. Sorthaug, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p146-149.

Ultrasonic testing

Acoustic Emission Monitoring of Pultruded Bridge Mem-bers, Arup K. Maji, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p963-966.

Detection of ASR in PCC Using Ultrasonic Waves, N. M. Al-Akhras, I. L. Al-Qadi and M. R. Hajj, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p897-

Fatigue Evaluation of Highway Bridges Using Ultrasonic Stress Measurements, Samer H. Petro, Udaya B. Halabe, Paul Fuchs, Powsiri Klinkhachorn and Hota V. S. GangaRao, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p876-883.

Geophysical Characterization of Florida Limestone Investigative Case History, D. S. Saxena, R. M. Dickin-son and A. Saxena, (Case Histories of Geophysics Ap-plied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p73-85.

Measurement of Applied Stress in Steel Bridges, E. A. Mandracchia, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1118-1121.

NDE of Distributed Cracking in Concrete, Scott F. Selleck, Eric N. Landis, Michael L. Peterson and Surendra P. Shah, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p604-607.

A Non-Destructive Method for Prestress Evaluation, Atorod Azizinamini, Armin B. Mehrabi, Bruce Keeler and John Rohde, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p900-907.

Ultrasonic Characterization of FRP Composites for Bridge Applications, Jerrol W. Littles, Jr., Laurence J. Jacobs and Abdul-Hamid Zureick, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p959-962.

Ultraviolet radiation

Design Guidelines for UV Disinfection Facilities, Heba Awad, Jeff Kuo and Jamal Awad, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2999-3004.

Numerical Modeling of Flows in Ultraviolet Disinfection Channels, D. A. Lyn, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3005-3009.

UV Disinfection of Wastewater: Probabilistic Approach to Design, Frank J. Loge, Jeannie L. Darby and George Tchobanoglous, EE Dec. 96, p1078-1084.

744

Uncertainty analysis
Achieving a Reasonable Level of Accuracy in Site Characterization in the Presence of Geologic Uncertainty, Lynn Yuhr, Richard C. Benson and Devraj Sharma, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-

Frience, Charles D. Shackettori, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p195-209. Addressing Uncertainty in Rock Properties through Geo-statistical Simulation, Sean A. McKenna, Marc V. Cro-mer, Christopher A. Rautman and William P. Zelinski, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p297-311.

nalyzing Spatial Variability of In Situ Soil Properties,

Analyzing Spatial Don J. DeGroot, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed.,

1996), p210-238.

Bayesian Assessment and Selection of Models for Structural Reliability Analysis, Philippe Geyskens and Armen Der Kiureghian, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p566-569. Chebyshev Model for Water-Quality Management, An-drews K. Takyi and Barbara J. Lence, WR Jan/Feb. 96,

p40-48

Coastal Engineering Laboratory and Field Measurements: Some Uncertainties in Measurement, Frederic Raichlen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1139-1143.
A Combined Fuzzy and Random-Set Approach to the Multiobjective Optimization of Uncertain Systems, Alberto Bernardini and Fulvio Tonon, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p314-317.

Comparative Assessment of Prediction Strategies for Adaptive Control, R. Ghanem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-

cea D. Grigoriu, ed., 1996), p134-137.

Considering Uncertainty in Earthquake Response Spectra,
Sara Wadia-Fascetti and Burcu Vuran Gunes, (Natural Sara wadus-f-acetti and Burcul Vurian Counes, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p.211-212.
Dealing with Uncertain and Highly Variable Geotechnical Conditions Beneath the Inco Smelter in Copper Cliff,

Karlis J. Jansons, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1383-1401.

Dempster-Shafer Approach to Soil Properties, David Rees Gillette, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1254-

1268

Deterministic and Probabilistic Analyses of Preload Design at a Hydraulic Fill Site, S. Thevanayagam, E. Kavazan-jian, Jr., A. Jacob and S. Nesarajah, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1417-1431

S. Roth, Cu., 1990, p1417-1431.

Effect of Uncertainty on an Active Mass Damper System, H. S. Deoskar, R. V. Tappeta and B. F. Spencer, Jr., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p426-429.

p426-429.
Estimation of Driven Pile Resistance at an Overconsolidated Clay Site Using Geostatistical Methods, Gil L. Yoon and Michael W. O'Neill, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p550-953.
Estimation of In-Sitt Test Uncertainty, Fred H. Kulhawy and Charles H. Trautmann, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.

Shackefford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p269-286.
Evaluating Subsurface Uncertainty Using Zonal Kriging, William L. Wingle and Eileen P. Poeter, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1318-1330.

Examination of Exploration Options of the Yucca Mountain CHn Unit, Kurt E. Suchsland, Jerry L. King and Richard Crit Oliti, Kutle Suchstant, Jerty L. Alig and Richard D. Memory, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p300-302. Experimental Uncertainty and Measurement Errors in Hy-draulic Engineering, Fred L. Ogden. (North American

draunc Engineering, Fred L. Ogden, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl135-1138.
Fuzziness of the Modified Mercalli Intensity as a Measure of Damage, Nozar G. Kishi and Timothy H-J. Yao, (Nat-ural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p247-248.

Fuzzy Arithmetic for Ecological Risk Management, Jacques Ganoulis, Iraklis Bimbas, Lucien Duckstein and

Jacques Ganoulis, Iraklis Bimbas, Lucien Duckstein and Istvan Bogardi, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p401-415. Geologic Uncertainties in Tunneling, Herbert H. Einstein, Vijaya B. Halabe, Jean-Paul Dudt and François Descoeu-dres, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p239-253.

Hazard Ranking of Landfills Using Fuzzy Composite Pro-gramming, Michael E. Hagemeister, David D. Jones and Wayne E. Woldt, EE Apr. 96, p248-258. Health Risk Sensitivity to Variable and Uncertain Parame-

ters. Reed M. Maxwell and Susan D. Pelmulder. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1285-1290. norance Factors Using Model Expansion, Marc A. Maes,

EM Jan. 96, p39-45.

Incorporating Terrain Uncertainties in Autonomous Vehicle Path Planning, Kevin K. Gifford and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Dem-

setz, ed., 1996), p15-21.

Incorporating Uncertainty, Objective, and Subjective Data in Geologic Site Characterization, Patrick G. Kinnicutt and Herbert H. Einstein, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p104-118.

Incorporation of Fuzzy Damage States in Seismic Fragility Analysis, Jun-Rong Huo and Howard H. M. Hwang, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

M. Frangopol, ed. and America D. Grapha, San. p. 318-321.
Inflated Contour Approach for Deepwater Tendon Design,
J. W. van de Lindt and J. M. Niedzwecki, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol,
ed. and Mircea D. Grigoriu, ed., 1996), ps82-585.
An Interactive Operator Interface for Task-Level Direction
of a Robot in Uncertain Environments, Eric S. Miles and

of a Kobot in Uncertain Environments, Eric S. Miles and Robert H. Cannon, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p50-56. Issues of Uncertainty Regarding Localized Strains in Granular Soils, M. A. Mooney, R. J. Finno, G. Viggiani and W. W. Harris, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1906), 317-325.

1996), p312-325.

Just One More Boring, and We'll Know for Sure! Sam S.

C. Liao, David L. Druss, Thom L. Neff and Brian R.

Brenner, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p119-133.

Key Sources of Uncertainty in QUAL2E Model of Passa River, Charles S. Melching and Chun G. Yoon, WR

Mar./Apr. 96, p105-113.

A Look at Technological Risk and Uncertainties in Flood A Look at 1echnological Risk and Uncertainties in Flood Disaster Reduction, Shou-shan Fan and Nicholas C. Ma-talas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p253-255. Magnetic Investigation of a Simulated Hazardous Waste Site, Susan E. Burns and Kenneth E. Lemons, (Uncer-tainty in the Geologica Environment, form Theory, 1997).

tainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p813-825.

Methods for Measuring Discharge under Ice Cover, John F. Walker, HY Nov. 94, p1327-1336.

Model Uncertainty for the Advection-Dispersion Equation, Wade E. Hathhom, (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p881-896

Model Uncertainty in Anchorage Design for Anchored Bulkheads, Anurag Varde, Thomas C. Sandford and Ha-bib J. Dagher, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed.,

1996), p727-745.

745

Modeling the Impact of Uncertainty in Spatial Variability of Estuarine Boundary Conditions, B. H. Johnson and K. W. Kim, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2731-2736.

Modeling Uncertainty in Prediction of Pier Scour, Peggy A. Johnson and Bilal M. Ayyub, HY Feb. 96, p66-72.

Monte Carlo Simulation to Evaluate Slope Stability, Douglas Scott Chandler, (Uncertainty in the Geologic Emirornment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p474-493.

A Neural Network Approach for Site Characterization and Uncertainty Prediction, Yacoub M. Najjar and Imad A. Basheer, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996),

p134-148.

Non-Statistical Uncertainties in Liquefaction Risk Assessment, Khalid M. El Zahaby and M. S. Rahman, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1068-1082.

son, ed. and Mary J. S. Roth, ed., 1996), p1068-1082.

A Norm-Based Approach to the Quantification of Model Uncertainty, E. Zio and G. E. Apostolakis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p252-254.

Ocean Environment Contours for Structural Response Analysis and Experiment Design, Steven R. Winterstein, Todd C. Ude, Paolo Bazzurro and C. Allin Cornell, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p592-595

Optimum Risk Management with Uncertain Hazard and Vulnerability Information, Lawrence A. Twisdale and Peter J. Vickery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p88-

Optimum Smoothing Filter for Geophysical Tomography by the Extended Bayesian Method, Yusuke Honjo, Toshiaki Yamaue and Nobuaki Kudo, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p942-945.

Organizing and Evaluating Uncertainty in Geotechnical Engineering, Robert V. Whitman, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.

Roth, ed., 1996), p1-28.

Overcoming Soil Uncertainty in Prediction of Construction and Industrial Vibrations, Mark R. Svinkin, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1178-1194.

Path Integration Applied to Structural Systems with Uncertain Properties, Søren R. K. Nielsen and H. Uğur Köylüoğlu, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p6-9.

A Practical Approach to Uncertainty Modeling in Geotech-nical Engineering, C. Hsein Juang and David J. Elton, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p1269-1283.

Practical Methods for Managing Uncertainties for Geosynthetic Clay Liners, David E. Daniel and Robert B. Gilbert, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1331Probabilistic Assessment on Variability of Mechanical Properties of Rock Masses, Hang Gao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p934-937.

Probabilistic Simulation of Geologic Waste Disposal Facilities Using the Repository Integration Program (RIP), Ian Miller and Rick Kossik, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p944-964.

Project-Network Analysis Using Fuzzy Sets Theory, Pasit Lorterapong and Osama Moselhi, CO Dec. 96, p308-318. Random Response of Nonlinear System to PERPM Model,

Y. Wang, Z. Hou, M. Dimentberg, M. Noori and Y. Zhou, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p954-957.

Reducing Uncertainty in Environmental Site Characteriza-tion, Yi-Chang Tsai and J. David Frost, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and

Mary J. S. Roth, ed., 1996), p1019-1033.

Reliability Applied to Slope Stability Analysis, John T.
Christian, Charles C. Ladd and Gregory B. Baecher, GT

Dec. 94, p2180-2207.

The Reliability of Soil Classification Derived from Cone Penetration Test, Zhongjie Zhang and Mehmet T. Tumay, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p383-

Reliability of the SASW Method for Determination of the Shear Modulus of Soils, Karen E. Tuomi and Dennis R. Hiltunen, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1225-1238.

Reliability/Cost of Adaptive Intraply Hybrid Fiber Com-posite Structures, Christos C. Chamis, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p644-647.

Residential Vulnerability Functions and Their Variability Based on Claims Data, Ben Lashkari and Ronald Warpassed on Claims Data, Ben Lishkari and Ronald war-drop, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p307-308. Response to Arbitrarily Time-Varying Forces Using Con-vex Model, Chris P. Pantelides and Shyh-Rong Tzan,

(Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1252-1258.

Risk Analysis of Levee Closures Using Range/Confidence Estimates, W. D. Rowe and Michael Burnham, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p367-387.

Risk as a Sustainable Development Criteria, Heidelore I. Kroeger and Slobodan P. Simonovic, (North American

Kroeger and Slobodan P. Simonovic, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1531-1536.
Robust Stabilization of Systems with Time Delays, Mohammad Hosseini and Firdaus Udwadia, (Probabilis-tic Mechanics & Structural Reliability, Dan M. Frango-

pol, ed. and Mircea D. Grigoriu, ed., 1996), p438-441. Seismic Hazard Assessment in Southeastern U.S. Paul C. Rizzo and Vaidya E. Bazan, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p127-128.

Seven Guidelines for Managing Uncertainty in Geoenviron-mental Design, Robert B. Gilbert and Travis C. McGrath, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p774-796.

Site-Specific Live Load Models for Bridge Evaluation, Michel Ghosa and Dan M. Frangopol, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p30-33.

and Anticea D. Grigoriu, ed., 1996), 503-75.
Some Thoughts About Ecosystems: Management, Control, and Uncertainty, Daniel E. Willard, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p191-206.

Spatial Variability of Soil Parameters, Derin N. Ural, (Un-certainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p341-352.

Stochastic Finite Element Method in Geomechanics, Gabriel Auvinet, Amine Bouayed, Sandra Orlandi and Arturo López, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1239-1253.

Stochastic Prediction and Control of Uncertain Nonlinear Dynamical Systems, R. Ghanem and M. Grigoriu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p277-280.

Strain Level and Uncertainty of Liquefaction Related Index Tests, D. Roy, R. G. Campanella, P. M. Byrne and J. M. O. Hughes, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1149-1162.

Structural Analysis with Fuzzy-Based Load Uncertainty, Robert L. Mullen and Rafi L. Muhanna, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p310-313.

Systems for Forecasting Flows and Their Uncertainty, Kon-stantine P. Georgakakos, Alexandre K. Guetter and Jason A. Sperfslage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2360-2365.

Uncertainty Analysis of Dredge Production with Correlation, Said M. Easa, WW Sept./Oct. 94, p499-507.

Uncertainty Analysis of Reservoir Sedimentation, Hyun-Suk Shin and Jose D. Salas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2294-2299.

Uncertainty and Risk Analyses for FEMA Alluvial Fan Method, Bing Zhao and Larry Mays, (Risk-Based Deci-sion Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p180-190.

Uncertainty and Risk Analyses for FEMA Alluvial-Fan Method, Bing Zhao and Larry W. Mays, HY June 96,

p325-332.
Uncertainty in Back Analysis of Slopes, Robert B. Gilbert, Stephen G. Wright and Eric Liedtke, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p494-517.

Uncertainty in Comparative Analysis with Continuous Nonpoint Source Pollution Models, Dipmani Kumar and Conrad D. Heatwole, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1705-1710.

Uncertainty in Evaluation of Historical Subsidence Measurements, Kevin M. O'Connor, Sean M. Killen, Mark R. Chandler, Jan E. Stache and John A. Siekmeier, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p710-726.

Uncertainty in the Geologic Environment: from Theory to Practice, 2 vols., Geotechnical Special Publication No. 58, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996, 0-7844-0188-8, 1460pp.

Uncertainty in the Geologic Setting and Its Impact on Site Characterization, Richard C. Benson, Lynn Yuhr and Devraj Sharma, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p91-103.

Uncertainty Measures in Reliability Assessment of Ship Structures, Bilal M. Ayyub and Kwan-Ling Lai, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p621-626.

Uncertainty Model is a Redundancy, William Hayden, CE Aug. 96, p31. Uncertainty Modeling for Preliminary Design of Structures, Yung-Ching Shen and Larry J. Feeser, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p565-571.

Uncertainty of Hydraulic Parameters, Peggy A. Johnson, HY Feb. 96, p112-114.

Use of Geologic Information in Site Characterization, Tien H. Wu, Mohamed A. Abdel-Latif, Michael A. Nuhfer and B. Brandon Curry, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p76-90.

Vulnerability Assessment within BMS, Edgar P. Small and Steven B. Chase, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-

goriu, ed., 1996), p446-449

Seepage Assessments and Control Associated with Flori-da's Phosphate Industry". Wayne A. Ericson, (Uncer-tainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson. ed. and Mary J. S. Roth, ed., 1996), p866-880.

Uncertainty principles

Evaluation of Nitrate Treatment Methods Under Uncertainty, Crystal C. Tannehill, M. F. Dahab and W. E. Woldt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Large River Diversion Optimization Considering the Un-certainties Involved, M. H. Afshar, A. Afshar and H. Par-vazian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4347-4352.

Maximum Structural Response Using Convex Models, Yakov Ben-Haim, Genda Chen and T. T. Soong, EM

Apr. 96, p325-333.

Uncertainties in Characterising Soil Properties, Suzanne Lacasse and Farokh Nadim, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p49-75.

Uncertainty as a Parameter for Decision Making, Jiff Fal-tejsek, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p320-321.

Uncertainty in the Geologic Environment: from Theory to Practice, 2 vols., Geotechnical Special Publication No. 58, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996, 0-7844-0188-8, 1460pp.

Undergraduate study

Architectural Engineering Program at University of Miami, David A. Chin and Michael K. Phang, AE June 96, p78-

Business Degrees Three Times That of Engineering Degrees, ME July/Aug. 96, p5.

Editor's Note, Thomas L. Theis, EE Sept. 96, p778.

Environmental Engineering Forum, Steven I. Safferman, Vivek P. Utgikar and Sarwan S. Sandhu, EE Sept. 96, p779-784.

Forum, El July 96, p95-103.

Guest Editorial, F. Lawrence Bennett, CR Sept. 96, p119-

The International Walking Machine Decathlon: A Design Competition to Enhance Undergraduate Engineering Ed-ucation, Gordon K. Lee, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p296-302.

A Million Engineers, CE Feb. 96, p8.

National Reserach Council Symposium on Major Issues in Engineering Education, Peter G. Hoadley, El Apr. 96.

p51.

Particulate Sampler to be Carried on a High Altitude Bal-loon, Christopher Benning and Jared Whitaker, (Engi-neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1334-1338.

Recent Innovations in Undergraduate Civil Engineering Curriculums, Joy M. Pauschke and Anthony R. In-graffea, El July 96, p123-133.

Viewpoint, James T. P. Yao, IS Mar. 96, p1-4.

Underground conduits

Electronic Modeling of Underground Piping Systems, Har-old G. Thayne, Jr. and Joseph A. Bohinsky, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p825-831.

Underground construction

Cold Regions Utilities Monograph, 3rd edition, Daniel W. Smith, ed., 1996, 0-7844-0192-6, 780pp. Differing Site Conditions—Industry Consensus Opposes Ruling, S. Scot Litke, ME July/Aug, 96, p14-15.

Ground Improvement Salvation, Peter J. Nicholson, CE May 96, p6.

The Human Side of L.A. Metro, Donald R. Ciandella, CE Dec. 96, p36-39.

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Innovative Technology Development for Safe Excavation, Xiaodong Huang, Daniel Bernd and Leonhard E. Ber-nold, CO Mar. 96, p91-96.

Mapping Underground, ET June/July 96, p7,11.

Portland's Light Rail Goes Underground, Philip M. Rice and Joseph P. Gildner, CE Dec. 96, p32-35. Tunnelers Probe Policy Ponder Baseline Reports, CE June

Underground Contracts for the 21st Century, Robert A. Pond, CE Dec. 96, p54-57.

Application of GIS in Site Selection for Nuclear Waste Dis-posal Facility, Grant Sheng, Isaac N. Luginaah and John Sorrell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p95-97.

Autotrophic and Heterotrophic Bacterial Diversity from Yucca Mountain, M. Khalil, D. L. Haldeman, A. Igbinovia, P. Castro, L. Ragatz and P. Amy, (High Level Radioactive Waste Management, Technical Program Commit-

tee, 1996), p9-11

Computerized Decision Support System Applied to NAPL Cleanup, Dale W. Lough and Wade E. Hathhorn, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p693-704.

Control of Stacking Loads in Final Waste Disposal Accord-ing to the Borehole Technique, Walter Feuser, Eike Bar-nert and Hendrik Vijgen, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

p477-479

Controlled Drill & Blast Excavation at AECL's Under-ground Research Laboratory, G. W. Kuzyk, D. P. Onagi and P. M. Thompson, (*High Level Radioactive Waste Management*, Technical Program Committee, 1996), p404-406.

Critical Groups for Geological Disposal Performance As-sessments, Graham M. Smith and John Kessler, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p234-236.

Current Status of Paleohydrologic Studies at Yucca Mountain and Vicinity, Nevada, John S. Stuckless, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p98-101.

Deep Geological Disposal Programs in Preparation and Under Development, D. P. Khrushchov, (High Level Radioactive Waste Management, Technical Program Com-

mittee, 1996), p19-21.

Determination of Importance Process during Yucca Mountain Site Characterization, Peter S. Hastings, Dealis W. Gwyn and Robert F. Wemheuer, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p327-329.

Drying of a Heated Porous Medium at Sub-Residual Saturations, Y.-T. Chen, A. K. Sathappan and R. Boehm, (High Level Radioactive Waste Management, Technical

Program Committee, 1996), p119-121.

Effect of Repository Underground Ventilation on Emplacement Drift Temperature Control, Hang Yang, Yiming Sun, Daniel G. McKenzie and Kalyan K. Bhattacharyya, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p417-419.

Frogram committee, 1990), p417-419.

Effects of Transport Model Alternatives Incorporating Precipitation on the Performance of Engineered Barriers, Takao Ohi, Kaname Miyahara, Morimasa Naito and Hiroyuki Umeki, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p274-275.

Estimation of Leakage Quantity for Long Auxiliary Venti-lation Systems, Felipe Calizaya and Pierre Mousset-Jones, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p429-431.

Evaluation of Geological Formations of West Ukraine from the Standpoint of Raw Disposal, Olga V. Shestopalova, (High Level Radioactive Waste Management, Technical

Program Committee, 1996), p79-80.

Flooding of an Underground Facility at Yucca Mountain: A Summary of NRC Review Plans, Neil M. Coleman, Rex G. Wescott and Terry L. Johnson, (High Level Radioac-tive Waste Management, Technical Program Committee, 1996), p205-207

Geoenvironmental Evaluation of Geological Formations of Lithuania for Radioactive Waste Disposal, Valentinas Kadūnas and Jurgis Valiūnas, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p83-85.

Ground-Water Remediation with Granular Collection Sys-tem, Richard W. Frieseke and Erik R. Christensen, EE June 96, p546-549.

How Can Coupled Systems Evolve? A Scenario Simulation Methodology, H. Takase, P. Grindrod and S. P. Cromp-ton, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p258-260.

Implementing a Successful Conjunctive Use Program, William R. Mills, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3074-3078.

Indian Programme on Deep Geological Disposal of Radio-active Waste, A. N. Prasad, K. Balu, R. K. Mathur and P. K. Narayan, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p22-24.

Intended Validation in the Swedish Program for Spent Nuclear Fuel, Bjorn Cronhjort and Grant Sheng, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p67-69.

International High-Level Radioactive Waste Repositories, Wunan Lin, (High Level Radioactive Waste Ma

ment, Technical Program Committee, 1996), p492-493.

Keys to Opening the Nation's First Deep Geological Repository in 1998, Michael H. McFadden and Leif G. Eriksson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p220-223.

Methodology to Group DOE Fuels for the Purpose of Re-pository Technical Acceptance, Robert Einziger, Ray Stout, Henry Loo and Scott Gladson, (High Level Radio-active Waste Management, Technical Program Commit-tee, 1996), p432-434.

Modeling of Possible Outflow of Radionuclides from Deep Burials into Biosphere, V. M. Shestopalov, B. D. Stet-senko and A. S. Boguslawski, (*High Level Radioactive Waste Management*, Technical Program Committee, 1996), p176-177.

Moisture Removal from the Repository by Ventilation and Impacts on Design, Parviz Montazer and Nick Stellavato, (High Level Radioactive Waste Management, Technical

Program Committee, 1996), p423-425

Natural Ventilation of an Exothermic Waste Repository, George Danko and Steven Saterlie, (High Level Radioac-tive Waste Management, Technical Program Committee, 1996), p426-428.

The NEA International FEP Database: Outcome of the Working Group, Trevor J. Sumerling, (High Level Radi-oactive Waste Management, Technical Program Committee, 1996), p317-319.

Near-Drift Thermal Analysis Including Combined Modes of Conduction, Convection, and Radiation, Clifford K. Ho and Nicholas D. Francis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p448-450.

Release Rates of Radionuclides through a Porous Material-Filled Borehole in a Radioactive Waste Repository, Kun Jai Lee and Heui-Joo Choi, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p2

SEAM2D: A Numerical Model for Two-Dimensional Sol-LEANZU: A Numerical Model (10T two-Dimensional 300 ute Transport and Sequential Electron Acceptor-Based Bioremediation of LNAPL-Contaminated Aquifers, Dan W. Waddill, Mark A. Widdowson and J. Steven Brauner, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p366-477.

Site Selection and Evaluation of Geological Disposal of Ra-Site Selection and Evaluation of Geological Disposal of Radioactive Waste: Regulatory Aspects, G. Guentchev and L. Katzarska, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p86-88.
Status of Thermal Loading Evaluations for a Potential Repository, Steven F. Saterlie, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p42-444.
Storm-Water Treatment Goes Underground, Brian Roberts, CE, July 96, 266-57.

CE July 96, p56-57.

CE July 90, Doc-37.

Strategy for Rapid Evaluation of Waste Containment and Isolation at the Yucca Mountain Site, Larry D. Rickersen, Edward C. Taylor, Janet A. Docka and Jean L. Younker, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p303-304.

Technical Program Committee, 1990, p.303-304.
Surfactant Enhanced Electrokinetic Remediation of Gasoline Contaminated Soils, Sujan K. Bhattacharya, David H. Foster and J. Mohan Reddy, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p311-322.

Thermal Management with Ventilation, George Danko, Thomas A. Buscheck, John J. Nitao and Steven Saterlie, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p420-422.

Ukrainian Program of Radioactive Waste Disposal in Geo-

logical Formations, Dmitri P. Khrushchov, Michail A. Pavlovsky and Valeri M. Starodoumov, (High Level Ra-dioactive Waste Management, Technical Program Committee, 1996), p25-26.

Uranium Dioxide Dissolution under Acidic Aqueous Conditions, S. A. Steward and E. T. Mones, (High Level Radioactive Waste Management, Technical Program Com-

mittee, 1996), p388-389.

mutee, 1990, p.386-389.
Use of Expert Judgment in the HLW Regulatory Program:
U.S. NRC Staff Draft Guidance, Janet P. Kotra, Michael
P. Lee, Norman A. Eisenberg and Aaron R.
DeWispelare, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p247-249.

Water Quality Enhancement Using Subsurface Detention, Brian C. Roberts, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3338-3342.

Whither Nuclear Waste Disposal—A 50th Anniversary View, William W.-L. Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1592-1596.

X-ray Radiography of Fracture Flow and Matrix Imbibi-tion, Jeffery J. Roberts and Wunan Lin, (High Level Ra-dioactive Waste Management, Technical Program Com-

mittee, 1996), p89-91. The Yucca Mountain Standard: How Lenient Should It Be?
Thornas H. Pigford, (High Level Radioactive Waste
Management, Technical Program Committee, 1996),

Management, p263-266.

Controlled Drill & Blast Excavation at AECL's Underground Research Laboratory, G. W. Kuzyk, D. P. Onagi and P. M. Thompson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p404-406.

Dangerous Digging Requires New Excavation Methods, CE May 96, p22-23. Diffraction of SH-Waves by Subsurface Inclusions of Arbi-trary Shape, Michael E. Manoogian and Vincent W. Lee, EM Feb. 96, p123-129.

The French Experience in Bursting Rehabilitation for Pipe-line Crossings, Y. G. Diab and P. Perrotin, (*Pipeline* Crossings 1996, Lawrence F. Catalano, ed., 1996), p306-311.

Geological and Geophysical Studies of Sites in the Ukraini-an Shield Rock Series Suitable for Construction of Underground Laboratories, L. S. Galetsky, D. P. Khrush-chov and A. P. Volik, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p81-82.

New Materials and Methods for Insitu Rehabilitation of Underground Pipe, Richard D. Blackmore, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1298-

Numerical Analyses of Reinforced Underground Openings Subjected to Seismic Loadings, Fei Duan and Saeed Bonabian, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p412-414.

Practical Guide to Grouting of Underground Structures, Co-published in the UK by Thomas Telford Publications. Raymond W. Henn, 1996, 0-7844-0140-3, 198pp.

Probabilistic Creep Analysis of Underground Structure in Salt, A. F. Fossum and D. E. Munson, EM Mar. 96, p209-217.

p209-217.

Remote Sensing in Investigation of Engineered Underground Structures, William F. Kane, Douglas C. Peters and Robert A. Speirer, GT Aug. 96, p674-681.

Soil Thermal Properties for the Design of Underground Structures in Cold Regions, J. E. Steinmanis, D. Parmar, H. S. Radhakrishna and A. S. Judge, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p471-482.

Vertical Seismic Forces on Elevated Concrete Slabs, M. N. Palaskas, Limin He and Michael Chegini, SC Aug. 96, p88-90.

Underpinning
Simplified Method for Design of Underpinning Piles, M.
Makarchian and H. G. Poulos, GT Sept. 96, p745-751.

Using an Energetics Approach, Theofanis V. Karambas, Howard N. Southgate and Christopher Koutias, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p841-849.
Contributions to the Momentum Balance in the Surf Zone,

Marien Boers and Jan van de Graaff, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p257-268.

1996), p257-268.
Modeling Time- and Depth-Varying Currents at Supertank, Jane McKee Smith and Ib A. Svendsen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p245-256.
A Morphology Model to Predict Erosion Near a Seawall, K. A. Rakha and J. W. Kamphuis, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p276,8901

1996), p879-890.

A Quasi-3D Model of Longshore Currents, A. F. Garcez Faria, E. Thornton and T. Stanton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p389-400.

Sediment Transport Fluxes as Determined from Wave Breaker Induced Suspended Sediment and Flow Fields, G. Smith, G. Mocke and L. Engelbrecht, (Coastal Dy-namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p783-794.

Surf-Zone Modeling, Ib A. Svendsen and Uday Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p13-32.

Particle Dynamics in the Sound Between Denmark and Sweden, Jens R. Valeur, Morten Pejrup and Anders Jen-sen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p951-962.

Ultimate Strength of Underwater Pipe-Soil Systems, Mehdi S. Zarghamee, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p230-236.

Undersea Engineering Feat, CE Oct. 96, p12.

Utilizing Directional Drilling Techniques to Install Underwater Watermain, Timothy M. Stinson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p180-185.

Water Pipeline Crossings of the Pitt and Fraser Rivers, Tim R. Jervis and Jim V. Young, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p202-213.

Underwater pipelines
Tunneling Under Pressure, Stephen J. Navin, Jon Y.
Kaneshiro, Larry J. Stout and Gregory E. Korbin, CE Feb. 96, p64-67.

Underwater structures

Undersea Engineering Feat, CE Oct. 96, p12.

Wave Scattering by Submerged Elliptical Disk, S. Zhang and A. N. Williams, WW Jan./Feb. 96, p38-45.

Underwater surveys

Visual Mosaicking of the Ocean Floor and its Relation to Three-Dimensional Occlusions, Sanjay Tiwari, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p29-35.

Underwater testing Developments in the Use of Infrasound for Protecting Fish at Water Intakes, E. P. Taft, N. A. Brown, T. C. Cook, J. P. Ronafalvy and M. W. Haberland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p171-176.

Uniaxial tensile strength

Uniaxial Cyclic Behavior of Discontinuous Fiber Rein-forced Composites, Takashi Matsumoto and Victor C. Li, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p426-435.

Uniform flow

Normal-Depth Equations for Irrigation Canals, Prabhata K. Swamee, IR Sept./Oct. 94, p942-948.

Vegetation-Induced Drag: An Experimental Study, Chad Dunn, Fabián López and Marcelo García, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3824-3828.

Risk Variability Due to Uniform Soil Remediation Goals, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE July 96, p612-621.

Soil-Limiting Flow from Subsurface Emitters. I: Pressure Measurements, U. Shani, S. Xue, R. Gordin-Katz and A.

W. Warrick, IR Sept./Oct. 96, p291-295.

Soil-Limiting Flow from Subsurface Emitters. II: Effect on Uniformity, A. W. Warrick and U. Shani, IR Sept./Oct. 96, p296-300.

Toward a Unified Nomenclature for Reinforced-Concrete Theory, Thomas T. C. Hsu, ST Mar. 96, p275-283.

Uniformity Evaluation of Cohesionless Specimens Using Digital Image Analysis, Chun-Yi Kuo and J. David Frost, GT May 96, p390-396.

Unit hydrographs

Unit hydrographs
Rational-Method Equation and HEC TD-15, T. V. Hromadka, II and R. J. Whitley, IR Jan/Feb. 96, p15-18.

Runoff Computation Using Spatially Distributed Terrain
Parameters, Francisco Olivera and David R. Maidment,
(North American Water and Environment Congress &
Destructive Water, Chenchayya Bathala, ed., 1996), p3212-3217.

United Kingdom

Bus Gate, Pre-Signal and Queue Relocation: The Park View Road Bus Priority Scheme, Daniel D. G. T. Metz-ger, (Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p81-86.

CERF, U.K. Agree to Broaden Ties, CE May 96, p73.

Coupled Modelling of Groundwater Flow and Hydrochem-istry in the Sellafield Area, A. K. Littleboy, R. Metcalfe and D. J. Noy, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p135-140.

Development and Application of Urban Information Strate-gies, E. G. Shinakis, M. McDonald and A. Richards, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p310-314.

Engineering and History: Manifestations in Monuments, Henry Petroski, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p155-161.

Evaluation of the UK Coastal Research Facility, Richard R. Simons, Richard J. S. Whitehouse, Ruairi D. MacIver, Jonathan Pearson, Paul B. Sayers, Yingdao Zhao and Adrian R. Channell, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p161-172.

Innovative Methods for Informing the Public—A Case Study, Stan Reid, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p507-509. Issues in Risk Perception and Communciation of Impor-tance to a Regulator: Results of an International Seminar Sponsored by HMIP, Daniel A. Galson, Roger D. Wil-mot and Ray V. Kemp, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p502-504.

p502-504. Time Series Analysis of Long-Term Beach Level Data from Lincolnshire, UK, Howard N. Southgate and Luisa M. Beltran, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1006-1017. A Windstorm Damage Model for the Identification of Insurance and Reinsurance Risk, Brian E. Lee and David R. Whiting, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p197-198.

27 Years Documenting Engineering Heritage, Eric DeLony, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Ir., ed., 1996), p162-

Are Bridge Conditions Improving Under Bridge Manage-ment: A Panel Discussion, Bojidar S. Yanev, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

Benefits and Costs Associated with Flood Mitigation in the United States, Eugene A. Stallings, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p153-154.

Benjamin Wright-The Father of American Civil Engineering, Neal FitzSimons, (Civil Engineering History: Engi-neers Make History, Jerry R. Rogers, ed., Donald Ken-non, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p98-107

Border Environment Cooperation Commission: 1995 Year End Status Report, Peter Silva, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1819-1821.

Catastrophic Riverine Flooding: Rapid Evaluation with a Robust Numerical Model, David C. Froehlich and Michael A. Ports, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p225-226.
Comparison of General vs. Multi Sector NPDES Storm

Water Permits, William H. Espey, John Whitescarver and Michael Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2810-2814.

Construction Automation: Demands and Satisfiers in the United States and Japan, John G. Everett and Hiroshi Saito, CO June 96, p147-151.

A Critical Evaluation of Current Approaches to Earthquake Resistant Design, Christopher Rojahn and Andrew Whit-taker, (Natural Disaster Reduction, George W. Housner,

taker, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p331-332.
Current U.S. - Japan Collaborative Activities in Wind Engineering, B. Bienkiewicz, T. Ohkuma and K. Fujii, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1075-1082.

Engineering and History: Manifestations in Monuments, Henry Petroski, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p155-161.

nvironmental Policy Making in Today's Political Environ-ment, Warren M. Lee, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2805-2809

Evacuation Strategies for Public Officials, T. Michael Carter, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p109-110.

Evaluation of Reliability of Pile-Supported Structures, Wil-liam M. Isenhower and Reed L. Mosher, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and

Charles D. Smackerlord, ed., rTischia F. Nerson, ed. and Mary J. S. Roth, ed., 1996), p666-684.

Forensic Evaluation of Guyed Tower Collapses, David F. Mazurek and Jonathan C. Russell, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p510-517.

A Framework for Sanitation and Health Risk Assessment, Charles G. Gunnerson, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2390-2395.

The Great Great Lakes, Murray Clamen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2300-2305

The Great USA flood of 1993, Lee W. Larson, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2.

Greenville Installs 1st 1.5m Annular CPE Pipe in the USA, Douglas Hinken and Stephen Matheny, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p88-96.

History of Coastal Engineering in the USA, Robert L. Wiegel and Thorndike Saville, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996),

Holistic Appraisal of Value Engineering in Construction in United States, Angela Palmer, John Kelly and Steven Male, CO Dec. 96, p324-328.

Human Space Exploration: Justifications and U.S. Space Policy, Arthur M Hingerty, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p126-132.

Hydraulic Studies for a Large Wetland, Stephane Asselin, Phillip R. Mineart and Pierre-Yves Saugy, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p512-517.

Impacts of NAFTA on Environmental Engineering, Mark W. Killgore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2306-2311.

Innovative Design/Build Approach: Ambassador Bridge Project, Jay B. Shah, ME July/Aug. 96, p58-61.

Institutional Issues in Natural Hazard Mitigation, Daniel J. Alesch, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p367-368.

Linkages Between the El Nino-Southern Oscillation and U.S. Droughts, John A. Dracup and Thomas C. Piechota, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p373-374.

A Look at Technological Risk and Uncertainties in Flood Disaster Reduction, Shou-shan Fan and Nicholas C. Matalas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p253-255.

Looking for Evidence of Climatic Change in Streamflow Time Series, K. H. Hamed and A. R. Rao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1459-1464.

Lunar Sample Return: A Near-Term Marketing Opportuni-ty? Brad R. Blair, (Engineering, Construction, and Oper-ations in Space, Stewart W. Johnson, ed., 1996), p194-

The Management and Policies of the BECC, April Lander, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1813-1818.

Managing Great Lakes Water Levels: An International Partnership, Anthony J. Eberhardt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1317-1322.

Mexican Border Ground Water Agreement, Conrad G. Keyes, Ir., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2330-2334.

Microtunneling Database for the USA and Canada From 1984 to 1995, Alan Atalah and Paul Hadala, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996), p332-339.

Mitigation, Preparedness & Sustainable Development: Linking Research & Resources in the Global Information Infrastructure, Robert J. Coullahan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p321-322.

NAFTA Pact May Change as U.S. Engineers Mull Licens-ing Details, NE May 96, p16.

A National Standard for Flood-Resistant Design and Con-struction, Christopher P. Jones, Vernon K. Hagen, Chris-topher S. Hanson, Thomas C. MacAllen, David Greenwood and Clifford E. Oliver, (Natural Disaster Reduc tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p339-340.

New USGS Seismic Hazard Maps for the United States, A. Frankel, C. Mueller, D. Perkins, T. Barnhard, E. Leyen-decker, E. Safak, S. Hanson, N. Dickman and M. Hop-per, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p173-174.

Overview of Drought Response Strategies, Darrell G. Fon-tane and Donald K. Frevert, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p857-862.

anning for Intermodal Access at American Airports, Phil-lip S. Shapiro, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p78-88.

Problems with Metrication in Transboundary Water Projects, Conrad G. Keyes, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3680-3684

Range of Impacts of Some Recent U.S. Disasters and The Implications for Housing Recovery, Claire B. Rubin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p168-170.

Re-engineering Cowboy Heaven (Available only in Focus on Structures Special Edition), Richard G. Weingardt and John F. Davis, CE Jan. 96, p10A-13A.

The Reclamation Drought Index: Guidelines and Practical Applications, Karen Weghorst, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p637-642.

Safety Analysis Requirements for Robotic Systems in DOE Nuclear Facilities, W. H. McCulloch, (Robotics for Chal-lenging Environments, Laura A. Demsetz, ed., 1996), p235-240.

Sanitary Engineers in American Cities: Changing Roles from the Age of Miasmas to the Age of Ecology, Martin V. Melosi, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p108-122.

Satellite Setup Links Russian, U.S. GPS, CE July 96, p8. Seismic Hazard Assessment in Southeastern U.S. Paul C. Rizzo and Vaidya E. Bazan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p127-128.

The Space Exploration Initiative: Its Failure and Lessons for the Future, Matthew Fisk Marshall, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p116-125.

Structural Evaluation of Existing Buildings for Seismic and Wind Loads, Charles Lindbergh, Maurice R. Harlan and James L. Lafrenz, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p317-

A Surveying Trip Report from George Washington's Diary, Michael P. Johnson and William P. Johnson, Jr., (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), pl-12.

Toward A.D. 2000 in the IDNDR, Walter W. Hays, (Natural Disputer Reduction, George W. Housen ed., and

ral Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p285-286.

Kitey M. Chung, etc., 1997), p.283-200.
U.S.-Canadian Water Sharing, Kris G. Kauffman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.3423-3428.

US Space Policy and the Use of Excess US Ballistic Missile Assets, Mike Trial, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

p206-213.
US/Mexico Border Drinking Water Study, Blake L. Atkins, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2120-2125.
USAID Efforts in Mitigating Natural Disasters, Tej Mathur and Nathalic Valette-Silver, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p82-83.

Utilities and Systems for the New U.S. South Pole Station Amundsen-Scott Station, Antarctica, Steven Theno and Dick Armstrong, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p424-435

Water Allocation on US/Mexico Boundaries, Conrad G. Keyes, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3429-3433.

Wind Hazards in the United States, Peter J. Vickery, Law-rence A. Twisdale and Andrew C. Steckley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p139-140.

"California Border Environment Activities Since Passage of NAFTA", James M. Stubchaer, Bart Christensen and Susan Phillips, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1807-1812.

Fifteen Years of Commercial Space in Retrospect", M. Brian Barnett, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p162-

Units of measurement

The Metric System as Viewed by Napoleon, R.E. Crysler, CE Jan. 96, p30.

'Since When is 5% Slight?', Merlyn Isaak, CE Feb. 96,

Universities

ASCE's Strategic Plan in Action: The Civil Engineering Research Foundation, NE Oct. 96, p7.

Editorial, Victor C. Li, MT Nov. 96, p183.

Engineering Education for Appropriate Technology, Richard L. Rosen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2743-2747.

Some Thoughts from the Editor, Robert B. Harris, CO Dec. 96, p297.

State Engineers as Policymakers: Apolitical Experts in a Federalist System, Bruce E. Seely, (Civil Engineering History: Engineers Make History, Ierry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p123-135.

Talk Needed for Research Application, Neil S. Grigg, CE Oct. 96, p38.

University Arts Building Presents Structural Challenge, CE Nov. 96, p10. Urban Knowledge Parks and Economic and Social Development Strategies, George Bugliarello, UP June 96, p33-45.

Field Observations on Stabilization of Unpaved Roads with Geosynthetics, R. J. Fannin and O. Sigurdsson, GT July 96, p544-553.

Unsaturated flow

An Adaptive Finite Element Model for Saturated and Unsaturated Porous Media, D. W. Pepper, M. L. Lytle and D. B. Carrington, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p105-107.

Application of the Limit-State Method for Probabilistic Unsaturated Flow Modeling, Yanyong Xiang and Srikanta Mishra, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p108-110.

Capillary Pressure-Saturation Relationships in Fracture, Zi-tong Ye, Bing Han, Sishen Li and Jiafa Zhang, (North. American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3869-3873.

A Comparative Study of the Transformed Methods for Solving Richards' Equation, M. Rashidul Islam, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1748-1753.

Compass: A Source Term Code for Investigating Capillary Barrier Performance, Wei Zhou and M. J. Apted, (High Level Radioactive Waste Management, Technical Pro-gram Committee, 1996), p276-278.

Evaluation of Groundwater Travel-Time Calculations for Yucca Mountain, R. W. Barnard, S. J. Altman, B. W. Ar-nold, C. K. Ho and S. A. McKenna, (High Level Radio-active Waste Management, Technical Program Commit-tee, 1996), p193-195.

Implementation of Runtime Visualization for Tough2, H. Xin Yang and Srikanta Mishra, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p308-309.

Radionuclide Release for Unsaturated Spent Fuel Tests— First 1.6 Years, P. A. Finn, S. F. Wolf and J. K. Bates, (High Level Radioactive Waste Management, Technical

Program Committee, 1996), p390-392.

Sensitivity Studies of Unsaturated Groundwater Flow Modeling for Groundwater Travel Time Calculations at Yucca Mountain, Nevada, Susan J. Altman, Clifford K. Ho, Bill W. Arnold and Sean A. McKenna, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p190-192.

Simulation of Unsaturated Zone Virus Transport Adjacent to Municipal Wells, D. D. Adelman and M. A. Tabidian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Testing of Abstractions for Total System Performance As-sessment, Vinod Vallikat, Srikanta Mishra, Yanyong Xi-ang and David Sevougian, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p293-294

Total System Performance Predictions (TSPA-1995) for the Potential High-Level Waste Repository at Yucca Mountain, S. David Sevougian, Robert W. Andrews and Jerry A. McNeish, (High Level Radioactive Waste Manage ment, Technical Program Committee, 1996), p295-297.

Unsaturated Flows Around a Horizontal Hole with Con-stant Heat Input, Y.-T. Chen and R. F. Boehm, (High Level Radioactive Waste Management, Technical Pro-gram Committee, 1996), p125-127.

Unsaturated Zone Flow Modeling for GWTT-95, Clifford K. Ho, Susan J. Altman, Sean A. McKenna and Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p184-186.

Channel Routing with Flow Losses, Ming Jin and Danny L. Fread, HY Oct. 96, p580-582.

Comprehensive Modelling of Water Distribution Networks, Bryan W. Karney, Samuel S. Kpo and Kai-Wah Tang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4107-4112

An Extended Relaxation Technique for Unsteady Flows in Networks, J. M. Lewis, D. L. Fread and Ming Jin, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p195-200.

Filling of Pipelines with Undulating Elevation Profiles, Chyr Pyng Liou and William A. Hunt, HY Oct. 96, p534-539.

Finite-Volume Two-Dimensional Unsteady-Flow Model for River Basins, D. H. Zhao, H. W. Shen, G. Q. Tabios, III, J. S. Lai and W. Y. Tan, HY July 94, p863-883.

Friction-Term Response to Boundary-Condition Type in Flow Models, Raymond W. Schaffranek and Chintu Lai, HY Feb. 96, p73-81.

The Influence of Peak-Regulation of the Three Gorges Power Plant on Navigation, Xinhua Yu, Xiang Fu and Changming Ji, (North American Water and Environment Congress & Destructive Water, Chenchavva Bathala, ed., 1996), p3863-3868.

An LPI Numerical Implicit Solution for Unsteady Mixed-Flow Simulation, D. L. Fread, Ming Jin and Janice M. Lewis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3222-327.

Modeling Unsteady Open-Channel Flows Having Longitu-dinally Varied Fluid Density, Chintu Lai and Tsan-Wen Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1905-1910. Numerical Simulation of Unsteady Flow at Po River Delta, D. Ambrosi, S. Corti, V. Pennati and F. Saleri, HY Dec. 96, p735-743

Three-Dimensional Simulation of River Ice Jams, Mark A. - Hopkins, Sieven F. Daly and James H. Lever, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p582-593.

Unsteady Flow in Hydraulic Capsule Pipeline, C. W. Lenau and M. M. El-Bayya, EM Dec. 96, p1168-1173. The Use of an Equivalent Porosity Method to Model Flow in Marshes, Ian P. King and Lisa C. Roig, (North Amerian Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3734-3739.

Velocity and Turbulence Distribution in Unsteady Open-Channel Flows, T. Song and W. H. Graf, HY Mar. 96,

Uplift

752

Building Codes and Natural Disasters - 2 Case Studies, Kenneth R. Andreason, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p758-764.

Plate Anchor Groups Pulled Vertically in Sand, James D. Geddes and Edward J. Murray, GT July 96, p509-516.

Reliability Applied to Levee Seepage Analysis, Douglas A. Crum, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p946-949.

Signatures of Coastal Change at Mesoscales, Timothy W. Kana, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p987-997.

System Effects and Uplift Capacity of Roof Sheathing Fas-teners, S. Murphy, S. Schiff, D. Rosowsky and S. Pye, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p765-770.

Uplift resistance

Depart Visional Probabilistic Modeling of Roof Sheathing Uplift Capacity, D. V. Rosowsky and S. D. Schiff, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p334-337.

Roof Sheathing Uplift Resistance for Hurricanes, Edward Sutt, Kallem Muralidhar and Timothy Reinhold, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p974-981.

Benefits/Impacts of Utilizing Depleted Uranium Silicate
Glass as Backfill for Spent Fuel Waste Packages, R. B.
Pope, C. W. Forsberg, R. C. Ashline, M. D. DeHart, K.
W. Childs and J. S. Tang, (High Level Radioactive Waste

p309-371. Depleted-Uranium-Silicate Backfill of Spent-Fuel Waste Packages for Repository Containment and Criticality Control, Charles W. Forsberg, Ron B. Pope, Ron C. Ashline, Mark D. DeHart, Kenneth W. Childs and Jabo S. Tang, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p366-368.

Nopal I Uranium Deposit: A Study of Radionuclide Migra-tion, Virgina Wong, Elizabeth Anthony and Philip Goodell, (High Level Radioactive Waste Management,

GOOGEH, (ITIgh Level Radioactive Waste Management, Technical Program Committee, 1996), p43-45.
Uranium Dioxide Dissolution under Acidic Aqueous Con-ditions, S. A. Steward and E. T. Mones, (High Level Ra-dioactive Waste Management, Technical Program Com-mittee, 1996), p388-389.

Urban areas

An Analysis of Effect of Dynamic Traffic Information Considering Driver's En-Route Route Switches, Yasunori Iida, Nobuhiro Uno and Tetsuro Hasegawa, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p604-608.

Biopositive City as Means for Natural Disaster Reduction, Alexandr Tetior, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p329-

753 URBAN AREAS

Canal Crossing of High-Pressure Pipelines, Hiroya Kishino, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p434-440.

Communication Strategies for Distributed Traffic Systems, Communication strategies for Distributed Traine Systems, Norman Hunt, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p256-270.

Comprehensive Evaluation Method on Earthquake Damage Using Fuzzy Theory, Bo Song, S. Hao, Suminao Murakami and Satoru Sadohara, UP Mar. 96, p1-17.

Development and Application of a Dual Drainage Model for the Wethersfield Area of the City of Hartford, Con-necticut, Michael E. Hulley, C. Neil Geldof, William W.

necticut, Michael E. Hulley, C. Neil Geldof, William W. S. Gray and A. Charles Rowney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1242-1248.

DRACULA - Microscopic, Day-to-Day Dynamic Modelling of Traffic Assignment and Simulation, Ronghui Liu, Dirck Van Vliet and David Watling, (Applications of Advanced Technologies in Temperature International Conference on Computational Conference on Co vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p444-448.

Dry Deposition of Polycyclic Aromatic Hydrocarbons in Ambient Air, Hwey-Lin Sheu, Wen-Jhy Lee, Chun-Ching Su, How-Ran Chao and Yi-Chin Fan, EE Dec. 96,

Ching Su, How-Ran Chao and YI-Chin Fan, EE Dec. 20, p1101-1109.

Effective Management and Control of Urban Flood Disasters in West Africa, S. O. Ojo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3705.

Enhancing AVM Systems by Operator Support DRS Functionalities, G. Ambrosino, M. Boero and P. Sassoli, (Apalications of Advanced Technologies in Transportation

plications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p413-417.

nvironmental Linkages between Urban Form and Municipal Solid Waste Management Infrastructure, Tony Di Nino and Brian W. Baetz, UP Sept. 96, p83-100.

An Expert System Application for Robot Assisted Urban Search and Rescue, John G. Blitch, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p199-205.

Extreme Winds as a Component of Catastrophic Risk, Gregory L. F. Chiu, (Probabilistic Mechanics & Struc-

Gregory L. F. Chiu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p498-501.
Flexible Dynamic Scheduling: A Major Improvement for Public Transport, Antonio Marqués, Manuel Torregrosa, Arturo Camarena, K. Darby-Dowman, Shirley Moody and James Little, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), n134-138. p134-138.

p134-138.
Floodplain Mapping Using Continuous Hydrologic and Hydraulic Simulation Models, A. Allen Bradley, Paula J. Cooper, Kenneth W. Potter and Thomas Price, HE Apr. 96, p63-68.

30, p03-06.
30, p03-08.
A General Framework for Approaching Mobility Problems in Urban Areas, Walter Ukovich, Davide Tercelli, Nicola Campanella and Marco Crasnich, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p166-170.

Hydrologic Risk, Robert C. Patev, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996).

David A. Moser, ed. and Eugene Z. Stakmy, ed., 1990), p416-418.

Indianapolis Uses New Radar Technology to Refine Hyetographs for CSO Model and SSES Studies, Patrick L. Stevens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1236-1241.

Joint Development Planning for Inner City Airport Capital Improvements, Orikaye G. Brown-West, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka

Seneviratne, ed., 1996), p199-211.

Mobility Forecast in an Urban Area through the Use of Neural Networks, Maria Nadia Postorino and Giuseppe M. L. Sarnè, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p213-217. A Model for the Design and Control of Urban Electric Traction Systems, O. Bottauscio and G. Farina, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p39-43.

Modeling of Stratified Urban Trip Distribution, V. Thamizh Arasan, M. Wermuth and B. S. Srinivas, TE Sept./Oct. 96, p342-349.

96, p342-349.
Natural Disaster Reduction Structures Specialist of the Urban Search and Rescue Task Forces, Daniel W. Cook, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p221-222.
Pedestrian Flow Estimation in Urban Environment by Image Processing, P. Vannoorenberghe, C. Motamed, J.-M. Blosseville and J.-G. Postaire, (Applications of Advanced Technologies in Transportation Environment)

vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p119-123.

Perspectives of Rebuilding Inner City Airports in the Emerging Post-Soviet Environment, V. L. Khazanet, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p34-44.

Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996, 0-7844-0180-2, 510pp.

Preliminary Features of a Decision Support System for Incident Detection, John Hourdakis and Athanassios P. Chassiakos, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p227-232.

The Rapid Simulation of a Signalised Road Network, Gor-The Rapid Simulation of a Signainsed Road (retwork, code don Russell, Neil Ferguson, Paul Shaw and John McInnes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996, p449-454. Reclaiming Denver's Central South Platte River, Nick Ski-

falides, Leo Eisel, Brian Kolstad and Ben Urbonas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Retrofitting an Urban Watershed for Improved Water Qual-ity, David Ennis, Michael Clar, Candace Szabad and Chien Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4202-4207.

Screening Hospitals and Fire Stations for Seismic Potenriceing riceptains and rife stations for Seismic Potentials in City of Tehran, F. Nateghi-A, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p349-350.

Searching for Optimal Combinations of Stormwater Deten-tion Basins, David C. Froehlich, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2264-2269.

Chayya Bathala, ed., 1996), p.2504-2209.
Storm-Surge Flooding in Chittagong City and Associated Risk, M. Mozzammel Hoque, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.3701.

The Strategic/Master Plan at Boeing Field: A Means of Op-timizing Airport Utilization at an Inner City Airport, Ju-lie Rodwell, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p12-23.

Strategies for Searching an Area with Semi-Autonomous Mobile Robots, Robin R. Murphy and J. Jake Sprouse, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p22-28.

A Study into Effectiveness of Urban Best Management Practises, Robert G. Traver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1852-1857.

Sustainable Watershed Management in Developing Water-sheds, Thomas H. Cahill, Joel McGuire and Wesley R. Horner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3969-3974.

Systematic Evaluation of Pollutant Removal by Urban Wet Detention Ponds, Jy S. Wu, Robert E. Holman and John

R. Dorney, EE Nov. 96, p983-988 Testing and Effectiveness of a New Urban BMP Stormcep-tor 100 No. Vincent H. Berg and Graham J. Bryant, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1864–1869. Traffic Control System for Metropolitan Areas Based on Radio Links between Vehicles and Infrastructure, Andrea Borella and Giovanni Cancellieri, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p398-402.

Trip Characteristics of Travelers without Vehicles, V. Thamizh Arasan, V. R. Rengaraju and K. V. Krishna Rao, TE Jan/Feb. 96, p76-81. Trip Mode Recommendation Using Travel Time Prediction, Michael Cremer, Carsten Holtmann and Stefan Schrieber, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p330-334.

Urban Disaster Vulnerability Assessment & Lessening Is a Key for Safe Development, Mark Klyachko, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), pl 1-12.

Urban Knowledge Parks and Economic and Social Devel-opment Strategies, George Bugliarello, UP June 96, p33-45.

Urban Water Conservation Efforts of the Irrigation Association, Tim Wilson, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p911-916.

An User Behaviour Analysis in Signalized Urban Intersec-tions by Artificial Neural Network, Lorenzo Mussone. Giuseppe Reitani and Savino Rinelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p208-212

1979), p.208-212.
VMS Control in Aalborg, Peder Jensen, Lone Jensen, Markos Papageorgiou, Albert Messmer, Habib Haj-Salem and Said Mammar, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p.373-377.

Waste Not in Wisconsin, David A. Rudig, CE June 96, p68-70.

Wetlands Score at Coors Field, CE Apr. 96, p26.

Urban development Accessing Atlantic City, Paul Regenscheid, CE Mar. 96, p62-63.

Changes in Ground Water-Surface Water Interaction in the Santa Ana River Caused by Independent Water Resourc-Santa Ana River Caused by Independent Water Resources Management Activities, Mark J. Wildermuth, Timothy F. Moore and Traci Stewart, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3300-3313.

The Engineering Profession as a Major Role Player in the New South African Political Order, Kevin Wall, El Apr.

96, p73-77

Meeting the Challenge: Rebuilding Inner City Airports, Pri-anka Seneviratne, ed., 1996, 0-7844-0179-9, 300pp. New City Breaks Ground, CE Sept. 96, p20,22

Providential Resurrection, CE May 96, p16.

Santa Clara River Fluvial Analysis, Jun Wang, Ruh-Ming Li and Sree Kumar, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p358-363. Urban Knowledge Parks and Economic and Social Devel-

ent Strategies, George Bugliarello, UP June 96,

Urban highways DGT Architecture for Traffic Data Management Systems, Adrián Marín Puigpelat and Jesús López López, (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p.238-242.LP Type Dynamic On-Ramp Traffic Control Model for Urban Expressway, Yasuo Asakura, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p434-438.VARIA - Variable Massace Signal.

VARIA - Variable Message Sign Control Based on OD-Estimation in a Motorway Network, Thomas Sachse and Hubert Schmid, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p383-387. **Urban planning**

754

27 Years Documenting Engineering Heritage, Eric DeLony, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p162-

Development and Implementation of a Capital Improvement Program for a Small Water Utility, Benito Avalos, Jorge Garcia, Louis Grijalva and Antonia M. Romerican (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3236-3240.

Early Surveys in the Nation's Capital, Steven M. Penning-ton, (Civil Engineering History: Engineers Make Histo-ry, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p86-95.

Extending the Legacy: Planning America's Capital for the 21st Century, Reginald W. Griffith, (Civil Engineering History: Engineers Make History, Erry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p25-33.

MPO's Conform to ISTEA Requirements, CE Oct. 96, p12,14.

New City Breaks Ground, CE Sept. 96, p20,22.

Reservoir Targets for Urban Water Supply Systems, B. J. C. Perera and Gary P. Codner, WR July/Aug. 96, p270-

Sanitary Engineers in American Cities: Changing Roles from the Age of Miasmas to the Age of Ecology, Martin V. Melosi, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p108-122.

Storm Drainage GIS, Modeling, and Master Planning for the City of Berkeley, H. Yee, J. Egeberg and D. Akagi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p4239-4244

Unique Coalition Plans to Revitalize Neighborhood, CE Nov. 96, p12-13.

William Claire, 84, Editor of ASCE's Urban Planning Guide, NE July 96, p15.

Urban renewal

Accessing Atlantic City, Paul Regenscheid, CE Mar. 96, p62-63.

Paris Spreads Its Western Wing, CE Apr. 96, p18,20.

Retail Renovations (Available only in Structures Special Issue), Abdol Haghayeghi, CE May 96, p10A-12A. Unique Coalition Plans to Revitalize Neighborhood, CE Nov. 96, p12-13.

William Claire, 84, Editor of ASCE's Urban Planning Guide, NE July 96, p15.

Negative Binomial Analysis of Intersection-Accident Frequencies, Mark Poch and Fred Mannering, TE Mar/Apr. 96, p105-113.

Urban runoff

Alternative Urban Flood Control, Parviz Monadjemi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2540.

Culvert Composite Sampler: A Cost-Effective Storm-Water Monitoring Device, Stephen J. Dowling and Brian W. Mar, WR July/Aug. 96, p280-286.

A Decision Making Approach for Stormwater Management Measures—A Case Example in the City of Waukesha, Wisconsin, James A. Bachhuber, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3981-3986.

The Direction of the Point Source Program, Deborah G. Nagle, Gregory W. Currey and Will Hall, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3580-3585.

Hollyhills Drain Relief for 1920's Drainage System, T. Scott Schales and Glen Drogin, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4251-4256. 755

- Immobilization of Metals and Solids Transported in Urban Paverment Runoff, John Sansalone, Steven Buchberger and Joseph Koran, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3115-3120.
- Los Angeles County Department of Public Works Storm Water Quality Assessments, Los Angeles, California, Novin Rashedi and David Liu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3993-3997.
- Risk Analysis for Urban Stormwater Quality Management, James P. Heaney, Leonard Wright and Samsuhadi, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p219-248.
- Washington State's Stormwater Management Program, Shari Scaftlein, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4245-4250.

Urban transportation

- Application of Discrete Event Methodologies to Urban Multimodal Transportation Systems, Angela Di Febbraro and Simona Sacone, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), n154-158
- Development and Application of Urban Information Strategies, E. G. Shinakis, M. McDonald and A. Richards, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p310-314.
- Development of a Decentralized Traffic Control System Based on Logic Programming, Giovanni Felici, Giovanni Rinaldi and Klaus Truemper, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p573-577.
- Estimating Effects of TLC Into Urban Public Road Transport, Luigi Biggiero, Massimo Di Gangi and Bruno Montella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p66-70.
- Estimation of Turning Movement Proportions from Partial Sets of Traffic Counts at Intersections, Gary A. Davis and Chang-Jen Lan, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), 628-632.
- The Gaudi-Marseille Experiment: An Example of a Multiservice Remote Payment System, D. Danflous and G. Coquet, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p542-546.
- A General Framework for Approaching Mobility Problems in Urban Areas, Walter Ukovich, Davide Tercelli, Nicola Campanella and Marco Crasnich, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p166-170.
- Impact of Commuter-Rail Services in Toronto Region, Sarah Stewart Wells and Bruce G. Hutchinson, TE July/ Aug. 96, p270-275.
- Methodologies for the Analytic Definition of Uniform Travelling Time-Shifts of an Urban Public Transportation Service, Severo Pace and Graziana Ghio, Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996, p. 139-145.
- MPO's Conform to ISTEA Requirements, CE Oct. 96, p12,14.
- Package System for Supporting Decisions in a County Area, Quinto Riccardo Bertini and Pietro Antonio Cappa, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p408-412.

- PRIMAVERA: A Best Practice Manual for Innovative UTC Schemes, F. O. Montgomery, A. D. May, K. Fox, F. Biora, V. Mauro and S. Jones, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p680-684.
- PRIMAVERA: Integrated ATT Strategies for Urban Arterials, F. O. Montgomery, A. D. May, K. A. Fox, F. Biora, V. Mauro and S. Jones, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p685-689.
- Public Transport Priority in Real-Time Traffic Control Systems, N. B. Hounsell and J. P. Wu, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p71-75.
- REGIT Project: An Advanced Transportation Management System for the City of Terni, C. Galli, A. Mattucci and Righetti, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p676-679.
- A Strategy for Urban Transit Route Selection, Stefano Carrese and Stefano Gori, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p144-148.
- A Systematic Review of Busways, David R. Martinelli, TE May/June 96, p192-199.
- MayJunia 90, pt 21-199. Urban Control Services Integration the Innovative Components of THERMIE-JUPITER Architecture in Florence, G. Ambrosino, M. Boero, L. Niccolai, M. Romanazzo and M. Turrini, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p515-519.

Urbanization

- Alternative Urban Flood Control, Parviz Monadjemi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2540.
- Implementation of Watershed Planning in Chester County Pennsylvania, Robert G. Traver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3975-3980.
- Urbanization and Hydrologic Consequences in Simi Valley, California, M. Ali Tabidian, James M. Evensen, Jr., Don D. Adelman and Steve Elliott, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3332-3337.
- Zonification of Areas with Inundation Risk by Means of Mathematical Modeling in the Rosario Region, Argentina, G. A. Riccardi, E. D. Zimmermann and R. A. Navarro, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3704.

Hear fee

- Estimating Effects of TLC Into Urban Public Road Transport, Luigi Biggiero, Massimo Di Gangi and Bruno Montella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p66-70.
- Storm-Water Utility User Fee Credits, Andrew J. Reese, WR Jan./Feb. 96, p49-56.

Litab

Nongrowing Season Evaporation in Northern Utah, Richard G. Allen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p225-230.

Tiethiel.

- At AWWA Conference, Public Utilities Put Up a Fight, CE Sept. 96, p24-25.
- Canal Crossing of High-Pressure Pipelines, Hiroya Kishino, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p434-440.
- Central Artery Utility Crossings, Brian Brenner, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p130-138.

Challenges of an Advance Utility Contract for a Major Highway Widening Project in Norfolk, Virginia, Gary M. Hart, Peter S. Fortin and Gary L. Heisler, (*Pipeline Crossings* 1996, Lawrence F. Catalano, ed., 1996), p348-355.

Cold Regions Utilities Monograph, 3rd edition, Daniel W. Smith, ed., 1996, 0-7844-0192-6, 780pp.

Smith, ed., 1996, 0-7844-0192-6, 780pp.
Concept for a Permanent Lunar Utilities System, David G. Schrunk, Bonnie L. Cooper and Burt L. Sharpe, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p935-941.
Construction Forum, SC Nov. 96, p99-103.
Dangerous Digging Requires New Excavation Methods, CE May 96, p22-23.
Drying Sludge Saves Costs, CE Oct. 96, p11.
Environmental Concerns for High-Voltage Transmission Lines in UNIPEDE Countries, E. C. Kalkani and L. G. Boussiakou, EE Nov. 96, p1042-1045.
Evaluation and Upgrade of Maior Transmission Lines

Evaluation and Upgrade of Major Transmission Lines Crossing Active Faults, Robert W. Lau, David D. Lee, David L. Pratt and Marilyn L. Miller, (Pipeline Cross-ings 1996, Lawrence F. Catalano, ed., 1996), p418-425.

Financing the Future of Storm Water, Patrick S. Collins, CE Mar. 96, p64-66.

How Did a California Dam Get a Section 404 Permit? Gary ow Did a Cantornia Dam Get a Section 404 Permit? Gary W. Darling and Joel B. Butterworth, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p976-981.

Cherchayya Bannan, ed. 1701, p. Mapping Underground, ET June/July 96, p7,11. New Transmission Line Lets Power Corne Cheaper, CE

Aug. 96, p14,16.

Physical Distribution System Models for Assessing the Impact of Water Quality on Regrowth and Corrosion, Anne K. Camper, Warren L. Jones and Calvin Abernathy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1437-1441

p1437-1441.
Rethinking Well Efficiency, Otto J. Helweg and Timothy Mays, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p354-959.
Smithfield Interceptor Force Main River Crossings, Fredrick M. Muncy, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p173-179.
Solving Cellection Problems to Increase Revenue: The

Solving Collection Problems to Increase Revenue: The Houston Experience, Karen Philippi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4282-4287.

Storm-Water Utility User Fee Credits, Andrew J. Reese,

WR Jan/Feb. 96, p49-56. Survey of Storm-Water Utilities Available, Robert B. Benson, CE July 96, p29.

Utilities and Systems for the New U.S. South Pole Station, Amundsen-Scott Station, Antarctica, Steven Theno and Dick Armstrong, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p424-435

Utilizing Coordinated Billing and Metering Systems Analysis to Enhance Utility Revenue on a Shared Revenue Basis, Randy P. Schuler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4275-4281.

Vulnerability of Pacific Northwest Port-Related Lifeline Structures Based on Observations from the Kobe Earth-quake of January 17, 1995, David B. Swanson, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p9-10.

Water Quality Improvement Program in Ventura County at Port Hueneme, Lynn M. Takaichi, Sachiko Itagaki and Dennis D. Wolfe, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p412-417.

Wellhead Protection: Local and Community Efforts, Sharon Lien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p966-969.

Utility theory

Utility-Theory Model for Bid Markup Decisions, S. P. Doz-zi, S. M. AbouRizk and S. L. Schroeder, CO June 96, p119-124.

Cleaning Up Clay, Eric C. Lindhult and Daniel A. Kwiecin-ski, CE May 96, p49-51.

CHEMFLO Modeling of Aquifer Bioremediation in Va-dose Zone, Avdhesh K. Tyagi. (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2516-2521.

Editorial, M. L. Kawas, HE Jan. 96, pl.

Fate of Organics during Column Studies of Soil Aquifer Treatment, David M. Quanrud, Robert G. Arnold, L. G. Wilson, Howard J. Gordon, David W. Graham and Gary L. Amy, EE Apr. 96, p314-321.

Geochemical Modeling of Lead in Vadose Zone, K. V. Nedunuri, R. S. Govindaraju, A. P. Schwab and L. E. Erickson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1221-1226.

1990), p1221-1220. Hysteresis Effect of Karst Vadose Zone in Spring Kr5, Mt. Kräuterin, Austria, Dachang Zhang, Rudolf Pavuza, Karl Mais and Hans Fischer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1754-1759.

Optimizing Soil Vapor Extraction System Design and Op-erations for NAPL Remediation, John M. Farr, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi,

ed., 1996), p201-211.

The Role of Capillary Pressure Curve Selection in Modeling LNAPL Transport in the Vadose Zone, Jason L. Buesing and Marina Pantazidou, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p490-

A Screening Level Model for Estimation of Vadose Zone Scheduling and Saturated Zone Mixing: VLEACHSM, Sang B. Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1736-1741.

Surfactant Enhanced Electrokinetic Remediation of Gaso-line Contaminated Soils, Sujan K. Bhattacharya, David H. Foster and J. Mohan Reddy, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p311-

Comprehensive Fate Model for Metals in Municipal Waste-water Treatment, Wayne J. Parker, Hugh D. Monteith, John P. Bell, Henryk Melcer and P. Mac Berthouex, EE Sept/Oct. 94, p1266-1283.

Eastern San Joaquin County Groundwater Resource Plan-ning Alternative Analysis, Najmus Saquib, Alex Chen, Umesh Lalwani, Mike Cornelius, Jeff Kishel, Gary Nuss and Mark Williamson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3515-3520.

Field Validation and Application of a Coastal Profile Model, J. A. Roelvink, Th. J. G. P. Meijer, K. Houwman, R. Bakker and R. Spanhoff, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996).

p818-828.

Intended Validation in the Swedish Program for Spent Nu-clear Fuel, Bjorn Cronhjort and Grant Sheng, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p67-69.

Large-Displacement Analysis of Elastoplastic Thin-Walled Frames. II: Verification and Application, B. A. Izzuddin and D. Lloyd Smith, ST Aug. 96, p915-925.

Modeling 3D Free Surface Flow in Compound Channels: A Validation Case Study, Fraincisco J. M. Simões and Sam S.-Y. Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2719-2724.

Predicting the Concentration of Trace Metals in Natural Waters: Application of Co-Precipitation and Co-Dissolution Models, Jordi Bruno and Lara Duro, (High Level Radioactive Waste Management, Technical Pro-

Level Radioactive Waste management, sectional regram Committee, 1996, p64-66.

Rotation of Large Gravity Walls on Rigid Foundations under Seismic Loading, R. S. Steedman and X. Zeng, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p38-56.

Earinquakes, Shansher Trakash, ed., 1990, p.88-30. Source Characterization at Contaminated Sites, Sudhakar R. Kondisetty, Priyantha W. Jayawickrama and Kenneth A. Rainwater, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1990, 2021, 0421 1996), p927-943.

Validating Expert Systems in Transportation Practice, Gary Validating Expert systems in Transportation Fractice, Gary S. Spring, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p985-991.
Validation of a Model for Cross-Shore Sediment Transport,

Irene Katopodi and Nikos Kitou, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p806-817.

1990), psuo-817.
Validation of Numerical Model for Wind Waves and Swell in Harbors, Edward F. Thompson, H. S. Chen and Lori L. Hadley, WW Sept/Oct. 96, p245-257.
Validation of the Simplified Audit Process at a Roofing Tar Paper Speciality Product Manufacturer - Part 2, Pierre Sylvestre, Ronald Zaloum, Chantal Goyette and Claude Audet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p93-98.

Verification of a 3D Flow Model Using Laboratory Data, Yafei Jia and Sam S. Y. Wang, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3458-3463.

Value engineering

Holistic Appraisal of Value Engineering in Construction in United States, Angela Palmer, John Kelly and Steven

Male, CO Dec. 96, p324-328.
Lining the Line, Walter Mergelsberg, Vojtech Gall and Gerhard Sauer, CE Mar. 96, p50-52.

Gerhard Sauer, CE Mar. 96, p50-52.

Simple Method for Upgrading an Existing ReinforcedConcrete Structure, Hong Sioe Oey and Carlos J. Aldrete, SC Feb. 96, p47-50.

Value Engineering Changes to the Eastside Pipeline, Antonio J. Perez, Francisco Becerra and John Vrsalovich,
(North American Water and Environment Congress &
Destructive Water, Chenchayya Bathala, ed., 1996),
p697-701.

Value Engineering in the Assessment of Exterior Building Wall Systems, Abdulmohsen Al-Hammad and Moham-mad A. Hassanain, AE Sept. 96, p115-119.

Valves
Application of the Newton Method in Valve Discharge
Coefficient Relationships, Jorge A. Garcia and Antonia
M. Romero, (North American Water and Environment
Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p946-953.

Field Determination of Flow through a Pressure Regulating Valve, Jorge A. Garcia and Antonia M. Romero, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3610-3616.

Vapor pressure Borehole UE-25 ONC #1 Drilling at Yucca Mountain, Nevada, Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Effects of Vapor Extraction on Contaminant Flux to Atmosphere and Ground Water, Tjalfe G. Poulsen, Joel W. Massmann and Per Moldrup, EE Aug. 96, p700-706.

Optimization of Soil Vapor Extraction System Design, Yung-Hsin Sun and William W-G. Yeh, (North Ameri-

can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl 387-1392. Risk Assessment of Vapors in Cold Regions, Robert A. Perkins, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p360-371.

Venting Test Analysis Using Jacob's Approximation, Kenneth B. Edwards, EE Mar. 96, p232-234.

Variability

Analysis of Eigenvalue Variability for 2D Stochastic Structural Systems Using Variability Response Functions, George Deodatis and Lori Graham, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p600-603.

Assessing the Significance of Subgrade Variability on Test Section Performance, Maureen A. Kestler, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and

Mary J. S. Roth, ed., 1996), p685-694.

Calibration of XRF and Laboratory Analyses of Soil, Blair J. McDonald, Janice J. Trautner, Alan G. Seelos and J. McDonaid, Janice J. Irautner, Alan G. Seetos and Richard K. Glanzman, (Uncertainty in the Geologic En-vironment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p287-296.

California State Route 91 Variable Toll Express Lanes: Operational Aspects and Impact Assessment, Edward C. Sullivan and Jerry C. Porter, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p547-551

Clay Brick Masonry Weight Variation, Clayford T. Grimm, AE Dec. 96, p135-137.

Common and Variable Characteristics in Spatially Recorded Seismic Ground Motions, Ouqi Zhang and Aspasia Zerva, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p628-631.

Comparison of Spatial Variability of Infiltration Properties omparison of Spatial variations of infinitation Properties at Two Sites in Konza Prairie of East-Central Kansas, R. S. Govindaraju, J. K. Koelliker, M. K. Banks and A. P. Schwab, HE July 96, p131-138.

Dealing with Uncertain and Highly Variable Geotechnical Conditions Beneath the Inco Smelter in Copper Cliff, Karlis J. Jansons, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1383-1401.

Dempster-Shafer Approach to Soil Properties, David Rees Gillette, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1254-

Effect of Sampling Variability on Hindcast and Measured Wave Heights, George Z. Forristall, John C. Heideman, Ian M. Leggett, Bram Roskam and Luc Vanderschuren, WW Sept./Oct. 96, p216-225.

Evaluating the Variability of Engineering Properties of Soil Deposits Using Fractals, Luis E. Vallejo, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p353-367.

Finite Actuator VGT Manipulator Shape Control Paradigm, William C. Farrow, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p86-92.

Ground Water Variability at Sanitary Landfills—Causes and Solutions, John Oneacre and Debbie Figueras, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p965-987.

Influence of Spatial Variability of Soil Properties on Seismically Induced Soil Liquefaction, Radu Popescu, Jean H. Prevost and George Deodatis, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1098-1112.

Longitudinal Analysis of Bicycle Count Variability: Results and Modeling Implications, Debbie A. Niemeier, TE May/June 96, p200-206.

Low Building Wind Load Variability for Code Applica-tions, T. C. Eric Ho, (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1053-1060.

Mathematical Techniques & Software for Stochastic Design Optimization, Jean M. Parks and Chun Li, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p118-121.

Non-Statistical Uncertainties in Liquefaction Risk Assessment, Khalid M. El Zahaby and M. S. Rahman, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1068-1082.

On Quantifying Inherent Soil Variability, Kok Kwang Phoon and Fred H. Kulhawy, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Piscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p326-340.

Optimal Design of Steel Transmission Poles, Fatma Y. Kocer and Jasbir S. Arora, ST Nov. 96, p1347-1356.

Performance of Electric Irrigation Pumping Plants Using Variable Frequency Drives, B. Hanson, C. Weigand and S. Orloff, IR May/June 96, p179-182.

Probabilistic Assessment on Variability of Mechanical Properties of Rock Masses, Hang Gao, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed. 1996), p934-937.

Response of Pile Embedded in Stochastic Ground Media, Makoto Suzuki and Tsuyoshi Takada, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p612-615.

Sand Variability from Ground Penetrating Radar Data, Charles T. Young and Jon P. Doucette, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p368-382.

Soil-Limiting Flow from Subsurface Emitters. II: Effect on Uniformity, A. W. Warrick and U. Shani, IR Sept./Oct. 96, p296-300.

Spatial Variability of Soil Parameters, Derin N. Ural, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p341-352.

Spatiotemporal Stochastic Open-Channel Flow. I: Model and Its Parameter Data, Timothy K. Gates and Muhammad A. Al-Zahrani, HY Nov. 96, p641-651.

Spatiotemporal Stochastic Open-Channel Flow. II: Simulation Experiments, Timothy K. Gates and Muhammad A. Al-Zahrani, HY Nov. 96, p652-661.

Variability in Site-Specific Seismic Ground-Motion Design Predictions, C. J. Roblee, W. J. Silva, G. R. Toro and N. Abrahamson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p. 1113-1136.

Variability Response Functions for Plane Elasticity Problems with Multiple Stochastic Material/Geometric Properties, Lori Graham and George Deodatis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p174-177.

Variability Response Functions for Random Eigenvalue Problems, George Deodatis and Lori Graham, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p681-684.

Vibration Analysis of Special Orthotropic Plate with Variable Cross-Section, and with a Pair of Opposite Edges Simple Supported and the Other Pair of Opposite Edges Free, Duk Hyun Kim, Keyong Jin Kim and Do Sik Sim, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1408-1417.

Variance analysis

Implementation of Variance Reduction Techniques Using Monte Carlo Stratified Sampling in the COMPROMIS Code Version 2, Emmanuel Ardillon, Patrice Pitner and Bernard Lapeyre, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p692-695.

Vector analysis

Computational Aspects of Dynamic Concrete Viscoplasticity, Olubayo O. R. Famiyesin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p282-285.

Vector Analysis of Keyblock Rotations, Matthew Mauldon and Richard E. Goodman, GT Dec. 96, p976-987.

Vegetation

758

Are Erosion Control Programs Reducing Sedimentation? D. P. Roseboom, R. Sinclair, Gary Eicken and Pat Woods, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2879-2884.

Cellular Confinement System Helps Hold Slope, CE Dec. 96, p87.

Channel Restoration Project Along Toby Creek, Dennis N. Jermeland, Daniel Billman and William R. Tingle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3521-3526.

Control Systems Governing Gravity-Dependent Plant Growth, C. Duran, D. Flores, J. D. Smith and G. W. Morgenthaler, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1095-1101

Effects of Southern California Kelp Beds on Waves, M. Hany S. Elwany, William C. O'Reilly, Robert T. Guza and Reinhard E. Flick, WW Mar/Apr. 95, p143-150.

Environmental Assessment of a Site for Civil Construction, S. M. Govorushko, UP Mar. 96, p18-31.

An Experimental Study on the Use of Constructed Wetlands for Stormwater Management, Shih-long Liao, Shaw L. Yu and Stephen J. Long, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2462-2467.

Habitat Preservation and Enhancement Associated with San Diego Creek Flood Control Channel Improvement, Yen-Hsu Chen and Ruh-Ming Li, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p530-535.

Hydrodynamic Behavior of Partly Vegetated Open Channels, Dan Naot, Iehisa Nezu and Hiroji Nakagawa, HY Nov. 96, p625-633.

The Importance of Plant Community Structure on Form and Function of Created Wetland Systems, Richard A. Orson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1197-1202.

A New Technique for Measuring Vegetation Density, Syndi J. Dudley, Steven R. Abt, Charles D. Bonham and J. Craig Fischenich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3656-3661.

Oxygen Supplies for Bioremediation in Tundra Soils, Daniel M. White and Robert L. Irvine, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p339-350.

Phytoremediation: Plant Uptake of Atrazine and Role of Root Exudates, Joel G. Burken and Jerald L. Schnoor, EE Nov. 96, p958-963.

Plant Growth Experiments in Johnson Space Center's Advanced Life Support System Program, John E. Gruener, Douglas W. Ming, Daniel J. Barta and Donald L. Henninger, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1090-1094.

Predicting Stage-Discharge Curves in Channels with Bank Vegetation, Stephen E. Darby and Colin R. Thorne, HY Oct. 96, p583-586.

Rehabilitating Arctic Tundra in Alaska, Jay D. McKendrick, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p764-769.

Restoration Design for Urban Streams: Anacostia River Basin, Maryland, Meg Burns, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4198-4201.

Retaining Wall Enhances Flowering Residential Site, CE Jan. 96, p77.

Role of Vegetation in Hydraulics of Channel Restoration, Marcelo H. García, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2607-2612.

ment Congress & Destructive Water, Chenchayya Battala, ed., 1996), p2607-2612.

Shallow and Surfacing Ground Water in an Arid Urban Environment, D. L. Smith and J. C. Guitjens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1495-1500. Simulating Evapotranspiration on Semi-Arid Rangelands, G. N. Fierchinger, C. L. Hanson, W. P. Kustas and M. A. Weltz, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p424-429.

Studies on Herbal Desalination, Godavarthy Ramprasad and Varanasi Kaliprasad, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1015-1020.

Synchronized Measurements of Bed-Shear Stress and Flow Velocity in Open Channels with Simulated Vegetation, Fabián López and Marcelo García, (North American rannan Lopez, and Marceto Carcia, (worth American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3651-3655.

Three-Dimensional Organized Vortices Above Flexible Water Plants, Syunsuke Ikeda and Minoru Kanazawa, HY Nov. 96, p634-640.

Unstable Patterns in Partly Vegetated Channels, Dan Naot, Jehisa Nezu and Hiroji Nakagawa, HY Nov. 96, p671-

Vegetation-Induced Drag: An Experimental Study, Chad Dunn, Fabián López and Marcelo García, (North Ameri-

Dunn, Pabian Lopez and Marcelo Garcia, (Norin American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3824-3828.

Wave Motion in Vegetated and Non-Vegetated Coastal Zones, Stanislław R. Massel, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1-12.

Vegetative cover

Modeling Impact of Small Kansas Landfills on Underlying Aquifers, Marios Sophocleous, Nicholas G. Stadnyk and Miles Stotts, EE Dec. 96, p1067-1077.

Vegetative Roughness in Flood Control Channels, Gary E. Freeman, David R. Derrick and William J. Rahmeyer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1513-1518.

Vehicle impact forces
Design and Analysis of Approach Terminal Sections Using
Simulation, John D. Reid, Dean L. Sicking and Gene W.
Paulsen, TE Sept./Oct. 96, p399-405.
Detroit Cushion Wall Has a Positive Impact, CE May 96,

p84.

Vehicle safety
Detroit Cushion Wall Has a Positive Impact, CE May 96,

Vehicle usage Longitudinal Analysis of Bicycle Count Variability: Results and Modeling Implications, Debbie A. Niemeier, TE May/June 96, p200-206.
On Concept of Lateral Change of Acceleration, Orhan Bay-kal, SU Aug. 96, p132-141.

Advanced Technologies Applied to Public Transport Fleets Maintenance: Diamante Project, Antonio Marqués, Vi-cente Sebastián, Vicente Macián and Ma. José Lerma, (Applications of Advanced Technologies in Transporta-

(Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p19-23.
Alternative Scenarios for Military Deployment of Un-manned Ground Vehicles, John G. Blitch and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p36-42.
Autonomous Intelligent Cruise Control Using the Fuzzy Logic, Kwang Soo Chang and Jae Sung Choi. (Amilica-tion)

Logic, Kwang Soo Chang and Jae Sung Choi, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p644-655.

BootStrapping Space Resource Utilization with Tethers, Regolith Rockets and Micro Rovers, Bruce A. Mackenzie, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p321-327.

Space, Stewart W. Johnson, ed., 1996), p321-321.
Classifying Vehicles Using Their Auditory Signature Based on an Auditory Model, Denis McKeown, Stephen Hadland, Howard Kirby, Mark Dougherty, Luke Ibbetson, Louis Lopes and Peter Roach, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p711-715.

Coils Could Put ITS on Right Track, ET Apr./May 96, p1,7. Colls Could be a Mobile Instrument Deployment Device (MIDD), Lutz Richter, Klaus Schilling, Marco C. Bernasconi, Christoph Jungius and César Garcia-Marirotoffiag, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p283-289.

Dynamic Analysis of Resilient Crosstie Track for Transit System, M. J. Fatemi, M. F. Green, T. I. Campbell and

A. Moucessian, TE Mar./Apr. 96, p173-180.

Electric Vehicle Charging Sites Surveyed, CE Mar. 96, p8. Fuzzy Drivers Make Good Models, Monica Maldonado, ET

June/July 96, p1,9.

Incorporating Terrain Uncertainties in Autonomous Vehicle Path Planning, Kevin K. Gifford and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Dem-setz, ed., 1996), p15-21.

Iowa Touts Transportation, CE Nov. 96, p24.

Large Strain Finite-Element Analysis of Snow, Günther Meschke, Changhong Liu and Herbert A. Mang, EM July 96, p591-602.

Lunar Base Scenario for Middle School with RC Rover, Louise Fayette, Ruth M. Fruland and Carolyn Evans McDonald. (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p317-322.

Mechanistic-Probabilistic Vehicle Operating Cost Model, Curtis F. Berthelot, Gordon A. Sparks, Terry Blomme, Lyle Kajner and Mark Nickeson, TE Sept./Oct. 96, p337-341.

A Minimum Risk Evaluation Methodology for Fault Toler-ant Automotive Control Systems, P. Borodani, L. Gortan, R. Librino and M. Osella, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p552-557.

Motion Planning of a Robotic Arm on a Wheeled Vehicle on a Rugged Terrain, Yong K. Hwang, (Robotics for Challenging Environments, Laura A. Demsetz, ed.,

1996), p8-14.

Protecting Buildings against Vehicle Bomb Attacks, Anatol Longinow and Kim R. Mniszewski, SC Feb. 96, p51-54.

Reexamining Vehicle-Actuation Strategies at Isolated Sig-nalized Intersections, Michael Cassidy, Yu-Hao Chuang and Jeff Vitale, TE May/June 96, p235-540.

Signal Processing Study for an FM/CW Collision Avoidance System, Pascal Deloof, Atika Menhaj, Jamal Assaad, Nathalie Haese and Christian Bruneel, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p661-665. Simulation and Visualization of Martian Rover, William

Lincoln, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p143-149.

Strategies for Searching an Area with Semi-Autonomous Mobile Robots, Robin R. Murphy and J. Jake Sprouse, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p22-28.

Sette, ed., 1996), p.22-28.
Structural Design for Vehicular Bombs, Task Committee on Structural Design for Physical Security, (Paul F. Mlakar, FASCE, Chair, chmn.), (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1269-1276.

Tolls Ready to Roll, ET Mar./Apr. 96, p7.

Train/Vehicles Wind-Induced Hazard and Its Mitigation, Masaru Matsumoto and Tatsuo Maeda, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p131-132.

Vision Technique for Platoon Driving, Michel Parent, Pascal Daviet and Sofiane Abdou, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p666-675.

Vision-Based Automated Overtaking Control, Massimo

VISION-BASED Automated Overtaking Control, Massimo Tistarelli, Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p705-710.
Visual Mosaicking of the Ocean Floor and its Relation to Three-Dimensional Occlusions, Sanjay Tiwari, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p29-35.

Vehicular traffic

Chicago Returns Traffic to Pedestrian Mall, CE June 96, p14.

Cost Benefit Analysis of Video-Based Vehicle Detection, Panos G. Michalopoulos, Craig A. Anderson and Richard D. Jacobson, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p176-182.

Density and Conditioning Characteristics of Motorway Vehicular Traffic Flow, V. Torrieri, D. Gattuso, G. Musolino and A. Vitetta, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p198-202.

Dynamic Vehicle Allocation Under Real Time Information:
Operational Considerations and Potential Efficiencies,
Amelia C. Regan, Hani S. Mahmassani and Patrick Jaillet, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Franorgen Eillung and 1006, ne2016004. cesco Filippi, ed., 1996), p690-694.

Providential Resurrection, CE May 96, p16.

Seepage Stoppers, V. J. Hebert, P.E., Juan Lelito, P.E. and A. Naudts, CE Oct. 96, p68-70.

Simple and Efficient Traffic Vision Algorithms, T. N. Tan, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p129-133.

A Strategy for Urban Transit Route Selection, Stefano Carrese and Stefano Gori, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p144-148.

Studded Tire Research in Norway, Finland and Sweden, Eric Johnson, Tony Barter and David Sterley, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p676-687.

Traffic Control System for Metropolitan Areas Based on Radio Links between Vehicles and Infrastructure, Andrea Borella and Giovanni Cancellieri, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p398-402.

Traffic Load Effects on Highway Bridges, Sang Hyo Kim and Sang Ho Lee. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p38-41.

Vehicle Detection Using Radial Basis Neural Network, Suryanarayana Manti and Darcy Bullock. (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p188-192.

Vehicle Traction Performance Comparison for Alaska Winter Seasons, J. John Lu, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996),

Vision-Based Automated Overtaking Control, Massimo Tistarelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p705-710.

"Marriage" of Fiber Optic and Wireless Communications Supporting Intelligent Transportation Systems, Bruce C. Abernethy, (Applications of Advanced Technologies in Transportation Engineering, Vorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p248-255.

Canal Design by Dynamic Programming, Goran Radovic, IR Jan./Feb. 96, p39-63.

Determination of Bridge Scour Velocity in an Estuary, Billy L. Edge, Stephan N. Vignet and John S. Fisher, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Effect of Acceleration on Bottom Shear Stress in Tidal Estuaries, A. Y. Kuo, J. Shen and J. M. Hamrick, WW Mar./Apr. 96, p75-83.

An Energetics Approach to Sand Transport on Beaches, Paul Russell, Yolanda Foote and David Huntley, (Coast-al Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p829-840.

Zeidler, ed., 1996), p829-840.
Estimation of Bed Material Transport Capacity, Henry M.
Fehlman and Ruh-Ming Li, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1033-1038.
Filling of Pipelines with Undulating Elevation Profiles, Chyr Pyng Liou and William A. Hunt, HY Oct. 96, p534-539.

The Importance of Maintaining Smooth Airport Pavements, Tony Gerardi, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p295-305. Initial-Inflow-Variation Impacts on Furrow Irrigation Eval-uation, D. Renault and W. W. Wallender, IR Jan/Feb.

96, p7-14.

96, p7-14.
Manning's Roughness Coefficient for Coarse-Bed Channels With High In-Bank Flows, David Froehlich and Craig A. Benson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p436-441.
Modeling Low Velocity/High Dispersion Flow in Water Distribution Systems, David H. Axworthy and Bryan W. Karney, WR May/June 96, p218-221.
One-Dimensional Finite-Flowent Model for High Flow Venezional Finite-Flowent Model for High Flow

One-Dimensional Finite-Element Model for High Flow Velocities in Porous Media, Blair T. Greenly and Douglas M. Joy, GT Oct. 96, p789-796.

Optimized Boundary Conditions for Coastal Modeling, Igor Shulman and James K. Lewis, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p268-282.

1990), p260-29.
Particle Spinning Motion during Saltating Process, Hong-Yuan Lee and In-Song Hsu, HY Oct. 96, p587-590.
Quasi Two-Dimensional Hydraulic Analysis of Drop Structures, William C. Taggart, Katherine J. Chase and Peter L. Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p600-605.

Random Field of Cumulative Damage by Space Debris Impact, A. Der Kiureghian, P. V. Geyskens and M. R. Khalessi, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p668-671.

Temporal Development of Local Scour at Bridge Piers, Yee-Meng Chiew and Bruce W. Melville, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2556-2564.

Theory and Practice of Projectile's Penetration in Soils, Yu. Boguslavskii, S. Drabkin, I. Juran and A. Salman, GT Oct. 96, p806-812.

Three-Dimensional Organized Vortices Above Flexible Water Plants, Syunsuke Ikeda and Minoru Kanazawa, HY Nov. 96, p634-640.

Tilt of Stationary Capsule in Pipe, Chih-Chiang Cheng and Henry Liu, HY Feb. 96, p90-96.

Velocity and Concentration Profiles in Sheet-Flow Layer of Movable Bed, B. M. Sumer, A. Kozakiewicz, J. Fredsøe and R. Deigaard, HY Oct. 96, p549-558.

Velocity distribution

Vencty distributions in Nearshore Currents, Marek Szmytkiewicz, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p366-376.

Latily, ed. and Ryszard B. Zeidler, ed., 1996), p366-376. Hydraulic Jump in Sloping Channels, Mustafa Gunal and Rangaswami Narayanan, HY Aug. 96, p436-442. Methods for Measuring Discharge under Ice Cover, John F. Walker, HY Nov. 94, p1327-1336. Modeling Overfalls Using Vertically Averaged and Moment Equations, Abdul A. Khan and Peter M. Steffler, HY July 96, p397-402.

Velocity Distribution in Compound Channel Flows by Nu-merical Modeling, Giuseppe Pezzinga, HY Oct. 94, p1176-1198.

Velocity gradient Direct Measurement of Turbulence Structures in a Standard Jar Test Tank Using PIV System, Chen-Yu Cheng, Jo-seph F. Atkinson and Marcus I. Bursik, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3746-3751. Significance of Lateral Elevation Gradients in Tidally Affected Tributaries, Frederick E. Schuepfer, Guy A. Apicella and Vincent J. DeSantis, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p229-239.

Velocity profile

Error Estimate in Einstein's Suspended Sediment Load Method, Nadim M. Aziz, HY May 96, p282-285.

Estimation of Mean Flow Velocity in Ice-Covered Channels, Martin J. Teal, Robert Ettema and John F. Walker, HY Dec. 94, p1385-1400.

On the Relationship between Net-Momentum Fluxes and Wall-Normal Velocity Fluctuations, Fabián López and Marcelo García, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p661-664.

Transition from Hydraulic Jump to Open Channel Flow, S. Wu and N. Rajaratnam, HY Sept. 96, p526-528. Velocity and Turbulence Distribution in Unsteady Open-Channel Flows, T. Song and W. H. Graf, HY Mar. 96, p141-154.

Velocity Profile in Shallow Coastal Waters, Habib D. Anwar, HY Apr. 96, p220-223.

Vertical Profiles of Longshore Currents and Bed Shear Stress, E. B. Thornton, C. M. C. V. Soares and T. P. Stanton, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p449-459.

Veneers

Testing of Prestressed Clay-Brick Walls, Gary L. Krause, Ravi Devalapura and Maher K. Tadros, (Worldwide Ad-vances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p37-48.

Design Modification of Water Supply Intakes in Mountain-ous Regions, Adnan Alsaffar, Yifan Zheng and Karim Khalifa, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p4046-4051.

Ventilation

Applications of CFD Flow Modelling in Building Design, J. R. Sinclair, P. A. Irwin, K. M. Matsui, M. Vanderhey-A. M. Madail, F. A. Ilwin, K. M. Madail, M. Valicarley-den and F. Kriksic, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p997-1004.

Effect of Repository Underground Ventilation on Emplacement Drift Temperature Control, Hang Yang, Yiming Sun, Daniel G. McKenzie and Kalyan K. Bhattacharyya, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p417-419.

Estimation of Leakage Quantity for Long Auxiliary Venti-lation Systems, Felipe Calizaya and Pierre Mousset-Jones, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p429-431.

Indoor Air Quality Cost Comparisons in Three Typical Buildings, Peter Rojeski, Jr. and Harmohindar Singh, AE Sept. 96, p107-114.

Moisture Removal from the Repository by Ventilation and Impacts on Design, Parviz Montazer and Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p423-425.

Natural Ventilation of an Exothermic Waste Repository, George Danko and Steven Saterlie, (High Level Radioac-tive Waste Management, Technical Program Committee, 1996), p426-428.

Postoccupancy Indoor Environmental Quality Evaluation of an Institutional Building, Brian A. Rock, P.E. and Craig A. Hillman, AE Sept. 96, p88-94.

Thermal Management with Ventilation, George Danko, Thomas A. Buscheck, John J. Nitao and Steven Saterlie, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p420-422.

Venting Test Analysis Using Jacob's Approximation, Kenneth B. Edwards, EE Mar. 96, p232-234.

Verification inspection

Overview of the International Space Station Extra Vehicular Robotics Verification, Corrie Hunt, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p502-508.

Case History - Outfall Pipeline Failure - Burlington, VT, Nelson L. Thibault and Eugene J. Forbes, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p487-493.

Vertical cylinders

A Complete Three Dimensional Analysis of Pressures on a A Complete Three Dimensional Analysis of Pressures on a Vertical Cylinder by Earthquakes Including Fluid-Structure Interaction, Bang-Fuh Chen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p519-522.

Three-Dimensional Moving Contact Line for an Accelerating Vertical Cylinder, K.-H. Wang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p848-851.

Wave Forces on an Array of Vertical Cylinders, Shohachi Kakuno, Yoshibiro Nakata and Philip L.-F. Liu, WW May/Jung 96, p147-145.

May/June 96, p147-149.

Vertical forces

Stress Factors Explained, Robert T. Ratay, CE Dec. 96,

Vertical Seismic Forces on Elevated Concrete Slabs, M. N. Palaskas, Limin He and Michael Chegini, SC Aug. 96, p88-90.

Vertical loads

Three-Dimensional Failure Analysis of Composite Mason-Walls, Subhash C. Anand and Kishore K. Yalamanchili, ST Sept. 96, p1031-1039.

Community Involvement Drives Chicago Viaduct Reconstruction, CE Apr. 96, p10.

Modeling the Blue Ridge, CE Aug. 96, p20,22.

Riddle of the Riverbed, Kenneth D. Walsh, Robert E. Schock and Steven A. Jimenez, CE June 96, p64-67.

Active Isolation of Machine Foundations by In-Filled Trench Barriers, T. M. Al-Hussaini and S. Ahmad, GT Apr. 96, p288-294.

Actuator Dynamics and Delay Compensation Using Neuro-controllers, Khashayar Nikzad, Jamshid Ghaboussi and Stanley L. Paul, EM Oct. 96, p966-975.

Advances in System Identification Using Output Measure-ments, N. P. Jones, J. H. Ellis and K. Pan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p160-163. Aerial Pipeline Crossings - Inspection and Rehabilitation, Thomas Spoth, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p298-305.

Analysis and Simulation of Road Profiles, V. Rouillard, M. A. Sek and T. Perry, TE May/June 96, p241-245. Analysis of Free Vibrations of Tall Buildings, Qiusheng Li, Hong Cao and Guiqing Li, EM Sept. 94, p1861-1876.

Analysis of the Nonlinearity Associated with the Free Vi-bration of an Orthotropic Shell, Jamal F. Nayfeh and Nicholas J. Rivieccio, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pi 115-1121.

Article Should Be Required Reading, James Warner, P.E., CE Nov. 96, p32.

Bad Vibrations, Lawrence W. Gubbe, P.E., CE Aug. 96, p58-60.

Buckling and Vibration of Thick Laminates on Pasternak Foundations, Y. Xiang, S. Kitipornchai and K. M. Liew, EM Jan. 96, p54-63. Cast-in-Place Factory Largest for Industry, CE Nov. 96,

p13.

Comprehensive Modal Tests of a Space Truss Model for Damage Assessment, Cesar J. Carrasco, Roberto A. Osegueda, Carlos M. Ferregut, Brian Harms, David Meza and Mike Grygier, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1141-1147.

A Comprehensive Relational Database of Structural Damp-ing Data, Sandeep Khare and Nicholas P. Jones, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1236-1243.

Computation of Structural Flexibility for Bridge Health Monitoring Using Ambient Modal Data, Scott W. Doe-bling and Charles R. Farrar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1114-1117.

Control of Mega-Sub Building Against Wind Loads, Winston Chai and Maria Q. Feng, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p486-489.

Convex Models for Impulsive Response of Structures, Shyh-Rong Tzan and Chris P. Pantelides, EM June 96, p315-20.

p521-529.

p221-329.
Deformation, Alignment, and Vibration in Large Turbine-Generator Set, W. F. Teskey, J. W. Lovse and N. N. Al-Hanbali, SU May 96, p65-79.
Doubly Symmetric Tube Structures. II: Dynamic Analysis, Hideo Takabatake, Hisao Mukai and Tadato Hirano, ST

Hideo Takabatake, Hisao Mukai and Tadato Hirano, ST July 93, p2002-2016.

Dynamic Responses of Shallow-Buried Flexible Plates Subjected to Impact Loading, Hung-Liang (Roger) Chen and Shen-En Chen, ST Jan. 96, p55-60.

Dynamic Stiffness Analysis of Lattice Structure, Eldad Levy and Moshe Eisenberger, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, p526-533.

Effect of Internal Length on the Vibration of Granular Solids Chines, S. Chem. (Engineering Machenites, V. K. Lin

ids, Ching S. Chang, (Engineering Mechanics, Y. K. Lin

and T. C. Su, 1996), p873-876.

The Effects of Construction Joint in Mass Concrete, Donald D. Liou, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p193-202.

Effects of Non-Structural Elements on the Acceleration Response of Tall Multi-Story Buildings Under Wind Excitation, Cindy X. Qiu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p974-977.

Grigoriu, ed., 1996), ps/4-9/7.
An Electro-Optical Accelerometer for Civil Structural Applications, Maria Q. Feng. (Materials for the New Millennium, Ken P. Chong, ed., 1996), p877-886.
Engineers Establish Bridge Safety Site, CE Nov. 96, p8.
Engineers Roll Out Concrete for New Dam, CE Oct. 96,

Estimating Settlement of Sand Caused by Construction Vi-bration, S. Drabkin, H. Lacy and D. S. Kim, GT Nov. 96,

p920-928.

Fatigue Failures of Hexa'lliptical Steel Davit Arms Induced by Aeolian Vibrations at Resonant Conditions, Markus Ostendorp, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

bitity, Dan 3r., Transgupen, etc. and Anteces. Polya-ed., 1996), p874-877. Flood Protection Using Inflatable Dams, R. H. Plaut, S. Liapis and D. P. Telionis, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p264-265.

Free Vibration of Stiffened Composite Laminates, Meiwen Guo and Issam E. Harik, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), pl 163-1166.

Lin anu 1, C. Su, 1990), p.1103-1166. Identification of Wind Spectral Characteristics from Structure Response, K. Pan, N. P. Jones and J. H. Ellis, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p482-485.

Impact of Weight Falling onto the Ground, Jose M. Roesset, Eduardo Kausel, Vicente Cuellar, Jose L. Monte and Julian Valerio, GT Aug. 94, p1394-1412.

Investigation on Active Isolation of Machine Foundations by Open Trenches, S. Ahmad, T. M. Al-Hussaini and K. L. Fishman, GT June 96, p454-461.

Launch Vibration Isolation System, Eugene R. Fosness, Rory R. Ninneman, Paul S. Wilke and Conor D. Johnson, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p228-231.

Measuring and Modeling Dynamic Loads Imposed by Moving Crowds, A. Ebrahimpour, A. Hamam, R. L. Sack and W. N. Patten, ST Dec. 96, p1468-1474. Measuring Blast Damage, Clifton E. R. Lawson, P.E., CE

Oct. 96, p38-39. Measuring Coherency of Human-Induced Rhythmic Loads Using Force Plates, A. Ebrahimpour and L. L. Fitts, ST July 96, p829-831.

Mechanisms Involved in Vibratory Destabilization of NAPL Ganglia in Sands, Lakshmi N. Reddi and Hui Wu, EE Dec. 96, p1115-1119.

Optimal Polynomial Control of a Duffing System, Anil K. Agrawal and Jann N. Yang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p890-893.

Overcoming Soil Uncertainty in Prediction of Construction and Industrial Vibrations, Mark R. Svinkin, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1178-1194.
Passive Isolation Systems for Launch Vehicles, Eugene R. Fosness, Paul S. Wilke and Conor D. Johnson, (Engineering, Constructions of Operations in Superscience, Struct

neering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1176-1182.

W. Johnson, ed., 1576), p.110-1162.
Passive Structural Control with Sequential Coupling, Paul Weidlinger, ST Sept. 96, p.1072-1080.
Prestress Force Effect on Vibration Frequency of Concrete Bridges, M. Saiidi, B. Douglas and S. Feng, ST July 94, p.2233-2241.

Probabilistic Evaluation of Wood-Joist Floor Vibrations, Omar A. Jaradat, Arshad A. Al-Foqaha'a and Kenneth J. Fridley, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p342-345.

1996), p342-345.
Protection from Vibrations, S. Drabkin, P.E. and H. Lacy, P.E., CE Nov. 96, p30.
Pulsatile Blood Flows in Stenotic Artery, Tin-Kan Hung and Tommy M.-C. Tsai, EM Sept. 96, p890-896.
Recent Progress in Thermally Induced Vibrations Research, John D. Johnston, Richard S. Foster, David L. Eby and Earl A. Thornton, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1 34-1140.

The Response of Long Span Bridges to Wind Action, Robert L. Wardlaw, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p66-69.

Robust H. Control Considering Actuator Saturation. I: The-ory, J. Geoffrey Chase and H. Allison Smith, EM Oct. 96, p976-983.

96, p976-983.
Robust H. Control Considering Actuator Saturation. II: Applications, J. Geoffrey Chase, H. Allison Smith and Tetsuo Suzuki, EM Oct. 96, p984-993.
Simple ATMD Control Methodology for Tall Buildings Subject to Wind Loads, Seshasayee Ankireddi and Henry T. Y. Yang, ST Jan. 96, p83-91.
Simulation of Nonlinear Structures with Artificial Neural Networks Thomas I. Page (Engineering Mechanics, V.

Networks, Thomas L. Paez, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p72-75.

Vibration Confinement in Trusses, Muhammad A. Hawwa and Reyolando M. Brasil, EM Mar. 96, p286-290.

Vibration Isolation for Space Station Micro-Gravity Using High Temperature Superconductors, W. K. Chu, K. Ma, H. Xia and T. L. Wilson, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p540-544.

Vibration of Laminated Shallow Shells on Quadrangular Boundary, A. V. Singh and V. Kumar, AS Apr. 96, p52-

Vibration of Thin-Walled Box-Girder Bridges Excited by Vehicles, Dongzhou Huang, Ton-Lo Wang and Mohsen Shahawy, ST Sept. 95, p1330-1337.

Statianwy, S1 5ept. 32, p1330-1331.

Vibrations of Clamped Rectangular Plates on Elastic Foundations Subjected to Uniform Compressive Forces, S. Sacit Tameroğlu, EM Aug. 96, p714-718.

Vibratory Excavation and Anchoring Tools for the Lunar Surface, J. Ledlie Klosky, Stein Sture, Hon-Yim Ko and Escale Baress. (Engineering Construction and Opera-Frank Barnes, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p903-

Vibration analysis

Vibration analysis
Analysis of Free Vibrations of Tall Buildings, Qiusheng Li,
Hong Cao and Guiqing Li, EM Sept. 94, p1861-1876.
Coupled Flutter and Buffeting Analysis of Long-Span
Bridges, Anurng Jain, Nicholas P. Jones and Robert H.
Scanlan, ST July 96, p716-725.

Cross-Flow Vibrations of Cylinder in Irregular Oscillatory Flow, Andrzej Kozakiewicz, B. Mutlu Sumer and Jørgen Fredsøe, WW Nov./Dec. 94, p515-534.

Giant, Man-Made Eel Inspects City's Sewers, CE Apr. 96,

po. Review of Dynamic Behavior of Sector Plates and Curved Bridge Decks, H. R. Molaghasemi and I. E. Harik, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p993-996.

763 VIDEOTAPE

Simple and Effective Equilibrium Models for Vibration Analysis of Curved Rods, A. Benedetti, L. Deseri and A. Tralli, EM Apr. 96, p291-299.

Stochastic Response of Systems with Linear Hysteretic Damping, B. F. Spencer, Jr. and L. A. Bergman, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

p677-680. Vibration Analysis of Horizontally Curved Beams with Warping Using DQM, Kijun Kang, Charles W. Bert and Alfred G. Striz, ST June 96, p657-662. Vibration Analysis of Special Orthotropic Plate with Variable Cross-Section, and with a Pair of Opposite Edges Simple Supported and the Other Pair of Opposite Edges Free, Duk Hyun Kim, Keyong Jin Kim and Do Sik Sim, (Materials for the New Millennium, Ken P. Chong, ed., 1906), 1418, 1417. 1996), p1408-1417.

Vibration control

Active Vibration Control of Double Wall Composite Shells to Random Inputs, Chen-Ying Wang and Rimas Vaicai-tis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p842-845. ctive Vibration

ctive Vibration Control of Machine Foundation, Mohamed Abdel-Rohman and Hasan Al-Sanad, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p566-573

Analysis and Design of ER Damper for Seismic Protection of Structures, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, EM Oct. 96, p1003-1011

Comparison of LQR and H., Algorithms for Vibration Con-trol of Structures in Seismic Zones, H. Allison Smith and J. Geoffrey Chase, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1164-1171.

Design of Vibration Control System for High-Rise Residential Buildings in Consideration of Wind-Induced Response, Yukio Tamura, Kiyoshi Uesu and Takeshi Ohkuma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1244-1251.

An Emerging Technology: Damping Design for Wind and Seismic Events, Robert J. McNamara, (Building an In-ternational Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p1252-1260.

Inelastic Vibration Phase Theory for Seismic Pounding Mitigation, Kazuhiko Kasai, Anil R. Jagiasi and Van Jeng, ST Oct. 96, p1136-1146. Minimum Weight of Control Devices with Bounded LQG

Control, Alexander A. Bolonkin, Duane E. Veley and Narendra S. Khot, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1230-1236.

Modeling the Response of ER Damper: Phenomenology and Emulation, Scott A. Burton, Nicos Makris, I. Konstantopoulos and P. J. Antsaklis, EM Sept. 96, p897-906.

Reduction of Structural Response by Energy Dissipation Devices Modelled on Shape Memory Materials, C. W. S. To and J. M. Kelly, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p491-494.

and T. C. Su, 1990, ps91-4994.
Research on Semiactive Dampers Makes Headway, Monica Maldonado, ET Aug./Sept. 96, p6-7.
Some Computational Issues in the Control of Distributed Systems, Weiming Xu, Sami F. Masri and Bingen Yang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p747-750.

Time Delayed Control of Classically Damped Structures, R. Kumar and F. E. Udwadia, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p751-755.

Tuned Mass Dampers for Structures with Bilinear Hystere-sis, Masato Abé, EM Aug. 96, p797-800.

Vibration Control of Cable-Stayed Bridges: Analytical De-velopment, Armin G. Schemmann and H. Allison Smith, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Vibration Control of Cable-Stayed Bridges: Control System Development and Experimental Results, Rahmat A. Shoureshi and Mark J. Bell, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p902-905.

Vibration Control of Structures Utilizing Architectural Walls, H. Allison Smith, Luciana R. Barroso and Vicki L. Vance, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p495-498.

Su, 1970, pr32-956.

Vibration Control of Tall Buildings under Seismic and Wind Loads, Lih-Shing Fur, Henry T. Y. Yang and Seshasayee Ankireddi, ST Aug. 96, p948-957.

Control of Floor Vibrations, Linda Morley Hanagan, Cheryl Rottmann and Thomas M. Murray, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p428-

Controlled Semiactive Hydraulic Vibration Absorber for Bridges, William N. Patten, Ronald L. Sack and Qiwei

He, ST Feb. 96, p187-192.

Minimizing Floor Vibrations from Occupant Activities, Sarah E. Mouring and Bruce R. Ellingwood, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p405-

Optimized Input Shaping for a Single Flexible Robot Link, David G. Wilson, Dennis Stokes, Gregory Starr and Rush D. Robinett, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1225-1229.

Vibration Absorber for Offshore Structures: Frequency-Domain Analysis, Mikhail F. Dimentherg, Shiyu Chen, Zhikun Hou and Mohammad Noori, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p588-591.

Vibration effects

Dynamic Service Actions for Floor Systems - Human Activity, Per-Erik Eriksson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p413-419.

Editor's Note, David Darwin, ST May 96, p469.

A Pore-Scale Study of the Stability of Nonaqueous Phase Liquid Ganglia under the Influence of Vibrations, Sunil Menon, Arun Pant and Lakshmi N. Reddi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ sessment and Remediation, Lakshmi N. Reddi, ed., 1996), p538-550.

Protection from Vibrations, S. Drabkin, P.E. and H. Lacy, P.E., CE Nov. 96, p30.

Neural Network Approach to Detection of Changes in Structural Parameters, S. F. Masri, M. Nakamura, A. G. Chassiakos and T. K. Caughey, EM Apr. 96, p350-360.

Assessment of Damage Identification Algorithms on Exper-imental and Numerical Bridge Data, David V. Jauregui and Charles R. Farrar, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p892-899.

Forced Vibration of Full-Scale Wall-Backfill System, Ahmed-W. Elgamal, Sreenivas Alampalli and Paul Van

Laak, GT Oct. 96, p849-858.

Modal Identification of a Cable-Stayed Bridge, W-H. P. Yen, T. T. Baber and F. W. Barton, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p600-603.

Practical Formulas for Estimation of Cable Tension by Vi-bration Method, Hiroshi Zui, Tohru Shinke and Yoshio Namita, ST June 96, p651-656.

Vibratory compactors

State-of-the-Art of Roller Compacted Concrete Pavement, Kwabena Ofori-Awuah, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1439-1448.

Analysing Road Traffic Movement Patterns by Image Analysis Using an Array of Transputers, X. Zhang, R. E. Allsop and M. R. B. Forshaw, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

An Automatic System for the Definition of the Setting Rules for Speed Diagrams, Francesco Saverio Capaldo and Rodolfo Grossi, (Applications of Advanced Technol-ogies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

p193-197.
CCATS and CCIDS Technologies for Traffic Data and Incident Detection. An Overview of the Technology and the Main Applications, V. Picciolo and F. Lemaire, (Ap-plications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p183-187.

Filippi, ed., 1990, p185-187.
Cost Benefit Analysis of Video-Based Vehicle Detection, Panos G. Michalopoulos, Craig A. Anderson and Richard D. Jacobson, Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p176-182.

Multicriteria Traffic Control with Video Feedback, Andrzej Adamski, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p620-627.

Vehicle Detection Using Radial Basis Neural Network, Suryanaryana Manti and Darcy Bullock, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p188-192.

Engineering Vietnam's Waterways, CE July 96, p8.

Flash Floods and Their Warning in Vietnam, Cao Dang Du, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Virginia

High Performance Concrete Applications in Bridge Struc-tures in Virginia, Celik Ozyildirim, Jose Gomez and M. Elnahal, (Worldwide Advances in Structural Concrete and Massonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p153-163.

1990, p135-198, p135-198, p135-1990, p135

Age, Deformation, and Temperature Effects of Viscoelastic Materials Under Large Deformations, Ashok Gurjar, Tianxi Tang, Dan Zollinger and Kenneth Slavick, (*Mate*rials for the New Millennium, Ken P. Chong, ed., 1996), p1398-1407.

Cohesive Crack Model with Rate-Dependence and Visco-elasticity, Zdeněk P. Bažant and Yuan-Neng Li, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

Design of Supplemental Dampers for Control of Structures, N. Gluck, A. M. Reinhorn, J. Gluck and R. Levy, ST Dec. 96, p1394-1399.

Dynamic Stability of Viscoelastic Structures under Sto-chastic Loading, S. T. Ariaratnam and G. Amaniampong, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p542-545.

Effect of Maxwell Binder on Two-Phase Materials, Han Zhu, Jeff W. Rish, III and William C. Dass, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p576-579

Effect of Rest Periods on Fatigue Response of Asphalt Concrete Mixtures, Tung-Wen Hsu and Kuo-Hung Tseng, TE July/Aug. 96, p316-322.

Bengy Dissipation in Concrete Materials Due to Viscoelas-tic and Damage Mechanisms, Vassilis P. Panoskaltisis, Saurabh Bahuguna and Dimitris Soldatos, Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p857-860.

Formulation for Viscoelastic Response of Pavements under Moving Dynamic Loads, A. T. Papagiannakis, N. Amoah and R. Taha, TE Mar/Apr. 96, p140-145.

Heat and Moisture Absorption Effects in Composites; The-ory and Experiments, A. Szekeres and R. A. Heller, (Ma-terials for the New Millennium, Ken P. Chong, ed., 1996), p63-72.

Inelastic Behavior of Steel Frames with Added Viscoelastic Dampers, K. C. Chang, S. J. Chen and M. L. Lai, ST Oct. 96, p1178-1186.

Inelastic Strains of Porous Saturated Media, Victor N. Ni-kolaevskiy, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p927-930.

Macroscopic Models with Complex Coefficients and Causality, Nicos Makris, José A. Inaudi and James M. Kelly, EM June 96, p566-573.

EM June 96, p506-5/3.
Modal Coupling and Accuracy of Modal Strain Energy Method, Alessandra Zambrano, José A. Inaudi and James M. Kelly, EM July 96, p603-612.
Stochastic Response of Systems with Linear Hysteretic Damping, B. F. Spencer, Jr. and L. A. Bergman, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), acres 13, 600.

Structural Dynamic and Viscoelastic Analysis via Electric Analogy, Roberto Scotta and Renato Vitaliani, ST Sept. 96, p1118-1121.

30, p1116-1121.
40, p1116-1121.
41. Uniaxial Constitutive Model Accounting for Viscoelasticity and Damage Evolution under Cyclic Loading, Hyun-Jong Lee and Y. Richard Kim, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p693-696.
Viscoelastic Modeling of Paper, Edmond P. Saliklis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p246-249.

p.240-249.
The Viscoelastic-Large Deformation Response of the Taylor Impact Cylinder, H. L. Schreyer and D. Sulsky, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p.250-253.

Viscoplasticity

Analysis and Design of ER Damper for Seismic Protection of Structures, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, EM Oct. 96, p1003-1011.

Analysis of Masonry Structures with Elastic/Viscoplastic Models, Teymour Manzouri, P. Benson Shing and Bernard Amadei, (Worldwide Advances in Structural Con-crete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p61-71.

Anisotropic Plasticity with Anisotropic Hardening and Rate Dependence, Raymond D. Krieg and Kevin H. Brown,

Dependence, Raymond D. Krieg and Kevin H. Brown, EM Apr. 96, p316-324.
Computational Aspects of Dynamic Concrete Viscoplasticity, Olubayo O. R. Famiyesin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p282-285.
Evaluation of Long-Term Time-Rate Parameters of Subglacial Till, C. L. Ho, J. C. Vela, P. U. Clark and J. W. Jenson, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed. 1996), p122-136. ed., 1996), p122-136.

Inelastic Thermal Response of Gr/Cu with Nonuniform Fiber Distribution, Brett A. Bednarcyk and Marek-Jerzy Pindera, AS Oct. 96, p93-105.

Large Strain Finite-Element Analysis of Snow, Günther Meschke, Changhong Liu and Herbert A. Mang, EM July 96, p591-602.

Modeling of the Oscillatory Response of Electrorheological Fluids, Nicos Makris, Scott A. Burton, Davide Hill and Mabel Jordan, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p894-897.

Structural Control with Electrorheological Dampers: Visco-Structural Control with Electrorheological Dampers: Viscoplastic Behavior and Anticipation, Scott A. Burton and Nicos Makris, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1261-1268.
A Unified Viscoplastic Model for the Inelastic Behavior of Ice, Jonah H. Lee and Michel Aubertin, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p828-836.

Importance of Strain Rate and Temperature Effects in Geotechnical Engineering, Serge Leroueil and Maria Esther Soares Marques, (Measuring and Modeling Time De-pendent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p1-60.

Mechanisms Involved in Vibratory Destabilization of NAPL Ganglia in Sands, Lakshmi N. Reddi and Hui Wu, EE Dec. 96, p1115-1119.

Mixer Viscometer Characterization of AFBC Ash Grout, Donald D. Gray and Scott J. Putnam, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p816-819.

Modeling Aspects Associated with Time Dependent Behavior of Soils, Toshihisa Adachi, Fusao Oka and Mamoru Mimura, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p61-95.

Viscosity Characteristics of Rubber-Modified Asphalts, T.
J. Lougheed and A. T. Papagiannakis, MT Aug. 96, p153-156.

Viscous flow

Viscous Ship Waves on Water of Finite Depth, Andy T. Chan and Allen T. Chwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p515-518.

CCATS and CCIDS Technologies for Traffic Data and Incident Detection. An Overview of the Technology and the Main Applications, V. Picciolo and F. Lemaire, (Ap-plications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p183-187.

Control of Construction Robots using Camera-Space Ma-nipulation, Emilio Gonzalez-Galvan, Michael Seelinger, John-David Yoder, Eric Baumgartner and Steven B. Skaar, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p57-63.

Cost Benefit Analysis of Video-Based Vehicle Detection, Panos G. Michalopoulos, Craig A. Anderson and Richard D. Jacobson, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p176-182.

A Flexible Machine-Vision System for Traffic Monitoring Applications, James F. Alves, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Frameview: Object-Oriented Visualization System for Frame Analysis, Sheloney Moni and Donald W. White, CP Oct. 96, p276-285.

An Interactive Operator Interface for Task-Level Direction of a Robot in Uncertain Environments, Eric S. Miles and Robert H. Cannon, Jr., (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p50-56.

Pedestrian Flow Estimation in Urban Environment by Image Processing, P. Vannoorenberghe, C. Motamed, J.-M. Blosseville and J.-G. Postaire, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p119-123.

A Robotic Inspector for Low-Level Radioactive Waste, Joseph S. Byrd and Robert O. Pettus, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996),

Simple and Efficient Traffic Vision Algorithms, T. N. Tan, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), p129-133.

Simulation and Visualization of Martian Rover, William Lincoln, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p143-149.

Vision-Based Automated Overtaking Control, Massimo Tistarelli, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p705-710.

Visual perception

Synthesized Images for Pavement Management System Design, H. D. Cheng and Mario Miyojim, CP Jan. 96, p60-

Aggregates for Construction from Vitrified Chromium Contaminated Soils, Jay N. Meegoda, W. Kamolpornwijit, David A. Vaccari, A. S. Ezeldin, L. Walden, W. A. Ward, B. A. Noval, R. T. Mueller and S. Santora. (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p31-46.

Void ratio

Consolidation Characteristics of Phosphatic Clays, A. Naser Abu-Hejleh, Dobroslav Znidarcic and Bobby L. Barnes, GT Apr. 96, p295-301.

Grain-Size Distribution for Smallest Possible Void Ratio, B. Aberg, GT Jan. 96, p74-77.

Modeling Damage to Rigid Pavements Caused by Subgrade Pumping, M. Asghar Bhatti, Jeffery A. Barlow and James W. Stoner, TE Jan./Feb. 96, p12-21.

Study of Parameters Affecting Impulse Response Method, Soheil Nazarian and Srinivasa Reddy, TE July/Aug. 96, p308-315.

Void Sizes in Granular Soils, B. Aberg, GT Mar. 96, p236-

Volatile organic chemicals

Cleaning Up Clay, Eric C. Lindhult and Daniel A. Kwiecin-ski, CE May 96, p49-51.

Designing SVE to Remove Volatile LNAPLs, Richard esigning SVE to Activity volune Evident Schoen, Mark Underwood, Jeff Munic and Jim Hartley, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p431-441.

Engineering Model for Fixed-Film Bioscrubbers, Hanneke . Ockeloen, Thomas J. Overcamp and C. P. L. Grady,

Jr., EE Mar. 96, p191-197.

Ground-Water Treatments Gain Ground, Rafat A. Abbasi, CE Feb. 96, p53-55.

The Importance of Water Depth for Sparger Performance, Charles Clauss, John S. Gulliver and Steven C. Wilhelms, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1305-1310.

In Situ Groundwater Treatment by Granular Zero-Valent Iron Design, Construction and Operation of an In Situ Treatment Wall, Frank S. Szerdy, John D. Gallinatti, Scott D. Warner, Carol L. Yamane, Deborah A. Hankins and John L. Vogan, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p245-256.

Optimization of Soil Vapor Extraction System Design, Yung-Hsin Sun and William W-G. Yeh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1387-1392.

Optimizing Soil Vapor Extraction System Design and Op-erations for NAPL Remediation, John M. Farr, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p201-211.

PCE in Dewatering Flows - A Case Study Risk-Based Clean-Up Action Levels, Shala L. Craig and Sri Krish-namachari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2242-2247.

Review of Factors Affecting In Situ Air Sparging, Daniel M. Baker and Craig H. Benson, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p292-

Study of Biological Reactors for Control of Odor, VOC and Toxic Emissions from Wastewater Treatment Plants, Todd S. Webster, Joseph S. Devinny, Edward M. Torres and Shabbir S. Basrai, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p571-576.

Three-Dimensional Numerical Simulation of Soil Vapor Extraction, Albert T. Yeung and Hui-Tsung Hsu, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-Assessment and Remediation, Lakshmi N. Reddi,

ed., 1996), p442-453.

Transport and Sorption of Organic Gases in Activated Car-bon, Tsair-Fuh Lin, John C. Little and William W. Nazaroff, EE Mar. 96, p169-175.

Vapor Phase Biofiltration for Removal of VOCs, Malcolm K. Man, Badri N. Badriyha, Walter Den and Massoud Pirbazari, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1209-1214.

VOC Inventory at New York City Wastewater Treatment Plants, Richard Pope, Bert Aubrey and Demetrios Moschandreas, (North American Water and Environmen Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p75-80.

VOCs in Fixed Film Processes. I: Pilot Studies, Wayne J. Parker, Hugh D. Monteith and Henryk Melcer, EE July

96, p557-563.

VOCs in Fixed Film Processes. II: Model Studies, Wayne J. Parker, Hugh D. Monteith and Henryk Melcer, EE July 96, p564-570.

Waste Using Organic-Clay Complex, Irene M.-C. Lo, EE Sept. 96, p850-855.

Volatility

Evaporation of Petroleum Products from Contaminated oil, Seon-Hong Kang and Charles S. Oulman, EE May 96, p384-387.

SoilRisk: Risk Assessment Model for Organic Contami-nants in Soil, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE May 96, p388-398.

VOCs in Fixed Film Processes. I: Pilot Studies, Wayne J. Parker, Hugh D. Monteith and Henryk Melcer, EE July

VOCs in Fixed Film Processes. II: Model Studies, Wayne J. Parker, Hugh D. Monteith and Henryk Melcer, EE July

Volcanic ash

Blasting Densifies Volcanic Debris (Available only in Focus on Geo/Environmental Special Issue), Thomas C. Badger, CE Mar. 96, p8A-12A.

Factors Limiting Microbial Activity in Volcanic Tuff at Yucca Mountain, Thomas L. Kieft, William P. Kovacik and Jennifer Taylor, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p36-38.

Localized Alteration of the Paintbrush Nonwelded Hydrologic Unit within the Exploratory Studies Facility, Z. E. Peterman, R. W. Spengler, F. R. Singer and S. C. Beason, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p46-47.

Modeling of Flow Through Fractured Tuff at Fran Ridge, Roger R. Eaton, Clifford K. Ho, Robert J. Glass, Michael J. Nicholl and Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p76-78.

Volcanic Hazards and Aviation Safety, Thomas J. Casade-vall, Theodore B. Thompson and John W. Ewert, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p363-364.

The Yucca Mountain Probabilistic Volcanic Hazard Analysis Project, Kevin J. Coppersmith, Roseanne C. Perman, Robert R. Youngs, Todd A. Crampton, Laurel A. DiSilvestro, Richard P. Smith, C. Allin Cornell, Peter A. Morris, Timothy Sullivan, Stephen T. Nelson and J. Carl Stepp, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p53-55.

Approach, Methods and Results of an Individual Elicitation for the Volcanism Expert Judgment Panel, Bruce M. Crowe, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p56-58.

An Assessment of Future Volcanic Hazard at Yucca Mou tain, William R. Hackett, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

p59-60

Development of a Multivariate Vulnerability Indicator, Wilbert O. Thomas, Jr., Betty Bonn and Albert V. Romano, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p303-304.

International Technology Transfer of Hydrologic Compo-nents, Eugene A. Stallings, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p325-326.

Peru's Program for Disaster Mitigation 1992-1995, Julio Kuroiwa and Dusan Zupka, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p84-85.

Results of the Probabilistic Volcanic Hazard Analysis Project, Robert R. Youngs, Kevin J. Coppersmith and Roseanne C. Perman, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Volcanic Hazards and Aviation Safety, Thomas J. Casade-vall, Theodore B. Thompson and John W. Ewert, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p363-364.

The Yucca Mountain Probabilistic Volcanic Hazard Analysis Project, Kevin J. Coppersmith, Roseanne C. Perman, Robert R. Youngs, Todd A. Crampton, Laurel A. DiSil-vestro, Richard P. Smith, C. Allin Cornell, Peter A. Morris, Timothy Sullivan, Stephen T. Nelson and J. Carl Stepp, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p53-55.
"Dry Canal" to Link Atlantic and Pacific, CE Dec. 96, p18.

Vollmer, Arnold L. (Fellow, ASCE) Vollmer, Engineer and Architect, Dies at 80, CE Apr. 96, p79.

Volume change

Atmospheric Flow Indices and Interannual Great Salt Lake Variability, Young-Il Moon and Upmanu Lall, HE Apr. 96, p55-62.

Volume measure

Maximized Detention Volume Determined by Runoff Capture Ratio, James C. Y. Guo and Ben Urbonas, WR Jan./ Feb. 96, p33-39.

Measurement of the DWPF Canistered Wasteform Weight and Free Volume, D. T. Herman, J. R. Harbour, M. K. Andrews and C. A. Cicero, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p402-403.

Representative Volumes of Composite Materials, Yunping Xi, EM Dec. 96, p1159-1167.

ASCE and American Red Cross Sign Pact on Disaster Aid, NE Oct. 96, pl.

Buffalo Section Works with Cub Scouts to "Build a Better Future", CE Nov. 96, p74. Editorial, Harry Yeh, WW Nov./Dec. 96, pvii.

Empowerment at ASCE's Grass Roots Starts to Take Hold, NE Apr. 96, p1,6. Is Moonlighting or Donating Professional Engineering Services Ethical? Thomas W. Lynch, El Jan. 96, p37-38.

Leading "Unmanageable" Systems, Mel Hensey, ME July/ 96, p9-10.

Moonlighting: Ethical Issues for Professional Engineers, Andrew M. Hui, El Jan. 96, p39-40. On TRAC with Tate Jackson, William E. Kelly, NE Feb.

Providing Engineering Services to Nonemployers: An Ethical Balance, David P. Brosnan, El Jan. 96, p35-36. Volunteer Organizations Use of Appropriate Technology

Developing Countries, Jim Horner and Tsegaye Hailu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2754-2759.

Vortex shedding

Vortez asculum, Cape Grardeau Bridge Over the Mississippi River, Steven T. Hague, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p952-959.

Comparison of Flow Around Circular Cylinder Using FE and FD Procedures, R. Panneer Selvam, (Building on International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

p1021-1028.

Determination of Force and Surface Pressure Coefficients of High Reynolds Number Flow over Circular Cylinder by Discrete Vortex Method, Fusen He and Tsung-chow Su, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p979-982

Identification of Vortex-Induced-Response Parameters in Time Domain, Himanshu Gupta, Partha P. Sarkar and

Kishor C. Mehta, EM Nov. 96, p1031-1037.

Investigation of Nonlinear Fluid-Structure Interaction, T. E. Fenske, D. Liu and S. M. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p407-415.

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Numerical Simulation of Flow Field Around Buildings, Da-hai Yu and Ahsan Kareem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p490-493.

The Response of Long Span Bridges to Wind Action, Robert L. Wardlaw, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p66-69.

A Stabilized Formulation of the Navier-Stokes Equations, Arif Masud, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1135-1138.

Statistical Dynamics of Pipe-Line with One-Side Contact Supports Under Turbulence of Cross-Wind Loads, Anatoly I. Menyailov and Christian G. Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p986-989.

Wind Tunnel and Water Flume Testing in the Design of High Rise and Long Span Structures, Charles H. Thornton, Leonard M. Joseph and Thomas Z. Scarangello, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p944-951.

The Aerodynamic Forces on Low-Rise Structures: The Effects of Incident Turbulence, H. W. Tieleman, M. R. Hajj and T. A. Reinhold, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p975-978.

Another Person Cures Galloping, Ray G. Barney, CE June

96, p27-28.

Breaking Waves in Surfzones, Ke Yu and Ib A. Svendsen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p329-340.

A Comparison Between Linear Stability and Direct Numerical Simulation of Waves in a Trailing Vortex, Saad Ragab, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1058-1061.

Eddy Pump Dredging Demonstration at Cresta Reservoir, Larry L. Harrison and Harry P. Weinrib, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2091-2096.

Flow Over Vortex Ripples: Models and Experiments, Lewis A. W., E. Hitching, G. Perrier, E. Asp Hansen, H. Earnshaw, K. Eidsvik, C. Greated, M. Sumer and A. Temperville, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p686-697.

Fluid Vortices edited by S.I. Green, J. S. Marshall, HY July 96, p423.

Laboratory Experiments on Density Current Over a Sloping Bottom in Rotating Fluid, Dieter Etling and Gabriel Cha-bert d'Hieres, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p923-926.

Mixing of a Bent-over Jet in Crossflow, Paul C. K. Chu and Joseph H. W. Lee, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p910-913.

A Model of the Juncture Vortex, Elie Monnier and M. R. Dhanak, (Engineering Mechanics, Y. K. Lin and T. C.

Su, 1996), p1126.

Modelling Eddy Formation in Coastal Waters: A Compari-son between Model Capabilities, Duncan Galloway, Eric Wolanski and Brian King, (Estuarine and Coastal Mod-eling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p13-25.

On the Numerical Treatment of Vorticity Diffusion from a Boundary Element in the Discrete Vortex Element Method, Fusen He and Tsung-chow Su, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p844-847.

A Secondary Flow Correction for Depth-Averaged Flow Calculations, John Finnie, Barbara Donnell, Joe Letter nd Robert S. Bernard, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p301-305.

Three-Dimensional Organized Vortices Above Flexible Water Plants, Syunsuke Ikeda and Minoru Kanazawa, HY Nov. 96, p634-640.

Velocity Measurements of Post-Breaking Turbulence Generated by Plunging Breakers, Paul A. Quinn, Timothy C. D. Barnes, Simon T. Lloyd, Clive A. Greated and D. Howell Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p293-304.

Vorticity and Eddies in the Surf Zone, D. Howell Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p460-464.

Waffle-slab

Cast-in-Place Factory Largest for Industry, CE Nov. 96, p13.

Wakes

Analysis Tools of Transitioning and Turbulent Flows, M. R. Hajj, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p434-437.

Modelling Eddy Formation in Coastal Waters: A Comparison between Model Capabilities, Duncan Galloway, Eric Wolanski and Brian King, (Estuarine and Coastal Mod-eling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p13-25.

Waldvogel, Grace, Kupferman, Michael

Two Join ASCE's Management Staff, CE Apr. 96, p76,78.

'Super-Element' to Represent the Behavior of Architectural Stud Partition Walls, Vicki L. Vance, H. Allison Smith and Luciana R. Barroso, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1106-1109.

Active Vibration Control of Double Wall Composite Shells to Random Inputs, Chen-Ying Wang and Rimas Vaicai-tis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p842-845.

Behavior of Reinforced Concrete Buildings: Deformations & Deformation Compatibility, John W. Wallace, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p245-256.

Compression Bending of Scale-Model Reinforced-Concrete Walls, James K. Gran and Paul E. Senseny, EM July 96, p660-668.

Coring Technique Reinforces Historic Masonry, CE May 96, p13-14.

A Cost Effective Rehab Scheme for URM Structures, M. Ala Saadeghvaziri, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p262-263.

Detroit Cushion Wall Has a Positive Impact, CE May 96, p84.

Economic Comparison between Drywall and Conventional Partitions, Ronie Navon, David Carmel and Arnon Bentur, AE Dec. 96, p129-134.

Editor's Note, David Darwin, ST Sept. 96, p987-988 Exterior Accessibility for Structural Repair, Retrofit and Enhancement, Kenneth Hallam and Dudley McFarquhar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p772-775.

Forces on a Vertical Wall due to Long Waves, Bores, and Dry-Bed Surges, Jerald D. Ramsden, WW May/June 96,

Geometric Calibration of CCD Camera Using Planar Object, Mohammed Taleb Obaidat and Kam W. Wong, SU Aug. 96, p97-113.

Aug. 26, 1971.
All Dynamic Response of Cantilever Walls, Sreenivas Alampalli and Ahmed-W. Elgamal, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p57-76.

Lateral Earth Pressures on Deep Braced Walls, Daniel O. Wong, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p746-

Lunar Textile Method for the Shield Wall on the Lunar Surface, Mikiya Okumura, Takao Ueno and Yasuhiro Ohashi, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p889-895.

Modified Janssen Theory for Flexible Circular Bins, Y. T. Feng and Y. L. Hua, ST Apr. 96, p454-456.

Moisture Penetration of Concrete Floor Slabs, Basement

Walls, and Flat Slab Ceilings, Robert W. Day, SC Nov. 96, p104-107.

Oblique Wave Interaction with Vertical Wall Structures, Xugui Ren and Keh-Han Wang, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p507-510.

Prefabricated Concrete Walls. Influence of Prestressload on Vertical Joints, J. P. Straman, (Computing in Civil Engineering, Jorge Vancgas, ed. and Paul Chinowsky, ed., 1996), p147-153.

Prestress Loss Due to Creep in Post-Tensioned Clay Ma-Prestress Loss Due to Creep in Post-Tensoried City World-sonry, Subhash C. Anand and Naresh Bhatia, (World-wide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p49-60. Reliability Analysis of Masonry Walls, A. S. Al-Harthy and

D. M. Frangopol, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p338-341.

Seismic Behavior of Masonry Walls: Experimental Simula-tion, Miha Tomaževič, Marjana Lutman and Ljubo Pet-

ković, ST Sept. 96, p1040-1047.

Seismic Pressures Against Rigid Walls, Guoxi Wu and W. D. Liam Finn, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p1-18.

Shear Lag in Shear/Core Walls, A. K. H. Kwan, ST Sept. 96, p1097-1104.

Shear Resistance of Gypsum-Sheathed Light-Gauge Steel Stud Walls, Reynaud Serrette and Kehinde Ogunfunmi, ST Apr. 96, p383-389.

Soil Fracture Technique Stops Blast Shock Waves, CE May

96, p12.

50, p.12.
Space Station Module Wall Hole Size and Crack Length Following Orbital Debris Penetration at 6.5 km/s, William P. Schonberg and Joel E. Williamsen, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pl-7.

Strengthening Concrete Block Walls Using Carbon Fiber, Dan Engebretson, Rajan Sen, Gray Mullins and Alfred Hartley, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1592-1600.

Testing of Prestressed Clay-Brick Walls, Gary L. Krause, Ravi Devalapura and Maher K. Tadros, (Worldwide Advances in Structural Concrete and Masonry. Schultz, ed. and S. L. McCabe, ed., 1996), p37-48.

Three-Dimensional Failure Analysis of Composite Mason Walls, Subhash C. Anand and Kishore K. Yalaman-

chili, ST Sept. 96, p1031-1039.

Use of Geosynthetics in Road and Airfield Construction in Cold Regions, Thomas C. Kinney, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p271-288.

Value Engineering in the Assessment of Exterior Building Wall Systems, Abdulmohsen Al-Hammad and Moham-

mad A. Hassanain, AE Sept. 96, p115-119. Vibration Control of Structures Utilizing Architectural Walls, H. Allison Smith, Luciana R. Barroso and Vicki L. Vance, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p495-498.

When Toxics Meet Metal, Virginia Fairweather, CE May 96, p44-48.

Wang, Flora Chu

Flora Wang, Noted Hydrologist, Was Louisiana State Pro-fessor, NE Oct. 96, p6.

Failure of a Stiffened Seat Bracket Connection, David L. Weaver, Jason S. Yates and Randall W. Poston, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p468-474.

Warpage
New Warping Function for Thin-Walled Beams. I: Theory,
A. Prokić, ST Dec. 96, p1437-1442.
A. Prokić, ST Dec. 96, p1437-1442.
II: Finite

New Warping Function for Thin-Walled Beams. II: Finite Element Method and Applications, A. Prokić, ST Dec. 96, p1443-1452.

Vibration Analysis of Horizontally Curved Beams with Warping Using DQM, Kijun Kang, Charles W. Bert and Alfred G. Striz, ST June 96, p657-662.

Warping Solution for Shear Lag in Thin-Walled Orthotro ic Composite Beams, Roberto Lopez-Anido and Hota V. S. GangaRao, EM May 96, p449-457.

State is Project Owner, CE Apr. 96, p28.

768

Aspects of River House Cleaning During Floods, Parviz Monadjemi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2192.

Washing of Zinc (II) from Contaminated Soil Column, Allen P. Davis and Inderbir Singh, EE Feb. 95, p174-

Washington

Acquisition and Restoration of a Drainage District in the Snohomish River Valley, John Engel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3950-3955

The Application of Time Domain Electromagnetics to a Regional Groundwater Investigation in Western Washington, Rory Retzlaff and Robert H. Anderson, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p27-41.

Monitoring Scour at Bridge Piers in Snohomish Co., WA, Anthony P. Nahajski, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1156-1161.

The Strategic/Master Plan at Boeing Field: A Means of Optimizing Airport Utilization at an Inner City Airport, Ju-lie Rodwell, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p12-23.

Washington State's Stormwater Management Program, Shari Scaftlein, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4245-4250.

Washington, D.C.

ASCE Convention Set for Nation's Capital This Fall, CE May 96, p72.

Building the Infrastructure of the New Federal City: 1793-1800, Robert J. Kapsch, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p74-85.

Capital Facelift Takes Flight, Richard Cullerton and Albert J. Gravallese, CE Apr. 96, p40-43.

Early Surveys in the Nation's Capital, Steven M. Pennington, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p86-95.

The Engineer and the Smithsonian Institution's Civil Engi-neering Collections, William E. Worthington, Jr., (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p34-43.

Extending the Legacy: Planning America's Capital for the 21st Century, Reginald W. Griffith, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p25-33.

Washington Buildup, John Casey, CE Oct. 96, p64-67.

Waste disposa

The Changing Role of the Civil Engineer in the Past 25 Years, F. Thomas Young, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p55-62.

Conveyance of Water and Wastewater Residuals, Sludge Treatment, Utilization, Reclamation and Disposal Committee, ASCE, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p994-996.

Critical Concepts for Column Testing, Charles D. Shackelford, GT Oct. 94, p1804-1828.

Disposal of Drilling Wastes in Permafrost Prudhoe Bay, Alaska, Paul Hansen, Michael Snyder and Per Wangstrom, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p327-338.

Energy from Paper Sludge: Criteria and Hazardous Air Pollutants, Amy K. Zander, Thomas L. Theis and Michael Brennan, EE Aug. 96, p758-760.

Geophysical Investigation of Karst Collapse Features for a Proposed Waste Rock Stockpile Irian Jaya, Indonesia, Philip H. Duoos and Rowland B. Cromwell, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p86-100.

High Level Radioactive Waste Management, Sponsored by

High Level Radioactive Waste Management, Sponsored by ASCE and the American Nuclear Society, Technical Pro-gram Committee, (Holly A. Dockery, chmn.), 1996, 0-7844-0169-1, 520pp. Life Cycle Cost Analysis of a Storburn Propane Combus-tion Toilet, Paul Ritz and Herbert P. Schroeder, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p816-827.

Management of Water Treatment Plant Residuals, AWWA Technology Transfer Handbook U.S. EPA/625/R-95/008 (M&R No. 88), American Society of Civil Engineers, American Water Works Association, and the U.S. Environmental Protection Agency, 1996, 0-7844-0181-0.

313pp.
A Neural Network Approach for Site Characterization and Uncertainty Prediction, Yacoub M. Najjar and Imad A. Basheer, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996). p134-148.

Permeability of Clay Liners with Contaminants, Puvvadi V. Sivapullaiah and Asuri Sridharan, (North American Water and Environment Congress & Destructive Water,

Chenchayya Bathala, ed., 1996), p506-511. A Plastic Tomb for DOE's Mixed Waste, CE May 96, p19. Random Network Modeling for Determination of Representative Specimen Size of Compacted Clays, Suri Thangavadivelu, Lakshmi N. Reddi and Sunil Menon, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1303-1317.

Recover Inorganic Solids from Obsolete Propellants, Frank J. Y. Shiu, Iris C. Y. Yang and T. F. Yen, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1373-1378.

Systematic Analysis of Long-Term Fate of Disposed Dredged Material, Norman W. Scheffner, WW May/June 96, p127-133.

Toning Asphalt, ET Aug./Sept. 96, p1,7.

Analysis of Proliferation Risk for Taiwan's Spent Fuels, K. Li, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p489-491

An Approach to International High Level Radioactive Waste Management, Pieter J. Bredell and Helmut D. Fuchs, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p486-488

The Changing Role of the Civil Engineer in the Past 25 Years, F. Thomas Young, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p55-62.

Classroom Simulation of Public Involvement in H.L.W. Issues Featuring STS Concepts, Z. T. Bieniawski, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p505-506.

Construction Waste: Quantification and Source Evaluation, A. G. Bossink and H. J. H. Brouwers, CO Mar. 96,

p55-60.

Data Qualification for the Waste Isolation Pilot Plant, R. Dennis Brown and Victor J. Harper-Slaboszewicz, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p211-213. Editor's Note, Thomas L. Theis, EE Feb. 96, p91.

Evaluation of Select Trade-Offs between Ground-Water Remediation and Waste Minimization for Petroleum Refining Industry, Craig D. Andrews, William F. McTer-nan and Keith D. Willett, EY Aug. 96, p41-60.

A Follow-Up Study to: Job Performance Aids to Criticality Safety, Michael A. Rodriguez, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p348-350. GIGO: Spreadsheet-Based Simulation for MSW Systems, Robert P. Anex, Renée A. Lawver, Jay R. Lund and George Tchobanoglous, EE Apr. 96, p259-262. High Level Radioactive Waste Management, Sponsored by ASCE and the American Nuclear Society, Technical Pro-gram Committee, (Holly A. Dockery, chmn.), 1996, 0-7844-0169-1, 520pp.

Impacts of SNF Burnup Credit on the Shipment Capability of the GA-4 Cask, Amir S. Mobasheran, William Lake and John Richardson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p330-332.

769

Intended Validation in the Swedish Program for Spent Nuclear Fuel, Bjorn Cronhjort and Grant Sheng, (High Level Radioactive Waste Management, Technical Pro-gram Committee, 1996), p67-69.

An Iterative, Probabilistic Environmental Decision Analysis Approach, Erik K. Webb, Stephen H. Conrad and Theresa J. Brown, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p249-264.

Management of Water Treatment Plant Residuals, AWWA Technology Transfer Handbook U.S. EPA/625/R-95/008 (M&R No. 88), American Society of Civil Engineers, American Water Works Association, and the U.S. Environmental Protection Agency, 1996, 0-7844-0181-0, 315pp.

Microbial Studies in the Canadian Nuclear Fuel Waste Management Program, Simcha Stroes-Gascoyne, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p4-6.

National High-Level Waste Systems Analysis, Thomas P. O'Holleran and Keith Kristofferson, (High Level Radio active Waste Management, Technical Program Committee, 1996), p315-316.

Physical Sampling for Site and Waste Characterization, Ted L. Bonnough, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p217-

A Process Unit Based Approach to Media-Integrated Waste Minimization: A Paint Manufacturing Case Study, Rafal D. Walicki, Isobel W. Heathcote and Gordon Hayward, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1632-1637.

Quality Assurance Plays a Key Role in Getting the Waste Isolation Pilot Plant to Operational Status, R. Dennis Brown, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p214-216.

Recommendations from EPA's Review Committee on WIPP, Chris G. Whipple, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p226-227.

A Simplified Process Audit to Design an Affordable Pollution Prevention and Waste Management Plan - Part 1, Ronald Zaloum and Pierre Sylvestre, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p87-92.

Spent Nuclear Fuel Dry Transfer System, Leroy Stewart and Stephen Agace, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p471-473.

Survey of University Students' Knowledge and Views on Nuclear Waste Disposal and the Alternative Dispute Resolution Process, Grant Sheng, Lenore Deffner and Sonja Fiorini, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p510-512.

U.S. Light-Water Reactor Spent Fuel Inventory—Fissile Distribution, Ron C. Ashline and Charles W. Forsberg, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p342-344.

"Design Control" and Scientific Investigations-Is There Any Linkage? Robert R. Richards, (High Level Radioac tive Waste Management, Technical Program Committee, 1996), p208-210

Waste processing facilities

Editor's Note, Thomas L. Theis, EE Nov. 96, p956.

Environmental Engineering Forum, Dee Ann Sanders, EE Nov. 96, p957.

Waste recycling

Waste recycling Development of a CO₂-Solidification Method for Recycling Concrete Wastes, Toshiyuki Hashida, Satoshi Teramura, J. C. Ha and Hideaki Takahashi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p674-683.

Milliennium, Ken P. Chong, ed., 1990), po/4-083.
Development of a Solidification Method for Pulverized Concrete Waste by Hydrothermal Hot-Pressing and Fiber Reinforcement, Kazuhiko Sato, Toshiyuki Hashida, Hideaki Takahashi and Nakamichi Yamasaki, (Materials for the New Millennium, Ken P. Chong, ed., 1996), 624-629. p684-693.

Savannah River Recycles Metals, Saves Money, CE Oct. 96, p14.

Toning Asphalt, ET Aug./Sept. 96, p1,7.

Waste site cleanup Brownfields Boom, Monica Maldonado, CE May 96, p36-40

CERCLA Liability and the Environmental Professional— An Overview of Judicial Developments, John J. Allen, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p35-41.

Conceptual Design of Soil Venting Systems, David W. DePaoli, James H. Wilson and Carl O. Thomas, EE May

96, p399-406.

A Cost-Effective approach to In Situ Remediation of Soil and Groundwater at a Diesel Fuel Spill Site, David A. Nickerson and James N. Baker, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1379-1386.

Design and Implementation of a Multi-Faceted Site Remediation, Stephen A. Kessel and Arnold S. Vernick, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p541-546.

Development of Remediation Technologies Simulators, Mark S. Dortch and Christian J. McGrath, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2583-2588.

The Effect of Measurement Scale on the Worth of Hydraulic Conductivity Data: Slug Tests and Pumping Tests, Willy Zawadzki and Roger Beckie, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1034-1051.

Experiences in Cleaning Up the Influence of Oil Spill on the Water Bodies, G. M. Barenboim, N. A. Rubanova and I. M. Saipulaev, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p2534.

Intelligent On-Line Monitoring of Machine Health for Roin Critical Environments, John P. H. Steele, Michelle Archuleta, Galen D. Brown, Tom Drouillard, Dirk Schlief and Tim D. Seifert, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p262-

An Iterative, Probabilistic Environmental Decision Analysis Approach, Erik K. Webb, Stephen H. Conrad and Theresa J. Brown, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p249-264. New Jersey Fund Offers Help, H. Michael Sklar, CE June

96, p27.

Overview of DoD Research in Groundwater Modeling, J. P. Holland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2565-2570.

Owner-Contractor Relationships on Contaminated Site Remediation Projects, Cynthia M. Ruff, David A. Dzombak and Chris T. Hendrickson, CO Dec. 96, p348-353.

Phytoremediation: Plant Uptake of Atrazine and Role of Root Exudates, Joel G. Burken and Jerald L. Schnoor, EE Nov. 96, p958-963.

Predictions on Federal Cleanup Market, CE July 96, p21-

Reducing Uncertainty in Environmental Site Characteriza-tion, Yi-Chang Tsai and J. David Frost, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1019-1033.

Research to Application: Network Models to Simulate Flow and Transport in Heterogeneous Media, John F. Peters and Stacy E. Howington, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2571-2576.

Risk Model Applied Backwards, Monica Maldonado, ET

Oct./Nov. 96, p1,7. Secondary Containment Design Practices, Charles R. Tay-lor, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p547-552.

Site Characterization Process Saves Time and Money, ET Mar./Apr. 96, p1,4.

Slim Environmental Outlook, Casey Dinges, CE Aug. 96. p96.

Analysis of Air Permeability Tests at Yucca Mountain, Nevada, Dave O. Cox and Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p160-162.

Building a Landfill on Mud(Available only in Geo/ Environmental Special Issue), Michael J. Byle and Anne M. Germain, CE July 96, p12A-16A.

Critical Groups for Geological Disposal Performance As-sessments, Graham M. Smith and John Kessler, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p234-236.

Data Qualification for the Waste Isolation Pilot Plant, R.

Dennis Brown and Victor J. Harper-Slaboszewicz, (High

Level Radioactive Waste Management, Technical Program Committee, 1996), p211-213. Deep Geological Disposal Programs in Preparation and Under Development, D. P. Khrushchov, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p19-21.

Defining the Potential Repository Siting Block Yucca Mountain, Nevada, Robert W. Elayer and Richard M. Nolting, III, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p157-159.

Determination of Importance Process during Yucca Mountain Site Characterization, Peter S. Hastings, Dealis W. Gwyn and Robert F. Wemheuer, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p327-329.

The Effect of Saturation on the Mechanical Properties of Tuff at Yucca Mountain, Moses Karakouzian and Nick Hudyma, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p407-408.

Evaluation of Groundwater Travel-Time Calculations for Yucca Mountain, R. W. Barnard, S. J. Altman, B. W. Ar-nold, C. K. Ho and S. A. McKenna, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p193-195.

Flooding of an Underground Facility at Yucca Mountain: A Summary of NRC Review Plans, Neil M. Coleman, Rex G. Wescott and Terry L. Johnson, (High Level Radioactive Waste Management, Technical Program Committee,

1996), p205-207.

Important Parameters in the Performance of a Potential Repository at Yucca Mountain (TSPA-1995), Joel E. At-kins, S. David Sevougian, Joon H. Lee, Robert W. An-drews and Jerry A. McNeish, (*High Level Radioactive* Waste Management, Technical Program Committee, 1996), p291-292.

Indian Programme on Deep Geological Disposal of Radio-active Waste, A. N. Prasad, K. Balu, R. K. Mathur and P. K. Narayan, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p22-24

Initial EPRI Reaction to the NAS Yucca Mountain Stan dards Recommendations, John H. Kessler, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p282-284.

Keys to Opening the Nation's First Deep Geological Repository in 1998, Michael H. McFadden and Leif G. Eriksson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p220-223.

Lateral Diversion in the PTn Unit: Capillary-Barrier Analy-sis, Michael L. Wilson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p111-113. Microbial Studies in the Canadian Nuclear Fuel Waste Management Program, Simcha Stroes-Gascoyne, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p4-6.

National Research Council Report: "Technical Bases for Yucca Mountain Standards"—A State of Nevada View, Carl A. Johnson, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p285-

NRC's Refocused Prelicensing High-Level Waste Regulatory Program, M. V. Federline, R. L. Johnson and J. T. Greeves, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p196-198.

Numerical Analyses of Reinforced Underground Openings Subjected to Seismic Loadings, Fei Duan and Saeed Bonabian, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p412-414.

Numerical Modeling for Saturated-Zone Groundwater Travel Time Analysis at Yucca Mountain, Bill W. Arnold and George E. Barr, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

p187-189.

- Performance Assessment Modeling of the Proposed Gent-ing Island Repository Facility, Yudi U. Imardjoko, Dan-iel B. Bullen and Sofyan Yatim, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p172-175.
- Potential Changes to Technical Issues in HLW Performance Assessment, N. A. Eisenberg and R. G. Wescott, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p288-290.

Preliminary Overview of Radiological Data Validation: Problems Found in Laboratory Data, LeRoy F. Wenrick, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p312-314.

Probabilistic Evaluation of Postclosure Criticality Events Internal to the Waste Package, Peter Gottlieb and John R. Massari, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p345-347

Quality Assurance Plays a Key Role in Getting the Waste Isolation Pilot Plant to Operational Status, R. Dennis Brown, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p214-216.

Radwaste Disposal in Clay—E. C. Everest Project, IPSN Contribution, Catherine Certes, Patrick Goblet and André Levassor, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p170-171

Radwaste Disposal in Granite—E.C. Everest Project, IPSN Contribution, P. Baudoin and C. Serres, (High Level Ra-dioactive Waste Management, Technical Program Com-mittee, 1996), p168-169.

Recommendations from EPA's Review Committee on WIPP, Chris G. Whipple, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p226-227.

Regulatory Assessment of Evapotranspiration at Yucca Mountain, Neil M. Coleman and Michael P. Miklas, (High Level Radioactive Waste Management, Technical

Program Committee, 1996), p199-200.

Screening, Combining and Tracking Features, Events and Processes in WIPP Performance Assessments, D. A. Galson, D. G. Bennett, R. D. Wilmot, D. R. Anderson and Peter N. Swift, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p231-

Sensitivity Studies of Unsaturated Groundwater Flow Mod-eling for Groundwater Travel Time Calculations at Yucca Mountain, Nevada, Susan J. Altman, Clifford K. Ho, Bill W. Arnold and Sean A. McKenna, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p190-192.

Shear Dispersion in the Benthic Boundary Layer, C. G. Hannah, J. W. Loder and Y. Shen, (Estuarine and Coast-al Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p454-465.

Systematic Analysis of Long-Term Fate of Disposed Dredged Material, Norman W. Scheffner, WW May/June 96, p127-133.

Testing of Abstractions for Total System Performance As sessment, Vinod Vallikat, Srikanta Mishra, Yanyong Xi-ang and David Sevougian, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p293-294.

Total System Performance Predictions (TSPA-1995) for the Potential High-Level Waste Repository at Yucca Mountain, S. David Sevougian, Robert W. Andrews and Jerry A. McNeish, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p295-297.

Tunneling Progress on the Yucca Mountain Project, Wil-liam H. Hansmire and Richard J. Munzer, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p385-387.

Unsaturated Zone Flow Modeling for GWTT-95, Clifford K. Ho, Susan J. Altman, Sean A. McKenna and Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p184-186.

Use of Expert Judgment in the HLW Regulatory Program:
U.S. NRC Staff Draft Guidance, Janet P. Kotra, Michael
P. Lee, Norman A. Eisenberg and Aaron R.
DeWispelare, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p247-249.

Use of Limited Information in a License Application to Construct a Repository, J. Michael McGarry, III and F. Stanley Echols, (High Level Radioactive Waste Manage ment, Technical Program Committee, 1996), p201-204.

Use of Probabilistic Methods for Analysis of Cost and Duration Uncertainties in a Decision Ánalysis Framework, D. M. Boak and L. Painton, (High Level Radioactive Waste Management, Technical Program Committee,

Waste Management 1996, p.250-251.
Westbay/MOSDAX Instrumentation of UE-25 ONC #1 and USW NRG-4 at Yucca Mountain, Newda, Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p163-165

"Design Control" and Scientific Investigations—Is There Any Linkage? Robert R. Richards, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p208-210.

Waste stabilization ponds Modeling Coliform Mortality in Waste Stabilization Ponds,

Aloice W. Mayo, EE Feb. 95, p140-152.

Savannah River Recycles Metals, Saves Money, CE Oct. 96, p14.

Waste treatment

Effects of Media Characteristics on Performance of Upflow Anaerobic Packed-Bed Reactors, Joo-Hwa Tay, Kuan-Yeow Show and S. Jeyaseelan, EE June 96, p469-476.

Engineered Contaminated Soils and Interaction of Soil Geomembranes, Geotechnical Special Publication No. 59, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N.

Reddi, ed., 1996, 0-7844-0213-2, 144pp.
Engineering Models of Combined Chemical and Biological Processes, Jon P. Scott and David F. Ollis, EE Dec. 96, p1110-1114.

From Sediment to Solid, James R. Donnelly and William C. Webster, CE May 96, p41-43.

To Integrated Lunar/Martian-Engineered Closed/ Controlled Ecosystem, Willy Z. Sadeh, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1083-1089.

Jamison, ed., 1950, p. 1063-1069.

Landfill Leachate Treatment by Evaporation, Deborah R. Birchler, Mark W. Milke, A. Leigh Marks and Richard G. Luthy, EE Sept./Oct. 94, p. 1109-1131.

Making a Case for "Cost-Effective" Compliance, Dale T. Bignell, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p. 305-307.

Management of Water Treatment Plant Residuals, AWWA Technology Transfer Handbook U.S. EPA.605.89.95008.

Technology Transfer Handbook U.S. EPA/625/R-95/008 (M&R No. 88), American Society of Civil Engineers, American Water Works Association, and the U.S. Envi-ronmental Protection Agency, 1996, 0-7844-0181-0,

Modeling Coliform Mortality in Waste Stabilization Ponds, Aloice W. Mayo, EE Feb. 95, p140-152.

Optimal Waste Decomposition-Landfill as Treatment Process, Robert P. Anex, EE Nov. 96, p964-974.

Pilot Study Shows Higher Methane Yields, CE May 96, p14-15.

pite-13.

Risk-Equivalent Seasonal Discharge Programs for Ice-Covered Rivers, Corinne L. Wotton and Barbara J. Lence, WR May/June 95, p275-282.

Understanding Why Stakeholders Matter, Richard C. Eschenbach and Ted G. Eschenbach, ME Nov/Dec. 96, p59-64.

Waste utilization

Alkali-Silica Reaction in Concrete with Waste Glass as Aggregate, Christian Meyer, Stephen Baxter and Weihua Jin, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1388-1397.

Cellular Rigid Pavement, John K. Bright and John R. Mays, TE Sept./Oct. 96, p381-387.

EcoBlocks: Nontraditional Use for Mixed Wastepaper, A. M. Springer, Marc Rose and Rich Ryu, EE May 96, p437-444

Effects of Sewage Effluent Irrigation on Paddy, S. Krish-namoorthi, K. Shyamala and P. Govindan, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2372-2377.

Engineered Contaminated Soils and Interaction of Soil Geomembranes, Geotechnical Special Publication No. 59, Jay N. Megoda, ed., Luis E. Vallejo, ed. and L. N.

Reddi, ed., 1996, 0-7844-0213-2, 144pp.

Evaluating Paint-Sludge Chars for Adsorption of Selected Paint Solvents, Byung R. Kim, Edward M. Kalis, Irving T. Salmeen, Carl W. Kruse, Ilham Demir, Stephen L. Carlson and Massoud Rostam-Abadi, EE June 96, p532-539.

Feasibility of Fullerene Waste as Carbonaceous Adsorbent, Theodore G. Cleveland, Sanjay Garg and William G. Rixey, EE Mar. 96, p235-238.

Clascrete 2 Disposing of Non-Recyclable Glass, Venkata S. Panchakarla and Millard W. Hall, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p509-518. Investigation of the Use of Carpet Waste PP Fibers in Concrete, Antoine E. Naaman, Sandra Garcia, Marwan Korkstein Concrete.

maz and Victor C. Li, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p782-791.

Liability to Asset: Beneficial Reuse of Stabilized Contaminated Soils, Michael F. Conway, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p47-56.

Permeability of High-Strength Concrete Containing Low Cement Factor, Tarun R. Naik, Shiw S. Singh and Mohammad M. Hossain, EY Apr. 96, p21-39.

Monammad M. Hossam, E. T. Apr. 79, Dz. 1-37.
Phosphogypsum Slag Aggregate-Based Asphaltic Concrete Mixes, Paul T. Foxworthy, Raju S. Nadimpalli and Roger K. Seals, TE July/Aug. 96, p300-307.
Potential of Waste Glass for Concrete Masonry Blocks, Christian Meyer, Stephen Baxter and Weihua Jin, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p666-673.

Recycling of Spent Abrasive Media in Nonstructural Con-crete, Matthew T. Webster and Raymond C. Loehr, EE Sept. 96, p840-849.

Resilient Modulus of Cement-Stabilized Phosphogypsum, M. I. Pericleous and J. B. Metcalf, MT Feb. 96, p7-10.

Sand Reinforced with Shredded Waste Tires, Gary J. Foose, Craig H. Benson and Peter J. Bosscher, GT Sept. 96, p760-767

Savannah River Recycles Metals, Saves Money, CE Oct. 96, p14.

Soil Stabilization Utilizing Alternative Waste Materials, Greg Heckel and Riyad Wahab, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p318-327. Toning Asphalt, ET Aug./Sept. 96, p1,7.

Wasteload allocation

Alternative to CBOD₅-Based Load Allocation Studies on Low-Dilution-Ratio Streams, Gary G. Rott, EE July 96, p669-671.

Wastewater

Dilution of Dense Bottom Plumes, Ole Petersen and Torben Larsen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p906-909.

EPA in Limelight at WEFTEC Meeting, CE Dec. 96, p10.

Experimental Studies of Merging Plumes, G. A. Daviero and P. J. W. Roberts, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p918.

Fuzzy Logic Process Control of HPO-AS Process, Mark T. Yin and Michael K. Stenstrom, EE June 96, p484-492.

Medium Span Gravity Sewer Aerial Crossings, Curtis W. Swanson and Glenn E. Hermanson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p457-468.

Modeling Dry Weather Wastewater Flow in Sewer Net-works, D. Butler and N. J. D. Graham, EE Feb. 95, p161-173.

Strange Attractors and Chaos in Wastewater Flow, Donald I. Angelbeck and Rafic Y. Minkara, EE Jan./Feb. 94, p122-137

Wastewater disposal

Biological Serendipity from an Ocean Outfall Maintenance Inspection, Tom Gerlinger, George Robertson and Don Maurer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2050-2055.

Constructed Wetlands for Metals Removal, Charles R. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1184-1189.

Costs of Treatment for Wastewater Reclamation and Disposal: A Preliminary Assessment, Pamela Doughman, Stephen Lyon, Lydia Chiu and Charles Gunnerson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996). p1425-1430.

Derivation of New Disperison Coefficient Equation for Natural Streams, Il Won Seo, Kil Seong Lee and Tac Sung Cheong, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p4263-4268.

Dilution of Dense Bottom Plumes, Ole Petersen and Torben Larsen, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p906-909.

Emergency Repair of An Ocean Outfall, Gail Lynch, John Linder and Robert Ooten, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2039-2043.

Experimental Studies of Merging Plumes, G. A. Daviero and P. J. W. Roberts, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p918.

The Fate of Pathogenic Organisms in Mamala Bay, John P. Connolly and Alan F. Blumberg, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4090-4095.

Hazardous Soil Remediation: A Cooperative Effort Be-tween Industry and Government, Wendy L. Cohen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1203-1208.

Hydrodynamic Model and Sensitivity Analysis for San Juan Bay, P. R. Lisa J. Wolf and Gavin Gong, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p505-517.

T. Cheng, 1990), p. 1887. The Cheng, 1990, p. 1887. The Health Straight Str Nguyen and Tom Gerlinger, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1699-1704.

Management of Stream-Aquifer Systems in the 21st Century, Babs Makinde-Odusola, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2787-2792.

Numerical Modeling of Deep Well Injection Near a Fault, Peikang Jin and Michael E. Barber, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p912-926.

The Role of Circulation Patterns on the Simulation of Constituent Transport in San Juan Bay, Puerto Rico, Gavin Gong and James D. Bowen, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p518-529.

Update on Aguas Argentinas, CE July 96, p22,24.

Wastewater System Design and Evaluation, Leonard Bell and Troy Norris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p949-957.

Wastewater management

ations, Thomas R. Dion, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p328-334. Alternative Wastewater Pumping Station Design Consider-

p326-334. Appropriate Sanitation Technology Advisor: A Planner's Tool in Less Developed Countries, Larry Quinn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2993-2998. Evaluating Sustainability of Water & Sanitation Projects: Cores Studies in Developing Countries, Philip Poorly

Case Studies in Developing Countries, Philip Roark, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3253-3258.

Innovative Effluent Management for Sustainability, Dan Bruinsma, Mary Ellen Dick, Eric Rosenblum and David Tucker, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1614-1619.

An Introduction to Taipei Suburban Sewage Collection and Treatment Systems, Chiang-Tsai Lin and Der-Liang Sheen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3170-3175.

Retention-Tank Systems: A Unique Operating Practice for Managing Complex Waste Streams at Research and De-velopment Facilities, Shari Brigdon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1771-1776.

Wastewater treatment Aerobic Fluidized Bed Reactor with Internal Media Cleaning, Steven I. Safferman and Paul L. Bishop, EE Apr. 96,

Alternative to CBOD₅-Based Load Allocation Studies on Low-Dilution-Ratio Streams, Gary G. Rott, EE July 96, p669-671.

Anaerobic Degradation of Cornstarch in Wastewater in Two Upflow Reactors, Tin Sang Kwong and Herbert H. P. Fang, EE Jan. 96, p9-17.

Anaerobic Treatment of High-Sulfate Wastewater and Substrate Interactions with Isopropanol, Peter Fox and Swamy Ketha, EE Nov. 96, p989-994.

An Appropriate Technology to Treat Domestic Sewage, S.
A. Mohsin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2748-2753.

Assessment of AWT Systems in Tampa Bay Area, Richard

O. Mines, Jr., EE July 96, p605-611.

Automatic Control of Flocculation Processes, Anders O. Wistrom and Jay A. Farrell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p997-1002.

Biological Phosphorus Removal: Effect of Low Temperature, Pradeep Kumar, Indu Mehrotra and T. Viraraghavan, CR June 96, p63-76.

Border Environment Cooperation Commission: 1995 Year End Status Report, Peter Silva, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1819-1821.

Brewery Wastewater Treatment in UASB Reactor at Ambient Temperature, Yue-Gen Yan and Joo-Hwa Tay, EE

June 96, p550-553.

Case History of a Lined Wastewater Treatment Lagoon Failure, Kelly S. Merrill and Matt Stephl, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p518-532.

Cold Temperature Nutrient Removal from Wastewater, Jan A. Oleszkiewicz and Shahnaz Danesh, (Cold Regions Engineering: The Cold Regions Infrastructure-An In ternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p533-544.

Comparison of Commonly Used Odor Control Technologies, Kartik Vaith, Mike Cannon, Darrell Milligan and James Heydorn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p64-74.

Comparison of Methods for Sizing Secondary Treatment Filters for Wastewater, Paily P. Paily, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p565-570.

Comprehensive Fate Model for Metals in Municipal Waste-water Treatment, Wayne J. Parker, Hugh D. Monteith, John P. Bell, Henryk Melcer and P. Mac Berthouex, EE Sept/Oct. 94, p1266-1283.

Constructed Wetlands for Metals Removal, Charles R. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1184-1189. Containing Spills and Fire, William E. Wiley, CE Mar. 96,

p53-55

Conveyance of Water and Wastewater Residuals, Sludge Treatment, Utilization, Reclamation and Disposal Committee, ASCE, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p994-996.

Coping with EPA's Storm Water Permit for Hazardous Waste Facilities, Industrial Landfills, Wastewater Treatment Plants, and Recyclers, James P. Amick, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2631-2635.

Costs of Treatment for Wastewater Reclamation and Disposal: A Preliminary Assessment, Pamela Doughman, Stephen Lyon, Lydia Chiu and Charles Gunnerson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1425-1430.

Denitrification of Ground Water/Waste Water using the Aquacel System, Peter Hall and Jerry Shapiro, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p577-581.

Design Guidelines for UV Disinfection Facilities, Heba Awad, Jeff Kuo and Jamal Awad, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2999-3004.

Double Duty Water Treatment, CE Mar. 96, p8.

Dune Drain Field, CE Dec. 96, p15-16.

Editor's Note, Thomas L. Theis, EE Dec. 96, p1049.

Environmental Engineering Forum, Takashi Asano and George Tchobanoglous, EE Aug. 95, p548.

Environmental Engineering Forum, Dee Ann Sanders, EE Nov. 96, p957

EPA Proposes Rural Wastewater Grants, CE Dec. 96, p8. Evaluating Coatings for Concrete Wastewater Facilities, C. Vipulanandan, H. Ponnekanti, Dara N. Umrigar and A. D. Kidder, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p851-862.

External Inspection of an Ocean Outfall, Mike Heinz, Don Siverts and Bob Ooten, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2056-2059.

Fate of Organics during Column Studies of Soil Aquifer Treatment, David M. Quanrud, Robert G. Arnold, L. G. Wilson, Howard J. Gordon, David W. Graham and Gary L. Amy, EE Apr. 96, p314-321.

Feasibility of Fullerene Waste as Carbonaceous Adsorbent, Theodore G. Cleveland, Sanjay Garg and William G. Rixey, EE Mar. 96, p235-238.

Fluidized Bed Denitrification of Secondary Effluent During Wastewater Reclamation in Southern California, Roger w. Babcock, Jr., Kapal Madireddi and Michael K. Stenstrom, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p788-793.

Groundwater Recharge with Reclaimed Water Another Step Closer to Potable Reuse, William R. Mills, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3898-3903.

Impact of Point and Nonpoint Discharges on the Water Quality of a Reach of the Red River of the North, Anil Peggerla and G. Padmanabhan, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2504-2509.

An Introduction to Taipei Suburban Sewage Collection and Treatment Systems, Chiang-Tsai Lin and Der-Liang Sheen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3170-3175.

Membrane Technology Helps Shopping Center Clean Wastewater, CE Dec. 96, p89.

Modeling Bacterial Decay Coefficient During SSDML Process, T. R. Sreekrishnan, R. D. Tyagi, J. F. Blais, N. Meunier and P. G. C. Cambell, EE Nov. 96, p995-1002.

Meunier and P. G. C. Cambeil, EE NOV. 90, p993-1002. North American Water and Environment Congress & De-structive Water, CD-ROM (Windows version only), Chenchayya Bathala, ed., 1996, 0-7844-0166-7, 1340pp, Odor Control in Wastewater Treatment Plants, WEF Manu-

al of Practice No. 22 (M&R No. 82), Joint Task Force of the Water Environment Federation and the American Society of Civil Engineers, (Perry L. Schafer, chmn.), 1995,

0-7844-0085-7, 285pp.
Optimal Geometric Shape of a Surface Aeration Tank, Achanta Ramakrishna Rao and U.S Laxmi, (North American Water and Environment Congress & Destructive

Water, Chenchayya Bathala, ed., 1996), p800-805.

Optimizing Municipal Wastewater Treatment in Cold Climates: Scale, Process and Benefits, Isobel W. Heathcote and William J. Jewell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1419-1424.

Oxygen Transfer Efficiency in Small Diffusers, Mark A.

Oxygen Transfer Einciency in Small Diffusers, Mark A. Tumeo and Tamar J. Stephens, EE Jan. 96, p55-57. Performance Evaluation of Overland Flow Wastewater Treatment System under Winter and Summer Condi-tions, R. Y. Surampalli, P.E., S. C. Chou and S. K. Ban-erji, P.E., CR Dec. 96, p163-177. Phenol- and Thiocyanate-Based Wastewater Treatment in PBC Paster Courter Passers FE Co. 106 (2011) 018

RBC Reactor, Goutam Banerjee, EE Oct. 96, p941-948. Pilot Testing of a Zero-Discharge Treatment Process, Pascale Lagacé, Paul R. Stuart and Ronald Zaloum, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p99-104. Postaudit of Upper Mississippi River BOD/DO Model,

Wu-Seng Lung, EE May 96, p350-358.
Production of Nitrous Oxide Gas under Sequencing Batch
Reactor System, Cheng-Nan Chang, Jih-Gaw Lin, JinYuan Chen and Fong-Bing Hsu, (North American Water
and Enginement Company & Dec ruan Chen and rong-ring road, worth American Maer and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p782-787. Spray Freezing to Treat Oil Sands Tailings Pond Water, W. Gao, D. C. Sego and D. W. Smith, (Cold Regions Engi-

neering: The Cold Regions Infrastructure-An Interna-

tional Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p60-70.

Study of Biological Reactors for Control of Odor, VOC and Toxic Emissions from Wastewater Treatment Plants, Todd S. Webster, Joseph S. Devinny, Edward M. Torres and Shabbir S. Basrai, (North American Water and Enviment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p571-576.

Treating Wastewater in Developing Nations, CE Aug. 96, p10.

Treatment of Metal Industrial Wastewater by Fly Ash and Cement Fixation, C. H. Weng and C. P. Huang, EE Nov./Dec. 94, p1470-1487.

Use of NaOH to Control pH for Solubilization of Waste Activated Sludge, Jih-Gaw Lin, Cheng-Nan Chang and Shih-Ling Hsu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2468-2473.

10. ed., 1996), p.2408-24/5.
10. UV Disinfection of Wastewater: Probabilistic Approach to Design, Frank J. Loge, Jeannie L. Darby and George Tchobanoglous, EE Dec. 96, p1678-1084.
VOC Inventory at New York City Wastewater Treatment Plants, Richard Pope, Bert Aubrey and Demetrios Moschandreas, (North American Water and Environment Connects & Destructive Water Chaperbown, Bathela Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p75-80.

VOCs in Fixed Film Processes. I: Pilot Studies, Wayne J. Parker, Hugh D. Monteith and Henryk Melcer, EE July

96, p557-563. VOCs in Fixed Film Processes. II: Model Studies, Wayne J. Parker, Hugh D. Monteith and Henryk Melcer, EE July 96, p564-570.

Washington Buildup, John Casey, CE Oct. 96, p64-67. Wastewater and Condo Jobs Are Highest Risks, CE Dec.

Wastewater Treatment Facility Aeration Project, Gary L. Eddy, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p506-517.

The Water Customer in Space, Tony Rachwal, Colin Waters and Tony Wachinski, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p663-667.

Wastewater use

Environmental Engineering Forum, Takashi Asano and George Tchobanoglous, EE Aug. 95, p548.

Groundwater Recharge with Reclaimed Water Another Step Closer to Potable Reuse, William R. Mills, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3898-3903.

Wastewater Reuse: An Alternative for Potable Water, S. A. Mohsin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2976-2981.

EPA in Limelight at WEFTEC Meeting, CE Dec. 96, p10. Impact of Sedimentation Caused by Runoff, Dilip Khatri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Modified Oedometer for Arid, Saline Soils, Omar Saeed Baghabra Al-Amoudi and Sahel N. Abduljauwad, GT

Oct. 94, p1892-1897.

Permeability of High-Strength Concrete Containing Low Cement Factor, Tarun R. Naik, Shiw S. Singh and Mohammad M. Hossain, EY Apr. 96, p21-39.

Ponding Study of January 1993 Storm Event within Airport Industrial Park, Oceanside, California, George Hsu and Yen-Hsu Chen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2282-2287.

Pulling Propellants Out of Thin Air. Demonstration of an End-to-End Mars In-Situ Propellant Production Unit, John F. Connolly and Robert M. Zubrin, (Engineering, Construction, and Operations in Space, Stewart W Johnson, ed., 1996), p706-716.

Reliability-Based Exit Gradient Design of Water Retain Structures, D. V. Griffiths, Gordon A. Fenton and G. M. Paice, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p518-

Sorption of Water in Mortars and Concrete, Nicos S. Martys and Chiara F. Ferraris, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1129-1138.

State-of-the-Art of Roller Compacted Concrete Pavement, Kwabena Ofori-Awuah, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1439-1448.

Stress Due to Alkali-Silica Reactions in Mortars, C. F. Ferraris, E. J. Garboczi, F. L. Davis and J. R. Clifton, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1379-1387

Transport and Sorption of Water Vapor in Activated Car-bon, Tsair-Fuh Lin and William W. Nazaroff, EE Mar. 96, p176-182.

Water allocation policy
ASCE Regulated Riparian Code and Florida's Regulated
Riparian Experience: The Role for Voluntary Reallocation, Phyllis Park Saarinen and Mark D. Farrell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2927-2932.

The Case Against Markets, Joseph W. Dellapenna, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2933-2938. The Case for Water Markets as the Best Means for Effective Water Allocation, Ronald G. Cummings and R. Peter Terrebonne, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2921-2926.

- Economic Efficiency of Regulations for Allocation and Control of Surface Water Withdrawals in Humid Regions, J. Wayland Eheart and Kenneth W. Harrison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2713-2718.
- Interruptible Option Contracts, John F. Scott, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3569-3573.
- Managing Transboundary Water Sharing, Stephen E. Draper, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3230-3235.
- A New Model of California's SWP/CVP Systems, Tariq N. Kadir and Miguel A. Marino, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3068-3073.
- Optimization of Water Distribution System with Blending Requirements, Yung-Hsin Sun, Shu-li Yang, William W-G. Yeh, Ali Diba and Timothy A. Blair, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4359-4364.
- Robustness of Reservoir Storage Reallocation Decisions to Climate Change, Andrew W. Wood, Dennis P. Lettenmaier and Richard N. Palmer, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p19-37.
- Sacramento Valley Conjunctive Use Future Water Supply for the State Water Project? John R. Fielden, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3062-3067.
- Third Party Impacts of Proposed Water Banking in the Colorado River Basin, James F. Booker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), 94042-4045.
- Transboundary Diversions, Water Law and Property Rights, George William Sherk, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3224-3229.
- Transferable Discharge Permits as a Function of Fluctuating Stream Conditions, Norman J. Dudley, Michelle Coelli and John J. Pigram, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p272-293.
- U.S.-Canadian Water Sharing, Kris G. Kauffman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3423-3428.
- Water Allocation on US/Mexico Boundaries, Conrad G. Keyes, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3429-3433.
- Water Crisis in Developing World: Misconceptions about Solutions, Harald D. Frederiksen, WR Mar/Apr. 96, p79-87.

Water balance

- Analyzing Water Balances and Ranking Maryland's Watersheds Related to Growth, Development and Loss of Habitat, Marcia Smith, David Bleil and James Ahl, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4365-4370.
- Design of Runoff Recycling Irrigation System for Rice Cultivation, R. C. Srivastava, IR Nov/Dec. 96, p331-335.
- Dormant Season Alfalfa Water Balance on the NIIP, Brian Boman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p231-236.
- Evaluation of Dormant Season Evapotranspiration, Jerry L. Hatfield, John H. Prueger and Thomas J. Sauer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p418-423.
- Hydrologic Impact of Great Flood of 1993 in South-Central Kansas, Marios Sophocleous, A. J. Stern and S. P. Perkins, IR July/Aug. 96, p203-210.
- Modeling Seasonal Furrow Irrigation, N. S. Raghuwanshi and W. W. Wallender, IR July/Aug. 96, p235-242.

- Non-Growing Season Water Budgets for a Shortgrass Steppe, Shusen Wang, William J. Parton and Gigi A. Richard, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p237-242.
- SCS Runoff Equation Revisited for Variable-Source Runoff Areas, Tammo S. Steenhuis, Michael Winchell, Jane Rossing, James A. Zollweg and Michael F. Walter, IR May/June 95, p234-238.
- Water Balance of the Niger Basin, D. R. Maidment, F. Olivera, Z. Ye, S. M. Reed and D. C. McKinney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3411-3416.

Water chemistry

- BAYMAP: A Simplified Embayment Flushing and Transport Model System, J. Craig Swanson and Daniel Mendelsohn, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p570-582.
- The Environmental Valuation Reference Inventory (EVRI) for Water Related Benefits Transfers, Jim Frehs, Mathew Clark, Paul De Civita, Fernand Filion, Virginia Kibler and Mahesh Podar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1331-1336.
- Performance Assessment Modeling of the Proposed Genting Island Repository Facility, Yudi U. Imardjoko, Daniel B. Bullen and Sofyan Yatim, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p172-175.
- Soil Water Chemistry of Irrigation with Drainwater, B. R. Faulkner and J. C. Guitjens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1483-1488.

Water compressibility

Procedure for Time-Domain Seismic Analyses of Concrete Dams, R. Yang, C. S. Tsai and G. C. Lee, EM Feb. 96, p116-122.

Water conservation

- Cooperative Approaches in Achieving Additional Water Conservation at Prado Dam, James A. Van Haun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2352-2353.
- Drought Management in Northeastern Colorado, Darell D. Zimbelman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p863-868.
- Evaluation of Modelling Needs for Central Valley Project Operations, John Burke and Donald Frevert, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p806-811.
- Impact of Agricultural Water Conservation on Water Quality in Arid Irrigated Areas, James E. Ayars, Kenneth K. Tanji and Thomas J. Trout, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p905-910.
- Integrated Resources Management for Irrigated Agriculture: Practical Lessons in Water Management and Conservation from the Arizona Management Improvement Program, Thomas Carr, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3486-3489.
- Non-point Source Policies for Agricultural Drainage, Dennis W. Westcot, Joe Karkoski and Rudy Schnagl, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p875-880.
- Regional Economic Impacts of a Land Fallowing Program

 The Palo Verde Test Land Fallowing Program Case
 Study, Fadi Z. Kamand, (North American Water and Environment Congress & Destructive Water, Chenchayya
 Bathala, ed., 1996), p4030-4035.
- Reservoir Sediment Management Practices of the Los Angeles County Department of Public Works, Sree Kumar and Martin Moreno, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1651-1656.

776

Water Conservation Definitions From a Hydrologic View-point, Richard G. Allen, Charles Burt, A. J. Clemmens and L. S. Willardson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p899-904.

Water Conservation for Boilers and Steam Systems, Joan Casey, Stuart Cooley and Marekat C. Joseph, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2685-2688.

Water-Price Effect on Residential and Apartment Low-Flow Fixtures, Donald E. Agthe and R. Bruce Billings, WR Jan./Feb. 96, p20-23.

Water consumption

Water Consumption

Pere Structure Evolution and State of Pore Water in Hydrating Cement Paste at Cryogenic Temperatures, J-Y.

Jehng, D. T. Sprague, S. Bhattacharja and W. P. Halperin, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p600-607.

Water Conservation for Boilers and Steam Systems, Joann Casey, Stuart Cooley and Marekat C. Joseph, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2685-2688.

A Diffusion-Type Adsorption Batch Test Method for De-termination of Benzene Adsorption on Regina Clay, Xiao Zhang, S. Lee Barbour and John V. Headley, (Non-Aqueous Phase Liquids (NaPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p175-186.

Evaluation of the Troxler Model 4430 Water-Cement Gauge, CERF Report: HITEC 96-03-F, Highway Innova-tive Technology Evaluation Center, Civil Engineering Research Foundation, 1996, 0-7844-0167-5, 51pp.

Flash-Setting Lightweight Material—A First Step to Float-ing Island Construction, Sumio Horiuchi, Noburu Uchiyama, Takuro Odawara and Kazuya Yasuhara, MT Aug. 96, p138-146.

Geotechnical Properties of Paper Mill Sludges for Use in Landfill Covers, Horace K. Moo-Young and Thomas F. Zimmie, GT Sept. 96, p768-775.

Investigation of Lignite-Based Bottom Ash for Structural Concrete, Nader Ghafoori and Jeffrey Bucholc, MT Aug. 96, p128-137.

Studies on the Erosion of a Compacted Soil, G. J. Hanson and K. M. Robinson, (North American Water and Envinent Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2427-2432.

Systems for Forecasting Flows and Their Uncertainty, Kon-stantine P. Georgakakos, Alexandre K. Guetter and Jason A. Sperfslage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2360-2365.

Upscaled Soil-Water Retention Using van Genuchten's Function, Timothy R. Green, James E. Constantz and David L. Freyberg, HE July 96, p123-130.

Study Concludes Feds Should Exit Water Business, CE June 96, p12.

Water demand

Anaheim State-of-the-Art Water Treatment Plant - Six years from Conception to Completion, Isaac Pai, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2654-2659.

Analysis of Long-term Supply-demand Planning of Water Resources in Taiwan, Shiang-Kueen Hsu, Nien-Sheng Hsu and William W-G. Yeh, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3153-3157.

California's Visions of Groundwater: a Water Source and a altionia's visions of Gloundwater. a main south and sout

Changing Conditions and Water Elections, Charles H. Lawrance, James M. Stubchaer and Jon A. Ahlroth, WR

July/Aug. 94, p458-475.

Characterization of Canal Operations under Ideal Anticipa-tory Control, E. Bautista, A. J. Clemmens and T. S. Strelkoff, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1887-1892.

Deriving a General Operating Policy for Reservoirs Using Neural Network, H. Raman and V. Chandramouli, WR

Sept./Oct. 96, p342-347.

Economic Efficiency of Regulations for Allocation and Control of Surface Water Withdrawals in Humid Re-gions, J. Wayland Eheart and Kenneth W. Harrison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2713-2718.

Evaluation of System Constant Volume Control, Zihui Lin and David H. Manz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4353-4358.

Evaluation of System Downstream Control, Zihui Lin and David H. Manz, (North American Water and Environ-

ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1893-1898.

Forcing Function and Climate Change, Bijaya P. Shrestha, Lucien Duckstein and Eugene Z. Stakhiv, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2151-2156.

Intensity, Duration, and Frequency of Residential Water Demands, Steven G. Buchberger and Greg J. Wells, WR

Jan./Feb. 96, p11-19.

Multicriterion Design of Long-Term Water Supply in Southern France, Oscar Cordeiro Netto, Éric Parent and Lucien Duckstein, WR Nov./Dec. 96, p403-413.

Policy and Engineering Decision-making under Global Change: Case of the Upper Rio Grande River Basin, Lu-cien Duckstein, Bijaya P. Shrestha and Marvin Waterstone, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p38-60.

Resolution of the ACT-ACF Water dispute with a Federal-State Partnership, N. D. McClure, IV. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3417-3422.

System Downstream Control for On-Demand Irrigation Canals, Zihui Lin and David H. Manz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p824-829.

Volunteer Organizations Use of Appropriate Technology in Developing Countries, Jim Horner and Tsegaye Hailu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2754-2759.

Water Use "Recession" in San Diego Region, James Zhou, Kenneth A. Steele and Richard C. Pyle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2958-2963.

Dynamic Analysis of Multi-Pool Irrigation Canal, V. M. Ruiz-C., Jorge Castillo and B. de León-M., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p818-823.

Evaluation of System Downstream Control, Zihui Lin and David H. Manz, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1893-1898.

The Importance of Water Depth for Sparger Performance, Charles Clauss, John S. Gulliver and Steven C. Wilhelms, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1305-1310.

Shallow Ground Water Management with a Modified Sub-surface Drainage System, J. E. Ayars, R. A. Schoneman, F. Dale and P. Shouse, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2130-2135.

Study of Hydraulic Jump Lengths on Inclined Channel Beds, Tiao J. Chang, Cheng F. Li and Hong Y. Sun, (North American Water and Environment Congress &

Destructive Water, Chenchayya Bathala, ed., 1996),

System Downstream Control for On-Demand Irrigation Canals, Zihui Lin and David H. Manz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p824-829.

Water discharge

Analysis and Design of Microirrigation Laterals, Yaohu Kang and Soichi Nishiyama, IR Mar./Apr. 96, p75-82.

A California Handbook for Developing an Industrial/ Commercial Storm Water Inspection Program, Jill C. Bicknell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2625-2630.

Hydraulic Analysis of Linear Dewatering Systems, Jerzy M. Sawicki, IR Nov./Dec. 96, p348-353

Modeling Two-Dimensional Turbulent Offset Jets, Ruo-

chuan Gu, HY Nov. 96, p617-624.

Physicostatistical Approach to River Delta Hydrology, V. F. Polonsky, HY June 96, p333-340. Suspended Sediment Loads in Dry and Wet Years, Renjie Xia and Misganaw Demissie, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1442-1446.

Water distribution

Adaptive Search Optimization in Reducing Pump Operat-ing Costs, S. Pezeshk and O. J. Helweg, WR Jan./Feb. 96, p57-63.

Buckeye Water Transmission Main Keswick Dam Cross-ing, D. Todd Kotey, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p194-201.

Comparison of Electromagnetic and Other Surveys to Lo-cate Extensive Water Main Corrosion, T. H. W. Baker, S. E. McDonald and R. J. H. Brousseau, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p829-

Comparison of Methods for Predicting Deficient-Network Performance, Rajesh Gupta and Pramod R. Bhave, WR

May/June 96, p214-217.

Comprehensive Modelling of Water Distribution Networks, Bryan W. Karney, Samuel S. Kpo and Kai-Wah Tang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4107-4112.

Control of an Irrigation Canal, Leslie Skertchly Molina and J. P. Miles, HY July 96, p403-410.

Damage Analysis of a Water Distribution System Subject to Natural Hazards, James Bates, Matthew J. Cassaro and Michael A. Cassaro, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p357-358.

Decision Process for Mitigating Seismically Vulnerable Water Facilities, Walter J. Bishop and Ernesto A. Avila, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p209-210.

Design Heuristic for Globally Minimum Cost Water-Distribution Systems, G. V. Loganathan, J. J. Greene and T. J. Ahn, WR Mar/Apr. 95, p182-192.

Design of Global Control Algorithm for Irrigation Canals, J. Mohan Reddy, HY Sept. 96, p503-511.

Design of the Santa Ana River Wash Crossing of the Inland Feeder, Birger Schmidt and Roy Cook, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p373-378.

Development and Implementation of a Capital Improve-ment Program for a Small Water Utility, Benito Avalos, Jorge Garcia, Louis Grijalva and Antonia M. Romero, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3236-3240. Drought Management in Northeastern Colorado, Darell D. Zimbelman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p863-868.

An Engineering Information System Application for Water Supply and Distribution Systems, Chun-Hou Orr, Sérgio Teixeira Coelho and Helena Alegre, (North American

Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4214-4219. Evaluation of System Constant Volume Control, Zihui Lin and David H. Manz, (North American Water and Envi-

and David H. Name, (Norm American Muer and Evidente Froment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4353-4358. Field Determination of Flow through a Pressure Regulating Valve, Jorge A. Garcia and Antonia M. Romero, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3610-3616. Field Evaluation of Water and Solute Distribution from a Point Source. Akbar Ali Khan, Mulunch Yitavew and A.

Point Source, Akbar Ali Khan, Mulunch Yitayew and A. W. Warrick, IR July/Aug. 96, p221-227.
Integrated Facility Information Systems: Total Information Access, Mike Tidwell and Cal Leckington. (North America) ican Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4119-4124. Measures of Water Distribution System Reliability, Rafael

G. Quimpo, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p388-395.

Mixing in Distribution System Storage Tanks: Its Effect on Water Quality, Robert M. Clark, Farzaneh Abdesaken, Paul F. Boulos and Russell E. Mau, EE Sept. 96, p814-

821

Model for Water Quality in Periphery of Distribution Systems, Lin Wu, Steven G. Buchberger and Trent G. Schade, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3464-3469.

Modeling in Water Losses Evaluation for Nonhomogene ous Furrow Set, Z. Popova and R. Kuncheva, IR Jan./

Feb. 96, p1-6. Modeling Low Velocity/High Dispersion Flow in Water Distribution Systems, David H. Axworthy and Bryan W.

Distribution Systems, David H. Axworthy and Bryan W. Karney, WR May/June 96, p218-221.

Numerical Methods for Modeling Water Quality in Distribution Systems: A Comparison, Lewis A. Rossman and Paul F. Boulos, WR Mar/Apr. 96, p137-146.

Object Orientation in Hydraulic Modeling Architectures, D. P. Solomatine, CP Apr. 96, p125-135.

Optimad Design of Water-Distribution Networks with GIS, Saud A. Taher and John W. Labadie, WR July/Aug. 96, s20131.

p301-311.

Optimization and Pipe-Sizing Decisions, Thomas M. Wal-ski, WR July/Aug. 95, p340-343. Optimization Modeling of Complex Surface Water Collection Systems, Ken Young, Stuart Stein, Kamal Saffarinia, George Oliger, Raphael Hurwitz, Robert Mayer and Janine Witko, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3393-3398.

Optimization of Water Distribution System with Blending Requirements, Yung-Hsin Sun, Shu-li Yang, William W-G. Yeh, Ali Diba and Timothy A. Blair, (North Amer ican Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4359-4364

Preparing for the Big One - Risk Assessment and Mitigation of a Major Earthquake, David L. Pratt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p207-208.

Reliability Tester for Water-Distribution Networks, D. Khomsi, G. A. Walters, A. R. D. Thorley and D. Ouazar, CP Jan. 96, p10-19.

Reliability-Based Design of Water-Distribution Systems, Rajesh Gupta and Pramod R. Bhave, EE Jan. 96, p51-54. Seasonal Effects on Generation of Particle-Associated Bac-

teria During Distribution, Blaise J. Brazos and John T. O'Connor, EE Dec. 96, p1050-1057.

Prinkler Performance as Function of Nozzle Geometrical Parameters, Jiusheng Li, IR July/Aug. 96, p244-247. Utilizing Directional Drilling Techniques to Install Underwater Watermain, Timothy M. Stinson, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p180-185.

Waste of Water is Costly. Why Not Use an Accurate Flow Monitoring System? Hans-Peter Vaterlaus, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3617-3622.

Water, Chenchayya Bamaia, ed., 1990), p5017-3022.
Water Distribution Network Reliability: Connectivity Analysis, Shu-li Yang, Nien-Sheng Hsu, Peter W. F. Louie and William W-G. Yeh, IS June 96, p54-64.

Water Distribution Network Reliability: Stochastic Simulation, Shu-li Yang, Nien-Sheng Hsu, Peter W. F. Louie and William W-G. Yeh, IS June 96, p65-72.

Water Wisdom of the Ancients, L. Michael Trapasso, CE

Jan. 96, p64-65.

WLS Method for Parameter Estimation in Water Distribu-tion Networks, P. V. Niranjan Reddy, K. Sridharan and P. V. Rao, WR May/June 96, p157-164.

Alluvial Channel Geometry: Theory and Applications, Pierre Y. Julien and Jayamurni Wargadalam, HY Apr. 95,

Analysis of Air Permeability Tests at Yucca Mountain, Nevada, Dave O. Cox and Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p160-162.

BAYMAP: A Simplified Embayment Flushing and Transport Model System, J. Craig Swanson and Daniel Mendelsohn, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p570-582.

Bed-Load Transport. I: Mechanical Characteristics, Chunhong Hu and Yujia Hui, HY May 96, p245-254. Borehole UE-25 ONC #1 Drilling at Yucca Mountain, Nevada, Nick Stellavato, (High Level Radioactive Waste

Management, Technical Program Committee, 1996), p166-167.

A Comparative Study of the Transformed Methods for Solving Richards' Equation, M. Rashidul Islam, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1748-1753.

Effect of Recharge Duration on Water-Table Response, Subramania I. Sritharan and Henry R. Gee, IR July/Aug.

96, p228-234.

Filling of Pipelines with Undulating Elevation Profiles, Chyr Pyng Liou and William A. Hunt, HY Oct. 96, p534-539.

Finite-Volume Two-Dimensional Unsteady-Flow Model for River Basins, D. H. Zhao, H. W. Shen, G. Q. Tabios, III, J. S. Lai and W. Y. Tan, HY July 94, p863-883.

Measuring Flutter Derivatives for Bridge Sectional Models in Water Channel, Q. C. Li, EM Jan. 95, p90-101.

A Method to Study Suspended Sediment Induced Flow Characteristics Changes, D. Zhou and C. Mendoza, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1447-1452

Modeling 3D Free Surface Flow in Compound Channels: A Validation Case Study, Fraincisco J. M. Simões and Sam S.-Y. Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2719-2724.

Numerical Modeling of Water Flow over Porous Media, Christopher Y. Choi, Peter M. Waller and Fukumura Kazunari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2433-2438.

Portable Flumes with Adjustable Throats, John Replogle and Brian Wahlin, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2409-2414.

Reliability Analysis in Support of Risk Assessment for Non-Routine Closure/Shutdown of Hydroelectric Generating Stations, T. V. Vo, T. R. Blackburn, L. O. Casazza, P. G. Heasler, N. L. Mara, T. M. Mitts and H. K. Phan, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p326-345.

Rock Riprap for Grade Control, Charles E. Rice, Kerry M. Robinson and Kem C. Kadavy, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p588-593.

Scour in Erodible Rock I: The Erodibility Index, George W. Annandale and Steven P. Smith, (North American and Environment Congress & Destructive Water, Chenchayva Bathala, ed., 1996), p1342-1348.

Scour in Erodible Rock II: Erosive Power at Bridge Piers, Steven P. Smith and George W. Annandale. (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1349-1357.

Systems for Forecasting Flows and Their Uncertainty, Kon-stantine P. Georgakakos, Alexandre K. Guetter and Jason A. Sperfslage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2360-2365.

Temporal Development of Local Scour at Bridge Piers, Yee-Meng Chiew and Bruce W. Melville, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2556-2564.

Time-Dependent Fluid Fracture Interaction in Concrete, Volker Slowik and Victor E. Saouma, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p865-868.

Water hammer

Filling of Pipelines with Undulating Elevation Profiles, Chyr Pyng Liou and William A. Hunt, HY Oct. 96, p534-539.

Legal Principles Applicable to Sharing Transboundary Wa-ters, William E. Cox, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3218-3223.

Managing Transboundary Water Sharing, Stephen E. Drap-er, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3230-3235.

Mexican Border Ground Water Agreement, Conrad G. Keyes, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2330-2334.

Transboundary Diversions, Water Law and Property Rights, George William Sherk, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3224-3229.

Water level fluctuations

Changes in Water Table Elevation at Yucca Mountain in Response to Seismic Events, Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p102-104.

Current Status of Paleohydrologic Studies at Yucca Mountain and Vicinity, Nevada, John S. Stuckless, (High Level Radioactive Waste Management, Technical Program

Committee, 1996), p98-101.

Modeling Groundwater Response to a Perimeter Flood, Jeff Leighton and Michel Genoud, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p748-752.

Modeling the Impact of Sea Level Rise in Delaware Bay, K. W. Kim and B. H. Johnson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2737-2742.

Strategies for Operation of Orange County Water District Talbert Seawater Intrusion Barrier, California, Kevin McGillicuddy and Timothy Sovich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4078-4083.

Two- and Three-Dimensional Hydrodynamic Modeling of the Salton Sea, California, Christopher B. Cook and Ger-ald T. Orlob, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3752-3757.

The 1995 Floods of Rhine and Meuse - How Predictable are Water Levels in the Netherlands, Bart Parmet, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p249-250.

Application of Kalman Filter to Short-Term Tide Level Prediction, Pei-Hwa Yen, Chyan-Deng Jan, Youe-Ping Lee and Hsiu-Fang Lee, WW Sept./Oct. 96, p226-231. Application of One- and Two-Dimensional Flow Models for an Evaluation of Riverine Wetland Hydrologic Functions, C. Charles Tai, Chou Fang and Apurba K. Borah, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Discharge Characteristics of Overshot Gates, Brian Wahlin and John Replogle, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3604-3609.

Dynamics of River Ice Jam Release, Hung Tao Shen and Namines of River the Jain Release, I uning Tab Shell and Shunan Lu, (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p594-605.

Estimation of High Spring Floods Causing Inundation in Non-Studied Rivers of the West Siberian Plain, E. A. Asabina, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3702-3703.

How to Manage Floodwaves in the Dutch Meuse: Future Measures to Reduce the Inconvenience of Inundations, J. H. Gerretsen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3271-3272.

Inundation Scenarios and Inundation Risk, M. P. C. Frijters and B. P. van den Bunt, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,

1997), p62-63.

Managing Great Lakes Water Levels: An International Partnership, Anthony J. Eberhardt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1317-1322.

Physicostatistical Approach to River Delta Hydrology, V. F. Polonsky, HY June 96, p333-340.

Simulation of Interaction between Canal Regulation and Groundwater, Hsin-Chi J. Lin and Hwai-Ping Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1587-1591.

Tide-Induced Ground-Water Flow in Deep Confined Aquifer, Ko-Fei Liu, HY Feb. 96, p104-110.

Two-Dimensional Boundary-Fitted Circulation Model in Spherical Coordinates, Muslim Muin and Malcolm

Spaulding, HY Sept. 96, p512-521.

Westbay/MOSDAX Instrumentation of UE-25 ONC #1 and USW NRG-4 at Yucca Mountain, Nevada, Nick Stellavato, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p163-165.

Modeling in Water Losses Evaluation for Nonhomogene-ous Furrow Set, Z. Popova and R. Kuncheva, IR Jan./

Non-Growing Season Water Budgets for a Shortgrass Steppe, Shusen Wang, William J. Parton and Gigi A. Richard, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p237-242.

Better Management in the Water Supply Sector Through Indigenous Institutions, Paula Donnelly-Roark, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2970-2975.

Billion Dollar Water Q&M Market Projected, CE May 96, p19,21.

The Case Against Markets, Joseph W. Dellapenna, (North American Water and Environment Congress & Destruc tive Water, Chenchayya Bathala, ed., 1996), p2933-2938.

The Case for Water Markets as the Best Means for Effective Water Allocation, Ronald G. Cummings and R. Peter Terrebonne, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2921-2926.

Conjunctive Water Use Transforms a California Desert, Tom Levy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2672-2678.

Economic Incentives Encourage Improvements In Farm-Level Water Management Practices, David Cone, Laurie Level Water Management Practices, David Cone, Laurie Houston and Dennis Wichelns, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p406-411.

Effects of Sewage Effluent Irrigation on Paddy, S. Krish-namoorthi, K. Shyamala and P. Govindan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2372-2377.

Efficiencies of Drainage Systems and Improved Water Management, I. C. Tod and M. E. Grismer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2136-2144.

Emerging Concepts for Management of Salinity and Drain-age in Irrigated Regions, M. E. Grismer, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2126-2129.

Evaluating Sustainability of Water & Sanitation Projects: Case Studies in Developing Countries, Philip Roark, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3253-3258.

Integrated Facility Information Systems: Total Information Access, Mike Tidwell and Cal Leckington, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4119-4124.

Legal Principles Applicable to Sharing Transboundary Wa-ters, William E. Cox, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3218-3223.

Management Framework for Large-Scale Water Problems, Neil S. Grigg, WR July/Aug. 96, p296-300.

The Management Improvement Program: A Model to Improve the Performance of Irrigated Agriculture, A. R. Dedrick, E. Bautista and S. A. Rish, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3470-3475.

The Management Improvement Program: An Irrigation District's Perspective of the Demonstration Program, Brian M. Betcher and Gary Sloan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3480-3485.

Management of Stream-Aquifer Systems in the 21st Century, Babs Makinde-Odusola, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2787-2792.

Managing Transboundary Water Sharing, Stephen E. Drap-er, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3230-3235.

Modeling of Rattlesnake Creek Watershed Using "Swat" Model, S. R. Ramireddygari, J. K. Koelliker and R. S. Govindaraju, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3241-3246.

Optimization Modeling of Complex Surface Water Collec-tion Systems, Ken Young, Stuart Stein, Kamal Saffarinia, George Oliger, Raphael Hurwitz, Robert Mayer and Janine Witko, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3393-3398.

Overview of Drought Response Strategies, Darrell G. Fon-tane and Donald K. Frevert, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p857-862.

Performance of Baffle-Sluice Modules with Changed Mod-ule Dimensions, B. Maheswara Babu, P. K. Mishra and T. Satyanarayana, IR Sept./Oct. 96, p310-313.

Problems with Metrication in Transboundary Water Projects, Conrad G. Keyes, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3680-3684.

Public Attitudes, Behavior, and the Willingness to Sacrifice to Mitigate Uncertain Adversity: Water Management Im-plications for Climate Change, Robert E. O'Connor, Richard J. Bord and Ann Fisher, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1828-1833.

A Regional Management Plan to Improve Water Quality in the Grassland Basin, Dennis Wichelns, Laurie Houston, Dan Nelson and Joseph McGahan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p655-660.

Research Agenda on Sustainability of Irrigated Agriculture, Luis S. Pereira, James R. Gilley and Marvin E. Jensen,

IR May/June 96, p172-177.

Sacramento Valley Conjunctive Use - Future Water Supply for the State Water Project? John R. Fielden, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3062-3067.

Asinity Management for the Upper Gila River, G. T. Orlob and E. W. Wessman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4257-4262.

Simple Irrigation Scheduling Calendars, Robert W. Hill and Richard G. Allen, IR Mar/Apr. 96, p107-111.

Simulation of Dissolved Oxygen in Sacramento-San Joaquin Delta, Haridarshan L. Rajbhandari, Gerald T. Orlob and Francis I. Chung, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3545-3550.

South Florida Water Management District: Reconstructing the Everglades Ecosystem, James Phillip Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1190-1196.

Southern San Joaquin Drainage Water Management, Doug-las E. Davis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p382-387.

Studies on the Erosion of a Compacted Soil, G. J. Hanson and K. M. Robinson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2427-2432.

The System for the Hydrological Forecasting in Serbia, Bo-jan Palmar and Borjanka Palmar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p716-717.

Urban Water Conservation Efforts of the Irrigation Association, Tim Wilson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p911-916.

The Use of Monitoring of Russian Water Objects for the Decrease of Disaster Consequences, G. M. Barenboim and G. M. Ostrovski, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1341.

Waste of Water is Costly. Why Not Use an Accurate Flow Monitoring System? Hans-Peter Vaterlaus, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3617-3622.

Water Conservation Definitions From a Hydrologic Viewpoint, Richard G. Allen, Charles Burt, A. J. Clemmens and L. S. Willardson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p899-904.

The Water Customer in Space, Tony Rachwal, Colin Waters and Tony Wachinski, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p663-667.

Westlake Farms Demonstration Wetlands A Cooperative Effort, John M. Shelton, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p388-393.

Water meters

Utilizing Coordinated Billing and Metering Systems Analysis to Enhance Utility Revenue on a Shared Revenue Basis, Randy P. Schuler, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4275-4281.

Water pipelines

Comparison of Electromagnetic and Other Surveys to Lo-cate Extensive Water Main Corrosion, T. H. W. Baker, S. E. McDonald and R. J. H. Brousseau, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p829-836.

Crossing Bridges with Ductile Iron Pipe-Update 1995, Michael S. Tucker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p120-129.

Crossing Fault Lines with Large Diameter Water Pipelines in the Houston Area, John M. Olden, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p155-162

Crossing of MacDonald Ranch Wash in Southern Nevada, Roger Beieler, Alvin R. Anderson, Russ Snow and Carol Tate, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p282-289.

Damage Analysis of a Water Distribution System Subject to Natural Hazards, James Bates, Matthew J. Cassaro and Michael A. Cassaro, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p357-358.

Design and Construction of the Santa Ana River Wash Crossing of the Inland Feeder, Burt Yu, Jay Arabshahi, Birger Schmidt and Roy Cook, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1789-1795.

Design of a 610-mm Water Pipeline Across Providence Harbor, David E. Hairston, Pasquale DeLise and William Skerpan, Jr., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p387-394.

Design of the Santa Ana River Wash Crossing of the Inland Feeder, Birger Schmidt and Roy Cook, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p373-378.

Evaluation and Upgrade of Major Transmission Lines Crossing Active Faults, Robert W. Lau, David D. Lee, David L. Pratt and Marilyn L. Miller, (*Pipeline Cross*ings 1996, Lawrence F. Catalano, ed., 1996), p418-425.

Pipe-Soil Interaction Analysis of Field Tests of Buried PVC Pipe, Senro Kuraoka, Balvant Rajani and Caizhao Zhan, IS Dec. 96, p119-120.

Relocation of Existing Pipelines at New Highway Crossings, Karl J. Rubenacker, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p290-297.

The Secondary Inlet of the Eastside Pipeline Project, Antonio J. Perez and Aida G. Garabetian, (North American

tonio J. Perez and Aida G. Garabettan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p702-707.
Seismic Design Issues of Water Pipelines at the Hayward Fault Crossing. Luke Cheng and Lota D. Nuguid, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p147-154.

Steel Water Pipe for Exposed and Buried Crossings, George Ruchti and Robert Card, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p105-111.

Technological Advances in the Design and Construction of Water Mains for Crossing Under Rivers and Other Barriers, Donald E. Eckmann and William F. Nabak, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p403-408.

Value Engineering Changes to the Eastside Pipeline, Antonio J. Perez, Francisco Becerra and John Vrsalovich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p697-701.

Water Pipeline Crossings of the Pitt and Fraser Rivers, Tim R. Jervis and Jim V. Young, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p202-213.

"Ductile Iron Microtunneling Pipe, Non-Traditional Instal-lation Applications", Ralph R. Carpenter and Randall C. Conner, (Pipeline Crossings 1996, Lawrence F. Ca-talano, ed., 1996), p312-321.

Water plans

Equity Measures for Selecting Sustainable Projects, Sam Matheson and Barbara Lence, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4371-4376.

Simulation of Pesticide Transport for Verification of the DWRDSM. Christopher Enright and Paul Hutton, (North American Water and Environment Congress & Destruc-tive Water, Chenchaya Bathala, ed., 1996), p3563-3568.

At AWWA Conference, Public Utilities Put Up a Fight, CE Sept. 96, p24-25.

Water-Related Hazards: India's Experiences, K. S. Murty, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3275.

Water pollution

Accidental Pollution Simulation System and Pollutant Transboundary Transport Problems for Tura River, N. N. Shagalova, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p714.

Accidental Situations: Application of Surface-Water Moni-toring Data, P. Berg and T. Vasiljeva, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1338-1339.

Beneficial Aspects of Flood and Rain in Countries Where the Drinking Water is Naturally Contaminated with Fluoride Where Fluorosis is a Major Public Health Problem, Susheela Andezhath Kumaran, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2191.

Buoyant Plumes from Multiport Diffuser Discharge in Deep Coflowing Water, María M. Méndez-Díaz and Gerhard H. Jirka, HY Aug. 96, p428-435.

A California Handbook for Developing an Industrial/ Commercial Storm Water Inspection Program, Jill C. Bicknell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2625-2630.

Coastal Ocean Model Performance in Eastern Australia, William L. Peirson and Ian P. King, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p632-643.

Comparative Simulation of Oil Weathering, Hector R. Fuentes, Rudolf Jaffé, Vassilios A. Tsihrintzis and Rahul V. Shrotriya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p559-564.

Electromigration of Nitrates in Soil, George Cairo, Dennis Larson and Donald Slack, IR Sept./Oct. 96, p286-290.

Enhanced Trichloroethene Desorption from Long-Term Contaminated Soil Using Triton X-100 and pH Increases, Dipak Sahoo, James A. Smith, Thomas E. Imbrigiotta and Heather M. McLellan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1215-1220.

An Evaluation of Drainage Conditions in the San Joaquin Valley. M. Manucher Alemi and George Nishimura. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996).

p177-182.

Experiences in Cleaning Up the Influence of Oil Spill on the Water Bodies, G. M. Barenboim, N. A. Rubanova and I. M. Saipulaev, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2534.

Impacts of Improved Water Supply and Sanitation on the Rural Population of India, Padmavathy Bogabathini, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Influence of Flooding Events on Suspended Matter Quality of the Meuse River (The Netherlands), J. J. G. Zwolsman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Pollution Transport in Karst, C. Warren Campbell and Mohamed Abd El Latif, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4269-4274.

Production of Nitrous Oxide Gas under Sequencing Batch Reactor System, Cheng-Nan Chang, Jih-Gaw Lin, Jin-Yuan Chen and Fong-Bing Hsu, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p782-787.

Risk Reduction of Lead and Mercury in Michigan, Jonathan W. Bulkley, Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Sukhiv, ed., 1996), p315-325.

River Dnister Pollution with Toxic Waste as a Result of Accident at Potassium Fertilizers Factory, Valeriu Ropot, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3499.

Sediment and Contaminant Transport in Green Bay, Zeni-tha Chroneer, Mary Cardenas, James Lick and Wilbert Lick, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p313-324.

Simulating Atrazine Transport with HSPF in an Agricultur-al Watershed, Anne-Marie Laroche, Jacques Gallichand, Robert Lagacé and Alain Pesant, EE July 96, p622-630.

Site and Size Optimization of Contaminant Sources in Surface Water Systems, Nikolaos D. Katopodes and Michael Piasecki, EE Oct. 96, p917-923.

The South Bay Ocean Outfall, Frank X. Collins, Gregory W. McBain, Jon Y. Kaneshiro, Luciano Meiorin and Larry Stout, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2044-2049.

Specification of Cu, Pb and Cr in Contaminated Sediment Effected by pH, Chin-Yuan Chen, Jih-Gaw Lin and Cheng-Nan Chang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1453-1458.

Survival of Coliform Microorganisms in Sediments from a Treated Water Reservoir, Heesong Yoon and Joseph S. Devinny, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1626-1631.

Swirl Technology: Enhancement of Design, Evaluation, and Application, Richard Field and Thomas P. O'Connor, EE Aug. 96, p741-748.

Water Quality Modeling of the Rouge River Watershed, Philip N. Brink, Gary Mercer and Richard Wagner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2415-2420.

Water pollution control

Assessment of the Surface-Water Pollution and Measures for Emergency Stations Warning in the Republic of Uz-bekistan, T. Ososkova, V. Talskikh and O. Smolkova, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Bacterial and Chemical Pollution of Littoral Waters of Lake Ohrid at Pogradec - Town Area, Valer Angjeli, Vasilika Petro and Ramazan Bukli, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p2536.

Comparison of General vs. Multi Sector NPDES Storm Water Permits, William H. Espey, John Whitescarver and Michael Ports, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2810-2814.

Cropping Systems on the Delmarva Peninsula to Reduce Ground Water Contamination, W. F. Ritter and R. W. Scarborough, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2341-2346.

A Decision Making Approach for Stormwater Management Measures—A Case Example in the City of Waukesha, Wisconsin, James A. Bachhuber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3981-3986.

A Framework for Sanitation and Health Risk Assessment, Charles G. Gunnerson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2390-2395.

The Great Great Lakes, Murray Clamen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2300-2305.

Groundwater Remediation Design When Pretty Good is Good Enough, J. Wayland Eheart, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p848-853.

Immobilization of Metals and Solids Transported in Urban Pavement Runoff, John Sansalone, Steven Buchberger and Joseph Koran, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3115-3120.

The Mamala Bay Study, Oahu, Hawaii: Introduction, Geraid T. Orlob, Camilla M. Saviz, Jerry R. Schubel and Rita R. Colwell, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p4101-4106.

Ia, ed., 1996), p4101-410b.
Protecting Drinking Water: Rapid Detection of Human Fecal Contamination, Injured, and Non-Culturable Pathogenic Microbes in Water Systems, D. C. White, D. E. Nivens, A. A. Arrage, B. M. Appelgate, S. R. Reardon and G. S. Sayler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1645-1650.
Because Lorenzais Schief from Othrobata Propullatis. Fends

Recover Inorganic Solids from Obsolete Propellants, Frank J. Y. Shiu, Iris C. Y. Yang and T. F. Yen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1373-1378.

Testing and Effectiveness of a New Urban BMP Stormcep tor Vincent H. Berg and Graham J. Bryant, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1864-1869.

Treatment of Wet Weather Discharges in Columbus, Geor-gia, Stephen P. Hides, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p582-587.

Use of SALQR Optimization in Large Aquifer Cleanup, Christopher M. Mansfield and Christine A. Shoemaker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p135-139.

Water Quality Mitigation for the San Joaquin Hills Transportation Corridor, Stanley D. Polasik, John H. Knutson and James H. Lenhart, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3109-3114.

Wellhead Protection: Local and Community Efforts, Sharon Lien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p966-969.

Water pollution sources BASINS—a GIS-linked Watershed Analysis and Modeling Tool, Gerald D. LaVeck, Marjorie C. Coombs and Marilyn Fonseca, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3629-3632.

GIS Applications in Modern Stormwater Management, Charles G. Boehm, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3633-3638.

The Mamala Bay Study, Oahu, Hawaii: Introduction, Ger-ald T. Orlob, Camilla M. Saviz, Jerry R. Schubel and Rita R. Colwell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4101-4106.

Water pricing

Water-Price Effect on Residential and Apartment Low-Flow Fixtures, Donald E. Agthe and R. Bruce Billings, WR Jan./Feb. 96, p20-23.

Water purification

New Block Copolymers for Membrane Materials, Francis A. DiGiano, Ying Chu, Joseph M. DeSimone, Benny D. Freeman, Camille Kassis and Doug Betz, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1638-1644.

Zoo Treats Aquatic Exhibits with Ozone, CE Nov. 96, p8.

30-Inch Gas Pipeline Crossing of the San Juan River: Open Cut Excavation in Quality Water Area, James D. Evanoff and Neil P. Stockholm, (Pipeline Crossings 1996, Law-rence F. Catalano, ed., 1996), p186-193.

3D Model of Estuarine Circulation and Water Quality Induced by Surface Discharges, Wenrui Huang and Malcolm Spaulding, HY Apr. 95, p300-311.

ANSWERS-2000: Runoff and Sediment Transport Model, Faycal Bouraoui and Theo A. Dillaha, EE June 96, p493-502.

Application of a Coupled 3-D Hydrodynamics-Sediment-Water Quality Model, Xinjian Chen and Y. Peter Sheng, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p325-339.

Artificial Recharge of a Buried Glacial Aquifer in South Dakota, Vernon R. Schaefer and Delvin E. DeBoer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996).

Assessing Water Quality Impacts of Stormwater Runoff, G. Fred Lee and Anne Jones-Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3103-3108.

Assessment of the Surface-Water Pollution and Measures for Emergency Stations Warning in the Republic of Uz-bekistan, T. Ososkova, V. Talskikh and O. Smolkova, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2533

BAYMAP: A Simplified Embayment Flushing and Trans-port Model System, J. Craig Swanson and Daniel Men-delsohn, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p570-582.

Best Management Practices and Community Education, Richard Boon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2648-2653.

Billion Dollar Water Q&M Market Projected, CE May 96, p19,21.

BMP for Control of Agricultural Nonpoint Source Flow, E. K. O'Brien and J. C. Guiţiens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1489-1494.

Calibration of a Water Quality Model Using the Influence Coefficient Algorithm, Kyung Soo Jun and Kil Seong Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4010-4015

Can Numerical Estuarine Models be Driven at the Estuary Mouth, B. H. Johnson, H. V. Wang and K. W. Kim, (Es-tuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p255-267.

The Caspian Sea Transgression (Environmental Medical Aspect), L. I. Elpiner, (North American Water and Envinent Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3498.

Chebyshev Model for Water-Quality Management, Andrews K. Takyi and Barbara J. Lence, WR Jan/Feb. 96,

p40-48.

Coast, T. M. Peck, R. J. M. Sweet, H. N. Southgate, S. Boxall, A. Matthews, R. Nash, J. Aiken, H. Bottrell and R. Wilson, (*Coastal Dynamics* '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1024-1034.

Comparative Simulation of Oil Weathering, Hector R. Fuentes, Rudolf Jaffé, Vassilios A. Tsibrintzis and Rahul V. Shrotriya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p559-564.

Controlling the Impacts of Development on Storm Water Quality through Proper Site Planning and Design, Jill C. Bicknell and Lisa Horowitz McCann, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3097-3102.

Critical Needs for Sustainable Water Resources: Bridging the Gap Between Science and Implementation, B. A. Miller and M. J. Sale, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1297-1298.

Dependence of Water Quality and Fish Habitat on Lake Morphometry and Meteorology, Midhat Hondzo and Heinz G. Stefan, WR Sept./Oct. 96, p364-373.

Design of Optimal Reliable Multiquality Water-Supply Systems, Avi Ostfeld and Uri Shamir, WR Sept./Oct. 96, p322-333.

scussion of Environmental Engineering Forum: Backflow Prevention and Water Quality in Residential Discussion Sprinkler Systems (September/October 1993, Vol. 119, No. 5, by Thomas M. Walski (Environmental Engineering Forum)), Harry Shaw, EE Jan. 96, p79-80.

Drainage Recirculation Project for Water Quality, Kevin Johansen and Robert Stoddard. (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1105-1110.

Dynamic vs. Quasi-Static Effluent Limits, Joe Karkoski, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Economic Issues Regarding Water Quality Objectives in the Grassland Basin, Dennis Wichelns and Laurie Houston, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Editor's Note, Thomas L. Theis, EE May 96, p340.

Effect of Pump-Ins on California Aqueduct Water Quality,
B. Auchard, C. Edwards, M. Morris, J. R. Phillips, L. A. Soo and Sun Liang, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p4004-4009.
Emulation of DWRDSM using Artificial Neural Networks and Estimation of Sacramento River Flow from Salinity. Nicky Sandhu and Ralph Finch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4335-4340.

Expert System for Water Treatment Plant Operation, Xin X. Zhu and Angus R. Simpson, EE Sept. 96, p822-829. From Cholera to Cancer to Cryptosporidiosis, Daniel A. Okun, EE June 96, p453-458.

Graphical Methods for Assessing Changes in Water Quali-ty, Karen Cozzetto and P. M. Berthouex, EE July 96, p667-668.

The Great Great Lakes, Murray Clamen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2300-2305.

Hydrodynamic Simulations in Sediment-Carried Contaminant Modeling for the Buffalo River, New York, Ruochuan Gu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1039-1044.

timpact of Agricultural Water Conservation on Water Quali-ty in Arid Irrigated Areas, James E. Ayars, Kenneth K. Tanji and Thomas J. Trout, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p905-910.

Impacts of Reservoir Sedimentation on Decommissioning of Dams, George W. Annandale, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2114-2119.

Implicit Scheme for Estuarine Water-Quality Models, Byung-Gi Hwang and Wu-Seng Lung, EE Jan. 96, p63-

The Integration of Receiving Water Impacts in the Evaluation Process of Alternative Designs for CSO Abatement in Providence, RI, J. Craig Swanson, Joseph Grgin and Peter von Zweck, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-

ment Congress as Destructive Water, Chenchayya Banala, ed., 1996), p1537-1542.

Key Sources of Uncertainty in QUAL2E Model of Passaic River, Charles S. Melching and Chun G. Yoon, WR Mar/Apr. 96, p105-113.

Lake Number: A Long-Term Lake Water Quality Predictor, Midhat Hondzo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3176-3187.

Long-term Consequences of Recycling Drainage Water for Irrigation, S. R. Grattan and J. D. Rhoades, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1942-1947.

Los Angeles County Department of Public Works Storm Water Quality Assessments, Los Angeles, California, Novin Rashedi and David Liu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3993-3997.

Milwaukee's Ozone Upgrade, James C. Kaminski, P.E. and Paul W. Prendiville, P.E., CE Sept. 96, p62-64.

Mixing in Distribution System Storage Tanks: Its Effect on Water Quality, Robert M. Clark, Farzaneh Abdesaken, Paul F. Boulos and Russell E. Mau, EE Sept. 96, p814-

Model for Water Quality in Periphery of Distribution Sys-tems, Lin Wu, Steven G. Buchberger and Trent G. Schade, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p3464-3469.

Modeling Combined Stresses on Aquatic Ecosystems, Jam-ie D. Anderson, Ian P. King and Gerald T. Orlob, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3998-4003.

Modeling the Effect of Reduced Nitrogen Loading on Water Quality, Y. Peter Sheng, Eduardo A. Yassuda and Changlu Yang, (Estuarine and Coastal Modeling, Mal-colm L. Spaulding and Ralph T. Cheng, 1996), p644-

638.
Modeling Water-Resource Systems for Water-Quality Management, R. G. Willey, Donald J. Smith and James H. Duke, Jr., WR May/June 96, p171-179.
Multi Dimensional Modeling of Water Quality Using the Finite Element Method, Ian P. King and John F. De-George. (Estuarine and Coastal Modeling, Marcolm L.

Spaulding and Ralph T. Cheng, 1996), p340-354. Nearshore Hydrodynamic and Water Quality Modeling for Water Intake Evaluation and Design, Kwang K. Lee, Bing Shen and Chung Shyan Wu, (North American

Bing Shen and Chung Shyan Wu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2456-2461.

New Jersey Nearshore Hypoxia During the Summer 1976, Ross W. Hall and Mark S. Dortch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T.

Cheng, 1996), p608-617.

Non-point Source Policies for Agricultural Drainage, Den-nis W. Westcot, Joe Karkoski and Rudy Schnagl. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p875-880.

Numerical Methods for Modeling Water Quality in Distri-bution Systems: A Comparison, Lewis A. Rossman and Paul F. Boulos, WR Mar/Apr. 96, p137-146.

raul F. Boulos, WR Mar/Apr. 96, p137-146.
Occurrence and Significance of Cryptosporidium parvum and Giardia lamblia in Surface Waters on Alaska's North Slope, Michael R. Pollen, Cindy L. Christian, Craig D. Nordgren and Jonathan D. Pollen, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p494-505.
Overflow Impacts on Piver Studied. CF May 96, p8.

Overflow Impacts on River Studied, CE May 96, p8.

Physical Distribution System Models for Assessing the Impact of Water Quality on Regrowth and Corrosion, Anne K. Camper, Warren L. Jones and Calvin Abernathy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Postaudit of Upper Mississippi River BOD/DO Model, Wu-Seng Lung, EE May 96, p350-358. A Practical Approach to Watershed Sanitary Surveys, Sachiko Itagaki and Elizabeth Teien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2964-2969.

Predicting THM Formation with Artificial Neural Net-works, Paul H. Hutton, Nicky Sandhu and Francis I. Chung, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3551-3556.

Recreational Impoundments Retrofit of Existing and Design of New Facilities, Dream L. Atallah and Michael P. Rudinica, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2945-2950.

Reducing Model Study Time and Improving Reliability, Ralph Finch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4341-4346.

A Regional Management Plan to Improve Water Quality in the Grassland Basin, Dennis Wichelns, Laurie Houston, Dan Nelson and Joseph McGahan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p655-660.

Risk-Equivalent Seasonal Discharge Programs for Ice-Covered Rivers, Corinne L. Wotton and Barbara J. Lence, WR May/June 95, p275-282.

The Sawmill Creek Watershed Restoration Project, Larry Lubbers, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2873-2878.

Seasonal Effects on Generation of Particle-Associated Bac-teria During Distribution, Blaise J. Brazos and John T. O'Connor, EE Dec. 96, p1050-1057.

The Secondary Inlet of the Eastside Pipeline Project, Antonio J. Perez and Aida G. Garabetian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p702-707.

Simulation of Dissolved Oxygen in Sacramento-San Joaquin Delta, Haridarshan L. Rajbhandari, Gerald T. Orlob and Francis I. Chung, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3545-3550.

Simulation of Perilithic Algae as a Biofilm and its Interac-tion with the Water Column, Stephen A. Breithaupt, Ian P. King and Gerald T. Orlob, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1620-1625.

Solution of the Advection-Dispersion Equation: Continuous Load of Finite Duration, Robert L. Runkel, EE Sept. 96,

Sources and Circulation of Salt in the San Joaquin River Basin, Leslie F. Grober, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p649-654.

South Florida Water Management District: Reconstructing the Everglades Ecosystem, James Phillip Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1190-1196.

A System to Improve Water-Related Sustainability Characteristics of International Development Programs/Projects, Larry Quinn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3259-3264.

Systematic Evaluation of Pollutant Removal by Urban Wet Detention Ponds, Jy S. Wu, Robert E. Holman and John R. Dorney, EE Nov. 96, p983-988.

Three-Dimensional Tidal Currents and Water Quality in Stratified Omura Bay, Tadashi Fukumoto, Akihide Tada, Takehiro Nakamura and Hiroyoshi Togashi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p707-721.

Treatment of Wet Weather Discharges in Columbus, Georgia, Stephen P. Hides, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p582-587

Upper Chehalis River Pollutant Capacity and Load Alloca-tions, Paul J. Pickett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1045-1050.

US/Mexico Border Drinking Water Study, Blake L. Atkins (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2120-2125.

Washington State's Stormwater Management Program, Shari Scaftlein, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4245-4250.

Water Quality Enhancement Using Subsurface Detention, Brian C. Roberts, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3338-3342.

Water Quality Impacts of Dredging and Disposal Operations in Boston Harbor, J. Craig Swanson and Daniel Mendelsohn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2642-2647.

Water Quality Improvement Program in Ventura County at Port Hueneme, Lynn M. Takaichi, Sachiko Itagaki and Dennis D. Wolfe, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p412-417.

Water Quality Mitigation for the San Joaquin Hills Trans-portation Corridor, Stanley D. Polasik, John H. Knutson and James H. Lenhart, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3109-3114.

Water Quality Modeling of the Rouge River Watershed, Philip N. Brink, Gary Mercer and Richard Wagner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2415-2420.

Who Springs for Water? Eric Rasmussen, CE Sept. 96.

p65-67.

WQMAP in a Windows Environment, Daniel Mendelsohn, Eoin Howlett and J. Craig Swanson, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p555-569.

Water quality control
Appropriate Sanitation Technology Advisor: A Planner's
Tool in Less Developed Countries, Larry Quinn, (North
American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2993-2998. Controlling Microbial Biota Transfer in the Garrison Diver-

sion Unit, Charles J. Moretti, David M. Kopchynski and Tia L. Cruise, WR May/June 96, p197-204.

The Direction of the Point Source Program, Deborah G. Nagle, Gregory W. Currey and Will Hall, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3580-3585.

Eastern San Joaquin County Groundwater Resource Plan-Eastern San Joaquin County Groundwater Resource Plan-ning Model Development and Calibration, Najmus Sa-quib, Young Yoon and Mike Cornelius, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3509-3514. Immobilization of Metals and Solids Transported in Urban Pavement Runoff, John Sansalone, Steven Buchberger and Joseph Koran, (North American Water and Environ-ment Congress & Destructive Water Chenchava Batha-

ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3115-3120.

An Introduction to Taipei Suburban Sewage Collection and Treatment Systems, Chiang-Tsai Lin and Der-Liang Sheen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3170-3175.

Lake/Reservoir Restoration Activities in Taiwan, Shaw L. Yu, Jan-Tai Kuo, Ching-Gung Wen, Shang-Lien Lo and Jen-Yang Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4208-4213.

Maximized Detention Volume Determined by Runoff Cap-ture Ratio, James C. Y. Guo and Ben Urbonas, WR Jan./

Feb. 96, p33-39.

Optimization of Water Distribution System with Blending Requirements, Yung-Hsin Sun, Shu-li Yang, William W-G. Yeh, Ali Diba and Timothy A. Blair, (North Amer-ican Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4359-4364.

Remote Monitoring and Technical Support for Drinking Water Systems in Remote Communities, Daniel W. water systems in remote communities, Daniel W. Smith, Stephen J. Stanley and Dennis S. Prince, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p545-557.

River Dnister Pollution with Toxic Waste as a Result of Accident at Potassium Fertilizers Factory, Valeriu Ropot, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p3499.
Salinity Management for the Upper Gila River, G. T. Orlob and E. W. Wessman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4257-4262. Seawater Intrusion Solutions for the Salinas Valley, How-

ard Lauran L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4312-4316.

Selecting Design Conditions as Part of a Watershed Approach to Water Quality Control, David W. Dilks and Kathryn A. Sweet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1543-1548.

Testing and Effectiveness of a New Urban BMP Stormcep-, Vincent H. Berg and Graham J. Bryant, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1864-1869.

Water Based Land Use Regulations Using GIS Water Budgeting Model, H. William Sellers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3962-3968.

The Watershed Approach: A Framework for Action, Louise P. Wise and Janet D. Pawlukiewicz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3574-3579.

Water quality standards

BASINS-a GIS-linked Watershed Analysis and Modeling Tool, Gerald D. LaVeck, Marjorie C. Coombs and Marilyn Fonseca, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3629-3632.

Drinking Water Quality in Small Northern Communities, Daniel W. Smith, Stephen J. Stanley and Dennis S. Prince, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p570-581.

Impact of Point and Nonpoint Discharges on the Water Quality of a Reach of the Red River of the North, Anil Peggerla and G. Padmanabhan, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2504-2509.

Modeling the Lake Decatur Watershed in Illinois to Evaluate Effects of Best Management Practices on Nitrate Loading, Deva Borah, Misganaw Demissie and Laura Keefer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1681-1686.

Storm Water General Industrial Permit Non-Filers Identification and Outreach, L. Donald Duke and Y. Jae Chung, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p2619-2624.

Survival of Coliform Microorganisms in Sediments from a Treated Water Reservoir, Heesong Yoon and Joseph S. Devinny, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1626-1631.

Telesleeve Crossing, David E. Comfort and Paul F. Lucas, (Pipeline Crossings 1996, Lawrence F. Catalano, ed.,

1996), p139-146. Water reclamation

Costs of Treatment for Wastewater Reclamation and Disposal: A Preliminary Assessment, Pamela Doughman, Stephen Lyon, Lydia Chiu and Charles Gunnerson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1425-1430.

Design Guidelines for UV Disinfection Facilities, Heba Awad, Jeff Kuo and Jamal Awad, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2999-3004.

EPA in Limelight at WEFTEC Meeting, CE Dec. 96, p10. The Fabric Dyers' Use of Recycled Water, Chuck Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2666-2671.

sstering Reclamation through Cooperation, Cheryl K. Davis, Olujimi O. Yoloye and Mary Grace Pawson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p3696-3700.

Groundwater Recharge with Reclaimed Water Another Step Closer to Potable Reuse, William R. Mills, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Titusville Cleans Up, CE Aug. 96, p18,20.

Use of Reclaimed Water in Cooling Towers, William T. Bresnahan and Joseph D. Papia, (North American Water and Environment Compress & Destructive Water, Chenchayya Bathala, ed., 1996), p2660-2665.

Water resources

The 1995 Flood in Southeastern Norway - Operational Forecasting, Warning, and Monitoring of a 200-year Flood, K. Repp. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2537.

Advanced Hydrologic Forecasting for Flood and Drought Mitigation, John J. Ingram, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p455.

Application of Mathematical Models for Flood Forecasting in Sri Lanka, G. T. Dharmasena, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1549.

Chayya Batmaia, ed., 1970), p1349.
The Birth and Success of Orange County's Hydrology and Hydraulics Technical Group, Chenchayya T. Bathala, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

California's Visions of Groundwater: a Water Source and a Salt Sink, J. D. Oster, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1936-1941.

Changing Conditions and Water Elections, Charles H. Lawrance, James M. Stubchaer and Jon A. Ahlroth, WR July/Aug. 94, p458-475.

Climate Change: What the North American Water Engineer limate Change: What the North American Water Engineer Should Know, Maurice Roos, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1471-1476.

Climate Variability Impact on the Water Resources of Ancient Andean Civilizations, Kenneth R. Wright, John A. Dracup and Jonathan M. Kelly, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1840-1845.

A Constructive Act, CE Dec. 96, p13.

Critical Evaluation of Risk Assessment: A Look from the Inside Out, Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p419-421.

Design of the Inlet/Outlet Tower for the Eastside Reservoir Project, Robert P. McBean and Clifford D. Dillon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1783-1788.

Development and Application of a Dual Drainage Model for the Wethersfield Area of the City of Hartford, Con-necticut, Michael E. Hulley, C. Neil Geldof, William W. S. Gray and A. Charles Rowney, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1242-1248.

Disaggregation Modeling Process for Climatic Time Series, Susan Firor, Brad A. Finney, Robert Willis and John A. Dracup, WR May/June 96, p205-212.

Dredging in the Southern Sacramento-San Joaquin Delta, Mike Mirmazaheri, (North American Water and Envi-Mike Mirmazanen, (Norin American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2636-2641.

Drought in California: When Does It Begin and When Does

it End? Maurice Roos, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1081-1086.

Earth Spillway Design Using SITES Software, Darrel M. Temple, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1930-1935.

Education and Research Needs for Appropriate Technology, Maurice L. Albertson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2760-2765.

The Effect of Climatic Change on Hydrologic Variables Jason R. Westmacott and Donald H. Burn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1465-1470.

Engineering Education for Appropriate Technology, Richard L. Rosen, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2743-2747.

Engineering Vietnam's Waterways, CE July 96, p8.

Environmental Policy Making in Today's Political Environ-ment, Warren M. Lee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2805-2809.

Experiment with Simulation Models in Water-Resources Negotiations, René Reitsma, Ilze Zigurs, Clayton Lewis, Vance Wilson and Anthony Sloane, WR Jan./Feb. 96, p64-70

Flora Wang, Noted Hydrologist, Was Louisiana State Pro-fessor, NE Oct. 96, p6. Fuzzy Rule-Based Estimation of Flood Probabilities under Climatic Fluctuations, Istvan Bogardi, Roland Reiter and Climatic Fluctuations, Istvan Bogardi, Roland Reiter and Peter Nachtnebel, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p61-79. Hydraulic Structures by P. Novak, A. I. B. Moffat, C. Nalluri, and R. Narayanan, Steven Abt, HY Nov. 96, p674. Hydrologic Risk, Robert C. Patev, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed., and Eugene, 2. Stakhiv, ed. 1996).

David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996),

Impacts of Climate Change in the Missouri River Basin, Rollin H. Hotchkiss, Steven F. Jorgensen, Ranjan S. Muttiah, Jeffrey G. Arnold, Thomas A. Fontaine, Scott J. Kenner and John M. Antle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3399-3404.

Impacts of NAFTA on Environmental Engineering, Mark W. Killgore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2306-2311.

eu., 1990), p.2306-2311. Integrated Hydrological/Ecological/Economic Modeling for Examining the Vulnerability of Water Resources to Cli-mate Change, John P. Kochendorfer and Jorge A. Ramirez, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2157-2162.

International Postgraduate Program of Water Resources Engineering in Asia, Thian Yew Gan, El Jan. 96, p6-11. Irrigation Policy for Realization of High Agropotential of Bihar State in India, I. N. Sinha, IR Jan/Feb. 96, p31-39.

James Ogilvie, Prominent Water-Resources Engineer, Dies at 84, NE Feb. 96, p14.

John Scoville, Killed in Croatia Plane Crash, Headed Harza

Engineering in Chicago, NE May 96, p15.
The Largest Water Reservoirs of Russia in Flood Control. S. E. Bednarouk, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2538.

The Management and Policies of the BECC, April Lander, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1813-1818.

Mixed Optimization Technique for Large-Scale Water-Resource Systems, Marcello Niedda and Giovanni M.

Sechi, WR Nov./Dec. 96, p387-393.

Modeling and Solving Water Resources Engineering De-sign Problems as Stochastic Programs to Account for an Uncertain Future, D. S. Yakowitz, W. Elshorbagy and K. Lansey, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p106-117.

Modeling Climate Change Impacts on Water Resources, Brian Hurd, Paul Kirshen and Mac Callaway, (North

Multicriterion Design of Long-Term Water Sund Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1834–1839.
Multicriterion Design of Long-Term Water Supply in Southern France, Oscar Cordeiro Netto, Éric Parent and Lucien Duckstein, WR Nov/Dec. 96, p403-413.

Lucien Duckstein, Mr Nov./Dec. 90, p403-413.

North American Water and Environment Congress & Destructive Water, CD-ROM (Windows version only), Chenchayya Bathala, ed., 1996, 0-7844-0166-7, 1340pp. Optimum On-Farm Irrigation Efficiency for Sustainable Agriculture, B. Davidoff, E. Craddock, M. Roos and F.

Karajeh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p189-194.

Organizing a Local Water Resources Technical Group, Thomas G. Sands, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2254-2258.

Performance of a Virtual Runoff Hydrograph System, Pa-

Performance of a virtual kunoli Hydrograph System, Fairtick Carrière, Shahab Mohaghegh and Razi Gaskari, WR Nov./Dec. 96, p421-427.

Quantitative Monitoring of Plata River Basin Waters, V. F. de sa e Benevides and R. M. Coimbra, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1719.

Reflections on the Regulatory Reform Debate, Leonard Shabman, Risk-Rayed Decision Makine, in Water Re-

Reflections on the Regulatory Reform Debate, Leonard Shabman, (Risk-Based Decision Making in Water Re-sources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p1-9. Reversibility Measures for Sustainable Decisions, Nick Fanai and Donald H. Burn, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1525-1530.

Risk as a Sustainable Development Criteria, Heidelore I.

Kroeger and Slobodan P. Simonovic, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1531-1536.

sk Communication: Guidelines and Commentary, Clifford S. Russell and Duane D. Baumann, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv,

ed., 1996), p396-400.

Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene

Z. Stakhiv, ed., 1996, 0-7844-0168-3, 450pp.

Selection of Sediment Transport Relations Part III: Numeri-cal Ranking of Sediment Transport Relations, David T. Williams and Pierre Y. Julien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2843-2848.

Selection of Sediment Transport Relations: Part I, Review of Sediment Transport Comparisons, Martin J. Teal and David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2831-2836.
Selection of Sediment Transport Relations: Part II, Ranges of Dimensionless Numbers, David S. Smith and David T. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2837-2842.

Statistical Distributions and Natural Hydrograph, Nazeer Ahmed, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p292-297.

A System Approach for Identifying and Improving Hydrau-lic Numerical Modeling Reliability, Bernard B. Hsieh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2725-2730.

Technical Activities in a Large Branch or Section, Martha Ferrero Juch, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2248-2253. Under Way: Decontamination Pilots for Dredged Material, CE Nov. 96, p10,12.

Using NOAA's New Climate Outlooks in Operational Hydrology, Thomas E. Croley, II, HE July 96, p93-102

Using Spaceborne Imaging Radar to Identify Lake Water Resources on the Alaskan North Slope, M. O. Jeffries, K. Morris and G. E. Liston, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p855-865.

Vulnerability of Water Resources to Global Climate Change in the Agricultural Midwest- Ecological, Eco-nomic, and Regulatory Aspects, J. Wayland Eheart and Edwin E. Herricks, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2145-2150. Water Crisis in Developing World: Misconceptions about Solutions, Harald D. Frederiksen, WR Mar/Apr. 96,

Water Resources Investigation Along Salt River in Phoenix and Tempe Area, James Chieh, Jody Fischer and Dennis Marfice, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1399-1405. Water Resources Legislation, Martin Hight, CE Sept. 96,

p116.

787

Water-Supply System Operations: Critiquing Expert-System Approach, Anne Shepherd and Leonard Ortolano, WR Sept./Oct. 96, p348-355.

"California Border Environment Activities Since Passage of NAFTA", James M. Stubchaer, Bart Christensen and Susan Phillips, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996, p1807-1812.

Water resources development

Analysis of Long-term Supply-demand Planning of Water Resources in Taiwan, Shiang-Kueen Hsu, Nien-Sheng Hsu and William W-G. Yeh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3153-3157.

Consensus as the Measure of Sustainability, Michael J. Bender and Slobodan P. Simonovic, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4148-4153.

Environmental Considerations for Water Resources Development in Haor Areas of Northeastern Bangladesh, G. M. Akram Hossain and Ainun Nishat, (North American Water and Environment Congress & Destructive Water, Chenchayay Bathala, ed., 1996), p1663-1068.

Environmental Planning for Water Resources Development, Cuatro Cienegas Region, Coahuila, Mexico, James r. Kunkel and Dario Rodriguez-Bejarano, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1249-1254.

Equity Measures for Selecting Sustainable Projects, Sam Matheson and Barbara Lence, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4371-4376.

Integration and Interdisciplinary Issues in Water Resources for the 21st Century: Comments and Critique, Richard Males, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4021-4025.

Managing Sediments in Reservoirs at FERC, Shou-shan Fan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2084-2090.

A New Model of California's SWP/CVP Systems, Tariq N. Kadir and Miguel A. Marino, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3068-3073.

Recently Emphasized Objectives and Risk Analysis for Project Planning in Developing Countries, Alvin S. Goodman and Lampros E. Bourodimos, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p154-168.

Sacramento Valley Conjunctive Use - Future Water Supply for the State Water Project? John R. Fielden, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3062-3067.

Water Resources Planning for the Fort Peck Indian Reservation, Montana, Deb Madison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4026-4029.

Water resources management

Adapting Water Resources of the Canadian Prairies under the impact of Climatic Warming, Thian Yew Gan, (North American Water and Environment Congress, & Destructive Water, Chenchayya Bathala, ed., 1996), p2163-2168.

Inve Water, Chenchayya Batnata, ed., 1990), p.2103-2108.
Advanced Hydrologic Forceasting Products for Flood and Drought Mitigation, John J. Ingram, Edwin Welles and Dean T. Braatz, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p.227-228.

Annual Delivery Decisions in the Simulation of the California State Water Project and Federal Central Valley Project using DWRSIM, Robert T. Leaf and Sushil K. Arora, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p812-817.

Appropriate Technology for Sustainable Development, Maurice L. Albertson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3247-3252. Artificial Recharge in the Oakes Test Area, Arden W. Freitag and Dale R. Esser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2335-2340.

California's Response to Drought, Chester V. Bowling and Scott A. Jercich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p869-874.

Challenges and Opportunities in Egypt's Integrated Water Resources Strategy, Mona El-Kady, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1051-1056.

Changes in Ground Water-Surface Water Interaction in the Santa Ana River Caused by Independent Water Resources Management Activities, Mark J. Wildermuth, Timothy F. Moore and Traci Stewart, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3300-3313.

Consensus as the Measure of Sustainability, Michael J. Bender and Slobodan P. Simonovic, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4148-4153.

Critical Needs for Sustainable Water Resources: Bridging the Gap Between Science and Implementation, B. A. Miller and M. J. Sale, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1297-1298.

Decision Support, R. B. Allen, CE July 96, p53-55.

Development and Implementation of a Capital Improvement Program for a Small Water Utility, Benito Avalos, Jorge Garcia, Louis Grijalva and Antonia M. Romero, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), n3236-3240

Drainage Recirculation Project for Water Quality, Kevin Johansen and Robert Stoddard, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1105-1110.

Eastern San Joaquin County Groundwater Resource Planning Model Development and Calibration, Najmus Saquib, Young Yoon and Mike Cornelius, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3509-3514.

Eastern San Joaquin County Groundwater Resource Planning Alternative Analysis, Najmus Saquib, Alex Chen, Umesh Lalwani, Mike Cornelius, Jeff Kishel, Gary Nuss and Mark Williamson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3515-3520.

Effect of Pump-Ins on California Aqueduct Water Quality, B. Auchard, C. Edwards, M. Morris, J. R. Phillips, L. A. Soo and Sun Liang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), Pd004-4009

Battana, cu., 17-20, process.

Environmental Improvement in Southern Africa, Daniel P. Miller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1069-1074.

The Environmental Valuation Reference Inventory (EVRJ) for Water Related Benefits Transfers, Jim Frehs, Matthew Clark, Paul De Civita, Fernand Filion, Virginia Kibler and Mahesh Podar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1331-1336.

Environmental Worldviews and Water Resources, Robert E. O'Connor, Richard J. Bord and Ann Fisher, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), pl0-18.

Evaluation of Modelling Needs for Central Valley Project Operations, John Burke and Donald Frevert, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p806-811.

Game Model Approach to Multi-Purpose/Multi-Objective Water Resources Related Environmental Protection Project Planning and Management in Developing Nations: A Nigerian Example, Azuka Benjamin Anyika, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1057-1062.

Impacts of Sea Level Rise on Coastal Water Resources Management, Chin Y. Kuo, (North American Water and Environment Congress & Destructive Water, Chen-change Bathale of 1985, 1985, 1985 chayya Bathala, ed., 1996), p1822-1827.

WATER RESOURCES MANAGEMENT

Implementation of Watershed Planning in Chester County Pennsylvania, Robert G. Traver, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3975-3980.

Implementing a Successful Conjunctive Use Program, William R. Mills, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3074-3078.

Integrated Resources Management for Irrigated Agricul-ture: Practical Lessons in Water Management and Conservation from the Arizona Management Improvement Program, Thomas Carr, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3486-3489.

Integration and Interdisciplinary Issues in Water Resources for the 21st Century: Comments and Critique, Richard Males, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p4021-4025.

Integration of Water Resources Planning and Environmen-tal Regulation, William Whipple, Jr., WR May/June 96,

p189-196

Interseasonal Irrigation System Planning for Waterlogged Sodic Soils, S. N. Panda, S. D. Khepar and M. P. Kaushal, IR May/June 96, p135-144.

Irrigation Policy for Realization of High Agropotential of Bihar State in India, I. N. Sinha, IR Jan. Feb. 96, p31-39.

Logging into Water, CE July 96, p14,18.

Managing Conflicting Demands from Endangered Species: Taking the Challenge, Kenneth W. Kirby, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4142-4147.

Modeling Water-Resource Systems for Water-Quality Management, R. G. Willey, Donald J. Smith and James H. Duke, Jr., WR May/June 96, p171-179.

Optimization and Simulation in Design and Operation of Reservoirs, A. Afshar and F. Peyrovian, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1956-1961.

Partnerships for Diversity in Water Resources Education, Neil S. Grigg, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p4016-4020.

Policy and Engineering Decision-making under Global Change: Case of the Upper Rio Grande River Basin, Lu-cien Duckstein, Bijaya P. Shrestha and Marvin Waterstone, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p38-60.

Precipitation and Water-Table Effects on Agricultural Pro-duction and Economics, Jorge A. Ramírez and Bryce Finnerty, IR May/June 96, p164-171.

Problems with Metrication in Transboundary Water Projects, Conrad G. Keyes, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3680-3684.

Project Object, Richard M. Shane, Edith A. Zagona, Dave McIntosh, Terrance J. Fulp and H. Morgan Goranflo, CE

Jan. 96, p61-63.

Reclaiming Denver's Central South Platte River, Nick Skifalides, Leo Eisel, Brian Kolstad and Ben Urbonas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Research Agenda on Sustainability of Irrigated Agriculture, Luis S. Pereira, James R. Gilley and Marvin E. Jensen,

IR May/June 96, p172-177.

Resolution of the ACT-ACF Water dispute with a Federal-State Partnership, N. D. McClure, IV, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3417-3422.

Risk Based Analysis of Major Rehabilitation of Hydraulic Structures Using REPAIR, David Moser, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2498-2503.

Robustness of Reservoir Storage Reallocation Decisions to Climate Change, Andrew W. Wood, Dennis P. Letten-maier and Richard N. Palmer, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996),

Site Vulnerability Assessment for Wellhead Protection Planning, Wade E. Hathhorn and Tyler Wubbena, HE

Oct. 96, p152-160.

A Study into Effectiveness of Urban Best Management Practises, Robert G. Traver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1852-1857

Subjective Probability Assessment in Water Resources Planning, Charles Yoe, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A.

Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p294-314. Sustainable Watershed Management in Developing Watersheds, Thomas H. Cahill, Joel McGuire and Wesley R. Horner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3969-3974.

A System to Improve Water-Related Sustainability Charac-Larry Quinn, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3259-3264.

Third Party Impacts of Proposed Water Banking in the Col-Initia Party Impacts of Proposed Water Banking In the Co-orado River Basin, James F. Booker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), PdV42-4045. U.S.-Canadian Water Sharing, Kris G. Kauffman, (North

American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3423-3428. United States Bureau of Reclamation (USBR) Perspectives

on the Management Improvement Program As a Vehicle for Integrated Resource Planning, Thomas G. Burbey and Stephen M. Jones, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3490-3495.

The Use of Monitoring of Russian Water Objects for the Decrease of Disaster Consequences, G. M. Barenboim and G. M. Ostrovski, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1341.

Use of the Metric System in Water Resources, Jan van Schilfgaarde, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3690-3695.

A Verification System for Probabilistic Hydrograph Fore-casts, Edwin Welles and Momcilo Markus, (*Natural Dis-aster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p223-224.

Water Allocation on US/Mexico Boundaries, Conrad G. Keyes, Ir., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3429-3433. Water Control Structure Choice for Wetland Restoration/ Creation, Roger C. Smith, (North American Water and

Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p268-273. Water Crisis in Developing World: Misconceptions about Solutions, Harald D. Frederiksen, WR Mar/Apr. 96,

Water in the International Decade for Natural Disaster Reduction, A. J. Askew, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl.

Water Quality Improvement Program in Ventura County at Port Hueneme, Lynn M. Takaichi, Sachiko Itagaki and Dennis D. Wolfe, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p412-417.

Ia. ed., 1990, Pa12-417. Water Resources Planning for the Fort Peck Indian Reservation, Montana, Deb Madison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4026-4029.
The Watershed Approach: A Framework for Action, Louise P. Wise and Janet D. Pawlukiewicz, (North American Material Patrick)

Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3574-3579.

Zonification of Areas with Inundation Risk by Means of Mathematical Modeling in the Rosario Region, Argenti-na, G. A. Riccardi, E. D. Zimmermann and R. A. Navarto, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3704.

Water reuse

Agroforestry as a Method of Salt and Selenium Manage-ment on Irrigated Land in the San Joaquin Valley, Re-becca F. Muñoz and Vashek Cervinka, (North American

Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p400-405.
Challenges and Opportunities in Egypt's Integrated Water Resources Strategy, Mona El-Kady, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1051-1056.
Drainage Recirculation Project for Water Quality Keyin

Drainage Recirculation Project for Water Quality, Kevin Johansen and Robert Stoddard, (North American Water Johansen and Robert Stoduard, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), pl 105-1110. The Fabric Dyers' Use of Recycled Water, Chuck Jones, (North American Water and Environment Congress &

Destructive Water, Chenchayya Bathala, ed., 1996),

Fluidized Bed Denitrification of Secondary Effluent During Wastewater Reclamation in Southern California, Roger w. Babcock, Jr., Kapal Madireddi and Michael K. Stenstrom, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p788-793.

Postering Reclamation through Cooperation, Cheryl K. Davis, Olujimi O. Yoloye and Mary Grace Pawson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

Long-term Consequences of Recycling Drainage Water for Irrigation, S. R. Grattan and J. D. Rhoades, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1942-1947. Use of Reclaimed Water in Cooling Towers, William T. Bresnahan and Joseph D. Papia, (North American Water

and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2660-2665.

Wastewater Reuse: An Alternative for Potable Water, S. A. Mohsin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2976-2981.

Water rights

The Case Against Markets, Joseph W. Dellapenna, (North

American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2933-2938. The Case for Water Markets as the Best Means for Effective Water Allocation, Ronald G. Cummings and R. Peter Terrebonne, (North American Water and Environnent Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2921-2926.

Interruptible Option Contracts, John F. Scott, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3569-3573.

Legal Principles Applicable to Sharing Transboundary Wa-ters, William E. Cox, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3218-3223.

Managing Transboundary Water Sharing, Stephen E. Drap-er, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3230-3235.

odeling of Rattlesnake Creek Watershed Using "Swat" Model, S. R. Ramireddygari, J. K. Koelliker and R. S. Govindaraju, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3241-3246.
Sacramento Valley Conjunctive Use - Future Water Supply for the State Water Project? John R. Fielden, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3062-3067.
Transboundary Diversions, Water Law and Property Rights, George William Sherk, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3224-3229.

Water services

At AWWA Conference, Public Utilities Put Up a Fight, CE Sept. 96, p24-25

Study Concludes Feds Should Exit Water Business, CE June 96, p12.

Drought Experiences of Ohio and Their Applications in the DAR-JAI River Basin of Taiwan, Tiao J. Chang, Wen C. Huang and Chian M. Wu, (North American Water and Environment Congress & Destructive Water, Chen-

Chayya Bathala, ed., 1996), p628-636.

Impacts of Improved Water Supply and Sanitation on the Rural Population of India, Padmavathy Bogabathini, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Risk Analysis of Joint Reservoir Operation in Central Taiwan, Jan-Tai Kuo, Chang-Shian Chen and Yuan-Hsi Liao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3158-3163.

Analyzing Drought with a Simplified Climate Model, Mi-chael L. Anderson and M. Levent Kavvas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1075-1080.

Annual Delivery Decisions in the Simulation of the Califor nia State Water Project and Federal Central Valley Pro-ject using DWRSIM, Robert T. Leaf and Sushil K. Arora, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p812-817

Chambers System Helps Developers Level Floodplain, CE Apr. 96, p96.

Chebyshev Model for Water-Quality Management, Andrews K. Takyi and Barbara J. Lence, WR Jan/Feb. 96,

Drought Management in Northeastern Colorado, Darell D. Zimbelman, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p863-868.

Evaluation of System Constant Volume Control, Zihui Lin and David H. Manz, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4353-4358.

Flood Risk Management: New Concepts for an Objective Negotiation, O. Gilard, P. Givone and G. Oberlin, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3918-3919.

Identification of Regional (Third Party) Impacts Associated with the Truckee River Operating Agreement, Charles Borda, Tom MacDiarmid, Rangessan Narayanan, Thomas Harris, Karl MacArthur and Shawn Stoddard, (North MacDiarmid, English Stoddard, (North Destruction) American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4036-4041.

Optimal Estimation of Storage-Release Alternatives for Storm-Water Detention Systems, Rafael Segarra-García and Mohammad El Basha-Rivera, WR Nov/Dec. 96,

Picacho Reservoir Enhancement Study for Water Recharge, Reparian Enhancement, and Water-Based Recreation Purposes, Ira Mark Artz, (North American Water and Environment Congress & Destructive Water, Chen-

Environment Congress & Destructive water, Cherichayya Bathala, ed., 1996), p1413-1418.

Resolution of the ACT-ACF Water dispute with a Federal-State Partnership, N. D. McClure, IV, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3417-3422.

San Diego County Water Authority's Emergency Storage Project: A Major Planning Achievement, Ken Steele, Lee Judd, Richard Pyle and Uli Kappus, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2815-2819.

Water suppy Analysis of Long-term Supply-demand Planning of Water Resources in Taiwan, Shiang-Kueen Hsu, Nien-Sheng Hsu and William W-G. Yeh, North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3153-3157.

Annual Delivery Decisions in the Simulation of the California State Water Project and Federal Central Valley Pro-ject using DWRSIM, Robert T. Leaf and Sushil K. Arora, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p812-817.

Application of Artificial Neural Networks to the Sacramer to-San Joaquin Delta, Nicky Sandhu and Ralph Finch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p490-504.

Application of Regime Theory in Practice: A Case Study, James A. Turpin and Martin J. Teal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1663-1668.

ASR Case Study - City of Salem, Oregon, Joe Glicker and Paul Eckley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p2679-2684.

Autoregressive Decision Rule in Aggregated Reservoir Op-eration, Qingfu Liang, Lynn E. Johnson and S. Mohan, WR Nov./Dec. 96, p438-440.

Better Management in the Water Supply Sector Through Institutions, Paula Donnelly-Roark, (North Indigenous American Water and Environment Congress & Destruc tive Water, Chenchayya Bathala, ed., 1996), p2970-2975.

Characterization of Canal Operations under Ideal Anticipa-tory Control, E. Bautista, A. J. Clemmens and T. S. Strelkoff, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1887-1892.

Climate Change: What the North American Water Engineer Should Know, Maurice Roos, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p1471-1476.

Critical Needs for Sustainable Water Resources: Bridging the Gap Between Science and Implementation, B. A. Miller and M. J. Sale, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1297-1298.

Decision Process for Mitigating Seismically Vulnerable Water Facilities, Walter J. Bishop and Ernesto A. Avila, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p209-210.

Designing Instream Flows to Satisfy Fish and Human Water Needs, Hal Cardwell, Henriette I. Jager and Michael J. Sale, WR Sept./Oct. 96, p356-363.

Drought Experiences of Ohio and Their Applications in the DAR-JAI River Basin of Taiwan, Tiao J. Chang, Wen C. Huang and Chian M. Wu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p628-636.

chayya Bathala, ed., 1990), p628-0.50.

Establishing the Relative Process Risks for Chlorination and Ozonation - A Case Study Illustrates the Need to Evaluate the Process Hazard Implications of a Change in Drinking Water Disinfection Process due to D/DBP Regulations, Paul G. Beswick, Craig E. Brackbill and L. Donald Duke, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed. 1906), 21021-1026. ed., 1996), p1021-1026.

The Great Great Lakes, Murray Clamen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2300-2305.

Impacts of Improved Water Supply and Sanitation on the Rural Population of India, Padmavathy Bogabathini, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p781.

Innovative Effluent Management for Sustainability, Dan Bruinsma, Mary Ellen Dick, Eric Rosenblum and David Tucker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1614-1619.

Intensity, Duration, and Frequency of Residential Water Demands, Steven G. Buchberger and Greg J. Wells, WR

Jan./Feb. 96, p11-19.

Management of Stream-Aquifer Systems in the 21st Century, Babs Makinde-Odusola, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2787-2792.

Managing Great Lakes Water Levels: An International Partnership, Anthony J. Eberhardt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1317-1322.

Chenchayya Bantala, ett., 1990b, p1317-1322.

Mapping Groundwater Vulnerability to Nitrate and Pesticide Contamination in the Salinas Valley, Monterey County, California, Weibo Yuan, 10c LeClaire, Ali Diba, Michael Inada and Matt Zidar. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1099-1104.

Ozone Update Requested, Ernest Nussbaum, CE Nov. 96,

p36

Picacho Reservoir Enhancement Study for Water Recharge, Reparian Enhancement, and Water-Based Recreation Purposes, Ira Mark Artz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1413-1418.

Rethinking Well Efficiency, Otto J. Helweg and Timothy Mays, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p954-959.

Risk Analysis of Drinking Water Treatment and Supply Fa-cilities Handling Highly Hazardous Chemicals, Krishna Nand, Bruno Loran and Morley Male, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p776-780.

San Diego County Water Authority's Emergency Storage Project: A Major Planning Achievement, Ken Steele, Lee Judd, Richard Pyle and Uli Kappus, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2815-2819.

San Diego's Historic Dulzura Conduit: New Solutions, Hans H. Torabi and Harold B. Tennant, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p340-347.

Sanitary Engineers in American Cities: Changing Roles from the Age of Miasmas to the Age of Ecology, Martin V. Melosi, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p108-122.

Sediment Impacts on Yield from a Two-Reservoir System in Puerto Rico, Gregory L. Morris, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2103-2108.

The Standley Lake Protection Project, Joseph Green-Heffern and David J. Kaunisto, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2820-2825.

Training for the Big One - A Proactive Approach, Andrew M. Hui and David R. Putnam, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p43-44.

US/Mexico Border Drinking Water Study, Blake L. Atkins, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2120-2125.

Use of Artificial Neural Networks for Agricultural Chemical Assessment of Rural Private Wells, Chittaranjan Ray and Kristopher K. Klindworth, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1687-1692.

Use of Reclaimed Water in Cooling Towers, William T. Bresnahan and Joseph D. Papia, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p.2660-2665.

Value Engineering Changes to the Eastside Pipeline, Antonio J. Perez, Francisco Becerra and John Vrsalovich, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Volunteer Organizations Use of Appropriate Technology in Developing Countries, Jim Horner and Tsegaye Hailu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2754-2759.

Wastewater Reuse: An Alternative for Potable Water, S. A. Mohsin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2976-2981. Water Pipeline Crossings of the Pitt and Fraser Rivers, Tim R. Jervis and Jim V. Young, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p202-213.

Water Quality Improvement Program in Ventura County at Port Hueneme, Lynn M. Takaichi, Sachiko Itagaki and Dennis D. Wolfe, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p412-417.

Mater Resources Investigation Along Salt River in Phoenix and Tempe Area, James Chieh, Jody Fischer and Dennis Marfice, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1399-1405.

Watershed Management for a Limited Coastal Aquifer Sys-tem, James P. Rhodes, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1087-1092.

Wisconsin Engineer Designs Irrigation System in the Phil-

ippines, NE June 96, p9.

Yields from Ground-Water Storage for California State Water Project, L. Jeffrey Lefkoff and Donald R. Kendall, WR Jan./Feb. 96, p72-74.

Water supply forecasting

Analyzing Water Balances and Ranking Maryland's Water-sheds Related to Growth, Development and Loss of Habitat, Marcia Smith, David Bleil and James Ahl, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4365-4370.

Equity Measures for Selecting Sustainable Projects, Sam Matheson and Barbara Lence, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p4371-4376.

Risk Analysis of Joint Reservoir Operation in Central Taiwan, Jan-Tai Kuo, Chang-Shian Chen and Yuan-Hsi Liao, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3158-3163.

Sacramento Valley Conjunctive Use - Future Water Supply for the State Water Project? John R. Fielden, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3062-3067.
Water Based Land Use Regulations Using GIS Water

Budgeting Model, H. William Sellers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3962-3968.

Water supply systems

Adaptive Search Optimization in Reducing Pump Operat-ing Costs, S. Pezeshk and O. J. Helweg, WR Jan/Feb. 96, p57-63.

Anton, Public-Works Engineer, Dies at 59, CE Apr. 96,

Biological Clogging and Rehabilitation of Drains and Well Systems and the Implications on Groundwater Quality, George Alford and D. Roy Cullimore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p34-39.

Comparison of Electromagnetic and Other Surveys to Lo-cate Extensive Water Main Corrosion, T. H. W. Baker, S. E. McDonald and R. J. H. Brousseau, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p829-836.

Comparison of Methods for Predicting Deficient-Network Performance, Rajesh Gupta and Pramod R. Bhave, WR

May/June 96, p214-217.
Comprehensive Modelling of Water Distribution Networks, Bryan W. Karney, Samuel S. Kpo and Kai-Wah Tang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Crossing of MacDonald Ranch Wash in Southern Nevada, Roger Beieler, Alvin R. Anderson, Russ Snow and Carol Tate, (Pipeline Crossings 1996, Lawrence F. Catalano,

ed., 1996), p282-289.

Design Heuristic for Globally Minimum Cost Water-Distribution Systems, G. V. Loganathan, J. J. Greene and T. J. Ahn, WR Mar/Apr. 95, p182-192. Design of Branched-Water-Supply Network on Uneven Terrain, Brian Young, EE July/Aug. 94, p974-980.

Design of Optimal Reliable Multiquality Water-Supply Systems, Avi Ostfeld and Uri Shamir, WR Sept/Oct. 96, p322-333.

An Engineering Information System Application for Water Supply and Distribution Systems, Chun-Hou Orr, Sérgio Teixeira Coelho and Helena Alegre, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4214-4219.

Flexible Water Deliveries: One District's Experience, Eric Swenson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p679-684. Getting Wet with Metric, Frederick A. Locher, (North American Water and Environment Congress & Destruc

tive Water, Chenchayya Bathala, ed., 1996), p3685-3689. Increasing Computational Accuracy of Radial Gate Flows, Brian Henning and Timothy F. Kacerek, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3592-3597.

Interruptible Option Contracts, John F. Scott, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3569-3573. The Management Improvement Program: An Irrigation

District's Perspective of the Demonstration Program, Brian M. Betcher and Gary Sloan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3480-3485. Measures of Water Distribution System Reliability, Rafael

easures of Water Distribution System Refracting, Research G. Quimpo, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p388-395.

Mixed Optimization Technique for Large-Scale Water-Resource Systems, Marcello Niedda and Giovanni M.

Resource Systems, marceine retends and crovatini str. Sechi, WR Nov/Dec, 96, p387-393.

Model for Water Quality in Periphery of Distribution Systems, Lin Wu, Steven G. Buchberger and Trent G. Schade, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3464-3469.

1996), p3464-3469.
Modeling Low Velocity/High Dispersion Flow in Water Distribution Systems, David H. Axworthy and Bryan W. Karney, WR May/June 96, p218-221.
Modeling Reservoir Evaporation Losses by Generalized Networks, Yung-Hsin Sun, Shu-li Yang, William W-G. Yeh and Peter W. F. Louie, WR May/June 96, p222-226.
Multicriterion Design of Long-Term Water Supply in Southern France, Oscar Cordeiro Netto, Eric Parent and Lorice Designers W. Now, Doc. 96, e2012 412 12.

Lucien Duckstein, WR Nov / Dec. 96, p403-413. Nation's Largest Grouting Contract Under Way, CE Aug.

96, p22

Optimal Design of Water-Distribution Networks with GIS, Saud A. Taher and John W. Labadie, WR July/Aug. 96, p301-311.

Optimization and Pipe-Sizing Decisions, Thomas M. Wal-ski, WR July/Aug. 95, p340-343.

Optimization Modeling of Complex Surface Water Collection Systems, Ken Young, Stuart Stein, Karnal Saffarinia, George Oliger, Raphael Hurwitz, Robert Mayer and Janine Witko, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3393-3398.

Optimization of Water Supply System Operation, Vilas Ni-tivattananon, Elaine C. Sadowski and Rafael G. Quimpo, WR Sept./Oct. 96, p374-384.

Plumbing the Hydraulic Secrets of Ancient Inca City Holds Great Fascination for Denver Civil Engineer, NE May

Preparing for the Big One - Risk Assessment and Mitigation of a Major Earthquake, David L. Pratt. (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p207-208.

Privatization and Water Supply/Treatment Projects, Brant-ley Liddle, (North American Water and Environment

ley Liddle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4136-4141. Reliability and Restoration of Water Supply Systems Fol-lowing Earthquakes, Donald Ballantyne, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p203-204. Reliability-Based Design of Water-Distribution Systems, Rajesh Gupta and Pramod R. Bhave, EE Jan. 96, p51-54.

Reservoir Targets for Urban Water Supply Systems, B. J. C. Perera and Gary P. Codner, WR July/Aug. 96, p270-

Robustness of Reservoir Storage Reallocation Decisions to Climate Change, Andrew W. Wood, Dennis P. Letten-maier and Richard N. Palmer, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996),

Seasonal Effects on Generation of Particle-Associated Bac-teria During Distribution, Blaise J. Brazos and John T. O'Connor, EE Dec. 96, p1050-1057.

Solving Collection Problems to Increase Revenue: The Houston Experience, Karen Philippi, (North American Water and Environment Congress & Destructive Water, Chenchavya Bathala, ed., 1996), p4282-4287.

Update on Aguas Argentinas, CE July 96, p22,24.

Utilizing Coordinated Billing and Metering Systems Analysis to Enhance Utility Revenue on a Shared Revenue Basis, Randy P. Schuler, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4275-4281.

Water Wisdom of the Ancients, L. Michael Trapasso, CE

Jan. 96, p64-65.

Water-Supply System Operations: Critiquing Expert-System Approach, Anne Shepherd and Leonard Orto-lano, WR Sept./Oct. 96, p348-355.

Zoo Treats Aquatic Exhibits with Ozone, CE Nov. 96, p8.

Water surface

Bugs Clean Tunnels, CE Aug. 96, p22.

Coastal Engineering Laboratory and Field Measurements: Some Uncertainties in Measurement, Frederic Raichlen, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996).

Manning's Roughness Coefficient for Coarse-Bed Chan-nels With High In-Bank Flows, David Froehlich and Craig A. Benson, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p436-441.

Simulating Nature Wind Waves in a Wave Flume, John Z. Yim, C.-R. Chou and M.-Y. Lai, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p45-56.

Water surface profiles

The Effects of Water Surface Profiles on Mann Roughness Coefficient, P. Michael DePue, II and Ta Wei Soong, (North American Water and Environment Con-gress & Destructive Water Chambers, 1987) gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3639-3644.

Hydraulic Effects of Habitat Structures in Flood Control Channels, Rebecca Seal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1519-1524.

Hydraulics of Subsurface Flow Constructed Wetlands, A. T. Hjelmfelt, Jr. and A. L. Thompson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p52-57.

A Knowledge Based System for the Design of Open Chan-nels, James M. Crum and Michael E. Mulvihill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4125-4130.

Modeling Overfalls Using Vertically Averaged and Mo-ment Equations, Abdul A. Khan and Peter M. Steffler, HY July 96, p397-402.

Nonunique Water-Surface Profiles in Open Channels, Subhash C. Jain, HY Dec. 93, p1427-1434.

Siting Low Profile Grade Control Structures for the Muddy Creek Demonstration Stream Restoration Research Project, R. J. Wittler, D. R. Eby, S. D. Keeney, C. C. Watson and S. R. Abt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p105-110.

Water Surface Profiles in Compound Channel with Multi-ple Critical Depths, Terry W. Sturm and Aftab Sadiq, HY Dec. 96, p703-709.

Water table

Changes in Water Table Elevation at Yucca Mountain in Response to Seismic Events, Bill W. Arnold, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p102-104.

Current Status of Paleohydrologic Studies at Yucca Mountain and Vicinity, Nevada, John S. Stuckless, (High Level Radioactive Waste Management, Technical Program

Committee, 1996), p98-101.

Effect of Recharge Duration on Water-Table Response, Subramania I. Sritharan and Henry R. Gee, IR July/Aug. 96, p228-234

Groundwater Dynamics in Beaches and Coastal Barriers, Peter Nielsen and Hong-Yoon Kang, (Coastal Dynamics 95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p521-532.

Groundwater Flow Component of a Wetland-Dynamics Model, Hector R. Bravo and Gregory H. Brown, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2793-2798.

Hydrologic Impact of Great Flood of 1993 in South-Central Kansas, Marios Sophocleous, A. J. Stern and S. P. Per-kins, IR July/Aug. 96, p203-210.

Modeling Coastal Ground-Water Response to Beach Dewa-tering, L. Li, D. A. Barry and C. B. Pattiaratchi, WW Nov/Dec. 96, p273-280.

Modeling Groundwater Response to a Perimeter Flood, Jeff Leighton and Michel Genoud, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p748-752.

Precipitation and Water-Table Effects on Agricultural Production and Economics, Jorge A. Ramírez and Bryce Finnerty, IR May/June 96, p164-171.

Shallow Ground Water Management with a Modified Subsurface Drainage System, J. E. Ayars, R. A. Schoneman, F. Dale and P. Shouse, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2130-2135.

Theories of Ditch Drainage in Layered Anisotropic Soil, G. Barua and K. N. Tiwari, IR Nov./Dec. 96, p321-330.

Water temperature

Data Analysis for Computer Modeling of Thermal Dis-charges, Chun-Hou Orr and Shu-Fang Peng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3758-3763.

Dependence of Water Quality and Fish Habitat on Lake Morphometry and Meteorology, Midhat Hondzo and Heinz G. Stefan, WR Sept./Oct. 96, p364-373.

Lake Number: A Long-Term Lake Water Quality Predictor, Midhat Hondzo, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3176-3187.

Modeling Combined Stresses on Aquatic Ecosystems, Jam-ie D. Anderson, Ian P. King and Gerald T. Orlob, (North American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996), p3998-4003. Modeling the Impact of Uncertainty in Spatial Variability of Estuarine Boundary Conditions, B. H. Johnson and K. W. Kim, (North American Water and Environment Conress & Destructive Water, Chenchayya Bathala, ed., gress & 221-2736.

Water transfer

Controlling Microbial Biota Transfer in the Garrison Diversion Unit, Charles J. Moretti, David M. Kopchynski and Tia L. Cruise, WR May/June 96, p197-204.

Water transportation

Polyethylene Piping Eases Drought, CE Nov. 96, p94.

Water treatment

Water treatment
Application of an Optical Monitor in Automatic Control of
Coagulation Dosing in Water Treatment Operations,
Chilipin Huang and Chi-Bing Liu, (North American
Water and Environment Congress & Destructive Water,
Chenchayya Bathala, ed., 1996), p2450-2450. Data from

Aquifer Transmissivity Computations Based on Data from Pump-and-Treat Facilities, Walter Z. Tang, Dean F. Ra-deloff and Vassilios A. Tsihrintzis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1273-1278.

Automatic Control of Flocculation Processes, Anders O. Wistrom and Jay A. Farrell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p997-1002.

Back to Bacteria: A More Natural Filtration, Bruce E. Rittmann, CE July 96, p50-52.

Closure to Disscussion of Environmental Engineering Forum: Long-Term Effects of Wetland Treatmen Mine Drainage (November/December 1993, Vol. 119, No. 6), Thomas M. Walski, EE Jan. 96, p85-86.

A Comparison of Geological and Stochastic Approaches to Characterization of Heterogeneity and their Effects on Simulations of Pump-and-Treat Systems, Peter E. Riemersma, Jean M. Bahr and Mary P. Anderson, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p1003-1018.

Computer Optimization of a Groundwater Treatment Facility. Denis M. O'Carroll and Thomas L. Theis. (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2492-2497.

- Conveyance of Water and Wastewater Residuals, Sludge Treatment, Utilization, Reclamation and Disposal Committee, ASCE, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p994-996.
- A Cost-Effective approach to In Situ Remediation of Soil and Groundwater at a Diesel Fuel Spill Site, David A. Nickerson and James N. Baker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1379-1386.
- Denitrification Incorporating Microporous Membranes, A. R. Reising and E. D. Schroeder, EE July 96, p599-604.
- Design of Class-I Sedimentation Tanks, Prabhata K. Swamee and Aditya Tyagi, EE Jan. 96, p71-73.

Design of Flocculating Baffled Channel, Prabhata K. Swamee, EE Nov. 96, p1046-1048.

Discussion of Environmental Engineering Forum: Long-Term Effects of Wetland Treatment of Mine Drainage (November/December 1993, Nov. 119, No. 6, by Thomas M. Walski (Environmental Engineering Forum)), Robert S. Hedin, EE Jan. 96, p83-84.

Discussion of Environmental Engineering Forum: Long-Term Effects of Wetland Treatment of Mine Drainage (November/December 1993, Vol. 119, No. 6, by Thomas M. Walski (Environmental Engineering Forum)), Frederick M. Williams and Lloyd R. Stark, EE Jan. 96, p84-85.

The DOD Groundwater Modeling System: A Conceptual Model Approach, David R. Richards and Norman L. Jones, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2589-2594.

Dynamic Optimal Groundwater Remediation by Granular Activated Carbon, Teresa B. Culver and Gary W. Shenk, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p123-128.

Editor's Note, Thomas L. Theis, EE June 96, p452.

Evaluation of Nitrate Treatment Methods Under Uncertainty, Crystal C. Tannehill, M. F. Dahab and W. E. Woldt, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p. 1003-1008 p1003-1008.

Genetic Algorithms for the Design of Groundwater Remediation Systems, Daene C. McKinney and Min-Der Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p842-847.

Ground-Water Treatments Gain Ground, Rafat A. Abbasi, CE Feb. 96, p53-55.

In Situ Groundwater Treatment by Granular Zero-Valent Iron Design, Construction and Operation of an In Situ Iron Design, Construction and Operation of an in Situ Treatment Wall, Frank S. Szerdy, John D. Gallinatti, Scott D. Warner, Carol L. Yamane, Deborah A. Hankins and John L. Vogan, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p245-256. In Situ Plume Interception and Treatment Technologies: An Overview, George P. Korfiniis and Alexandros Makari-gakis, (Non-Aqueous Phase Liquids (NAPLs) in Subsur-face Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p66-88.

Interpretation and Rejection of Alum Sludge Flocs by an Advancing Freezing Front, Philip J. Parker, Anthony G. Collins and John P. Dempsey, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p757-768.

Integrated Facility Information Systems: Total Information Access, Mike Tidwell and Cal Leckington, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4119-4124.

Interactions Between Ozone, AOM, and Particles in Water Treatment, Mysore S. Chandrakanth, Sadasivam Krishnan and Gary L. Amy, EE June 96, p459-468.

Milwaukee's Ozone Upgrade, James C. Kaminski, P.E. and Paul W. Prendiville, P.E., CE Sept. 96, p62-64.

Model for Water Quality in Periphery of Distribution Sys-tems, Lin Wu, Steven G. Buchberger and Trent G. Schade, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3464-3469.

A Multiperiod Approach for the Solution of Groundwater Management Problems using the Outer Approximation Method, George P. Karatzas, Alexander A. Spilioto-poulos and George F. Pinder, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p129-134.

New Block Copolymers for Membrane Materials, Francis A. DiGiano, Ying Chu, Joseph M. DeSimone, Benny D. Freeman, Camille Kassis and Doug Betz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1638-1644.

Niche for Steam Stripping in Treating Dilute SOC-Contaminated Waters, Bruce I. Dvorak, Desmond F. Lawler and Gerald E. Speitel, Jr., EE Sept. 96, p871-874.

Occurrence and Significance of Cryptosporidium parvum and Giardia lamblia in Surface Waters on Alaska's North Slope, Michael R. Pollen, Cindy L. Christian, Craig D. Nordgren and Jonathan D. Pollen, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p494-505.

Optimization of Groundwater Remediation with DES, Jae-Heung Yoon and Christine A. Shoemaker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p622-627.

Ozone Update Requested, Ernest Nussbaum, CE Nov. 96, p36.

Physical Distribution System Models for Assessing the Impact of Water Quality on Regrowth and Corrosion, Anne K. Camper, Warren L. Jones and Calvin Abernathy. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Preparing for the Big One - Risk Assessment and Mitiga-tion of a Major Earthquake, David L. Pratt, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p207-208.

Privatization and Water Supply/Treatment Projects, Brant-ley Liddle, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4136-4141.

Reductive Pyrolysis for the Destruction of Chloromethane: A Reaction Pathway Model Based on Thermodynamic and Thermokinetic Considerations, Varadarajan Ravin-dran, Massoud Pirbazari, Badri N. Badriyha and Sidney W. Benson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1367-1372.

Removal of Arsenic From Ground Water Using Granular Activated Carbon, Brock D. Buche and Lawrence P. Owens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1173-1177.

Selection Among Aqueous and Off-Gas Treatment Tech-nologies for Synthetic Organic Chemicals, Bruce I. Dvorak, Christopher J. Herbeck, Claire P. Meurer, Des-mond F. Lawler and Gerald E. Speitel, Jr., EE July 96, p571-580.

Storm-Water Treatment Goes Underground, Brian Roberts, CE July 96, p56-57.

Studies on Herbal Desalination, Godavarthy Ramprasad and Varanasi Kaliprasad, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1015-1020.

Surface Water Pretreatment Using Floating Media Filter, C. Visvanathan, D. R. I. B. Werellagama and R. Ben Aim,

EE Jan. 96, p25-33.

Use of SALQR Optimization in Large Aquifer Cleanup, Christopher M. Mansfield and Christine A. Shoemaker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p135-139.

The Water Customer in Space, Tony Rachwal, Colin Waters and Tony Wachinski, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p663-667.

Water Quality Enhancement Using Subsurface Detention, Brian C. Roberts, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3338-3342.

Water Quality Mitigation for the San Joaquin Hills Trans-portation Corridor, Stanley D. Polasik, John H. Knutson and James H. Lenhart, (North American Water and Envinent Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3109-3114.

Water treatment plants

Anaheim State-of-the-Art Water Treatment Plant - Six years from Conception to Completion, Isaac Pai, (North years from Conception to Completion, isaac Fai, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2654-2659. Billion Dollar Water Q&M Market Projected, CE May 96,

p19.21

Border Environment Cooperation Commission: 1995 Year End Status Report, Peter Silva, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1819-1821.

Canal Road Water Treatment Plant Intake Tunnels, Joel Moskowitz, Robert T. Wisniewski, II, Vincent Tirolo and Peter Evensen, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p322-331.

Corrosion Control of Drinking Water Using Tray Aerators, Enrique J. La Motta and Srinivas Chinthakuntia. EE July

96, p640-648.

Design Modification of Water Supply Intakes in Mountain-ous Regions, Adnan Alsaffar, Yifan Zheng and Karim Khalifa. (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p4046-4051.

Expert System for Water Treatment Plant Operation, Xin X. Zhu and Angus R. Simpson, EE Sept. 96, p822-829.

Management of Water Treatment Plant Residuals, AWWA Technology Transfer Handbook U.S. EPA/625/R-95/008 (M&R No. 88), American Society of Civil Engineers, American Water Works Association, and the U.S. Environmental Protection Agency, 1996, 0-7844-0181-0,

Pump and Treat and Wait (Available only in the Geo/ Environmental Special Issue), Richard A. Sullivan, P.E., CE Nov. 96, p8A-12A.

Scalping Makes Biosolids Safer, Saves Money, CE May 96, p21. Tennessee Tests Water Treatment, CE July 96, p20-21.

Water-Treatment Plant Helps Clean the Air of Jupiter, CE Mar. 96, p82.

Water treatment, chemical

Modified Jar Test Studies for Removal of Disinfection By-Products (DBPs) and Color Compounds from Ground-water, Mark Williams, Badri Badriyha, Shih-Chieh Tu, Jamal Awad and Massoud Pirbazari, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1009-1014. Risk Analysis of Drinking Water Treatment and Supply Fa-cilities Handling Highly Hazardous Chemicals, Krishna Nand, Bruno Loran and Morley Male, (North American Water and Environment Congress & Destructive Water, Chenchavya Bathala, ed., 1996), p776-780.

Evaluating Hydraulic Roughness in Tunnels, Thomas C. MacDonald and Ken J. Susilo, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3645-3650.

On Target: The Arrowhead East and West Tunnels, Jim Gallanes, Tobin Tellers and Victor Romero, CE Dec. 96,

Water use

ASCE Regulated Riparian Code and Florida's Regulated Riparian Experience: The Role for Voluntary Reallocation, Phyllis Park Saarinen and Mark D. Farrell, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2927-2932.

BMP for Control of Agricultural Nonpoint Source Flow, E. K. O'Brien and J. C. Guitjens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1489-1494.

inctive Water Use Transforms a California Desert, Tom Levy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2672-2678.

Demonstrating Brine Water Wells and Toilets for Deering, Alaska, Robert H. Lundell, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p558-569.

Dormant Season Evaporation: Challenges to the Current Models, Jerry L. Hatfield and John H. Prueger, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p219-224.

Economic Efficiency of Regulations for Allocation and Control of Surface Water Withdrawals in Humid Re-gions, J. Wayland Eheart and Kenneth W. Harrison, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2713-2718.

Evaluation of Dormant Season Evapotranspiration, Jerry L. Hatfield, John H. Prueger and Thomas J. Sauer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p418-423.

Evapotranspiration Estimates under Deficient Water Sup-plies, J. L. Hatfield and R. G. Allen, IR Sept/Oct. 96, p301-308.

Innovative Effluent Management for Sustainability, Dan Bruinsma, Mary Ellen Dick, Eric Rosenblum and David Tucker, (North American Water and Environment Con ress & Destructive Water, Chenchayya Bathala, ed., 1996), p1614-1619.

Interruptible Option Contracts, John F. Scott, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3569-3573.

Legal Principles Applicable to Sharing Transboundary Wa-ters, William E. Cox, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3218-3223.

Modeling Climate Change Impacts on Water Resources, Brian Hurd, Paul Kirshen and Mac Callaway, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1834-1839.

Urban Water Conservation Efforts of the Irrigation Association, Tim Wilson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p911-916.

Water Conservation Definitions From a Hydrologic View-point, Richard G. Allen, Charles Burt, A. J. Clemmens and L. S. Willardson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p899-904.

Water Conservation for Boilers and Steam Systems, Joann Casey, Stuart Cooley and Marekat C. Joseph. (North American Water and Environment Congress & Destructive Water, Chenchaya Bathala, ed., 1996), p2685-2688.

Water Use "Recession" in San Diego Region, James Zhou, Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2958-2963.

Water-Price Effect on Residential and Apartment Low-Flow Fixtures, Donald E. Agthe and R. Bruce Billings,

WR Jan./Feb. 96, p20-23.

Funite Analytic Method for Mild-Slope Wave Equation,

Xiping Yu, EM Feb. 96, p109-115.

Flexible-Membrane Wave Barrier. I: Analytic and Numeri-cal Solutions, M. H. Kim and S. T. Kee, WW Jan./Feb.

90, pag-33.
Modeling Unsteady Open-Channel Flows Having Longitudinally Varied Fluid Density, Chintu Lai and Tsan-Wen Wang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1905-1910.

Waterborne diseases From Cholera to Cancer to Cryptosporidiosis, Daniel A.

Okun, EE June 96, p453-458.

Water and Sanitation Intervention in Flood Mitigation Programs, Bilquis A. Hoque, Bradley R. Sack, Nahid A. Ali and J. T. A. Chowdhury, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3916.

Waterfront facilities

Composite Applications in the Navy Waterfront Infrastruc-ture, L. J. Malvar, G. E. Warren and C. M. Inaba, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1179-1188

Providential Resurrection, CE May 96, p16.

Watershed management

ANSWERS-2000: Runoff and Sediment Transport Model, Faycal Bouraoui and Theo A. Dillaha, EE June 96, p493-502.

Are Erosion Control Programs Reducing Sedimentation? D. P. Roseboom, R. Sinclair, Gary Eicken and Pat Woods, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Commercial Wetland Mitigation Banking, Robert Brum-baugh, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p4233-4238.

Editorial, M. L. Kawas, HE Jan. 96, pl.

Effect of Climate Change on Hydrologic Regime of Two Climatically Different Watersheds, Athanasios Loukas and Michael C. Quick, HE Apr. 96, p77-87

and Michael C. Quick, HE Apr. 90, pt/-87.

Extracting Watershed Characteristics from Spatial Digital

Data Using GIS, A Case Study of the Great Miami River

Basin, Maged Hussein and Franklin W. Schwartz, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p515-521.

Clindwasy, cu., 1996, p. 1997. Implementation of Watershed Planning in Chester County Pennsylvania, Robert G. Traver, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3975-3980.

Integrated GIS Based Watershed Management Modeling System, L. E. Gomez, C. L. Chen and J. Herr, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p508-514.

Lake/Reservoir Restoration Activities in Taiwan, Shaw I Yu, Jan-Tai Kuo, Ching-Gung Wen, Shang-Lien Lo and Jen-Yang Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4208-4213.

Partnerships for Diversity in Water Resources Education, Neil S. Grigg, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p4016-4020.

A Practical Approach to Watershed Sanitary Surveys, Sachiko Itagaki and Elizabeth Teien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2964-2969.

Sustainable Watershed Management in Developing Water-sheds, Thomas H. Cahill, Joel McGuire and Wesley R. Horner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3969-3974.

Upper Chehalis River Pollutant Capacity and Load Allocations, Paul J. Pickett, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1045-1050.

The Watershed Approach: A Framework for Action, Louise P. Wise and Janet D. Pawlukiewicz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3574-3579.

Watershed Management for a Limited Coastal Aquifer System, James P. Rhodes, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1087-1092.

Analyzing Water Balances and Ranking Maryland's Water-sheds Related to Growth, Development and Loss of Hab-itat, Marcia Smith, David Bleil and James Ahl, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4365-4370.

Assessment of Kinematic Wave Time of Concentration, Richard H. McCuen and Jill M. Spiess, HY Mar. 95,

p256-266.

Automated Tools for Spatially Distributed Rainfall/Runoff Modeling, E. James Nelson and Norman L. Jones, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2903-2908. Automatized System of Runoff Forecasting for the Amu-

darya River Basin, L. N. Borovikova, U. G. Konovalov and S. U. Myagkov, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p454.

BASINS—a GIS-linked Watershed Analysis and Modeling Tool, Gerald D. LaVeck, Marjorie C. Coombs and Marilyn Fonseca, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3629-3632.

Debris Basin Design Procedures, J. J. DeVries and T. V. Hromadka, (North American Water and Environm Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1657-1662.

The Direction of the Point Source Program, Deborah G. Nagle, Gregory W. Currey and Will Hall, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3580-3585.

Distributed Hydrologic Modeling of Humid Regions, Fred L. Ogden, Brent A. Watts and B. Saghafian, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2909-2914.

Effect of Climate Change on Hydrologic Regime of Two Climatically Different Watersheds, Athanasios Loukas and Michael C. Quick, HE Apr. 96, p77-87.

allu michael: Causa III. Alla Structures on DEC Streams, R. L. Bingner, E. J. Langendoon, L. Li and C. V. Alonso, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Estimating Sediment Conveyance Capacity and Deposition Potential in Culverts, Dennis L. Richards and Michael E. Zeller, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3920-3926.

Field Verification of Dem-Derived Watershed Response, Randal F. Bodnar, Mark Michelini and Rafael G. Quimpo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3206-3211.

Flood Quantiles for Small Watersheds Using Peak Eleva tion to Volume Method, Michael C. Morgan and Eric D. Loucks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p146-151.

Hydrologic Modeling System, John Peters and Arlen Feld-man, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3776-3781.

Interdisciplinary Research of Mountainous Areas: Past, Present, and Future, Robert D. Jarrett, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2445.

Karst Water Inventories Using Thermography, C. Warren Campbell, Joseph W. Foster and Mohamed Abd El Latif, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3910-3914.

Modeling of Rattlesnake Creek Watershed Using "Swat" Model, S. R. Ramireddygari, J. K. Koelliker and R. S. Govindaraju, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p3241-3246.

Modeling the Lake Decatur Watershed in Illinois to Evaluate Effects of Best Management Practices on Nitrate Loading, Deva Borah, Misganaw Demissie and Laura Keefer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1681-1686.

Pollution Transport in Karst, C. Warren Campbell and Mohamed Abd El Latif, (North American Water and En-vironment Congress & Destructive Water, Chenchayya

vironneni Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4269-4274.

A Practical Approach to Watershed Sanitary Surveys, Sachiko Itagaki and Elizabeth Teien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2964-2969.

Rainfall Depth—Duration Relationship for South Italy, Vito Ferro and Vincenzo Bagarello, HE Oct. 96, p178-180.

Rainfall-Runoff Modeling for Watershed Stormwater Management, Yuan Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p2066-2071.

Reduction of Downstream Impacts Through Use of Varia-ble Detention Basin Volume Requirements, Conor C. Shea, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1858-1863.

Results of a GIS/HEC-1 Interface Module, Paul A. DeBarry, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p3194-3199.

Retrofitting an Urban Watershed for Improved Water Qual-ity, David Ennis, Michael Clar, Candace Szabad and Chien Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p4202-4207.

Risk Analysis for Urban Stormwater Quality Management, James P. Heaney, Leonard Wright and Samsuhadi, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene

Yacov T. Haimes, etc., Laviu A. Broset, etc. and Logent Z. Stakhiv, ed., 1996), p219-248. Roanoke Valley Flood Hazard Mitigation, Edward G. Beadenkopf, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1976-1977.

Runoff Computation Using Spatially Distributed Terrain Parameters, Francisco Olivera and David R. Maidment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3212-3217.

Santa Chara River Fluvial Analysis, Jun Wang, Ruh-Ming Li and Sree Kumar, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p358-363.

The Sawmill Creek Watershed Restoration Project, Larry Lubbers, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2873-2878.

SCS Runoff Equation Revisited for Variable-Source Runoff Areas, Tammo S. Steenhuis, Michael Winchell, Jane Rossing, James A. Zollweg and Michael F. Walter, IR May/June 95, p234-238.

Selecting Design Conditions as Part of a Watershed Approach to Water Quality Control, David W. Dilks and Kathryn A. Sweet, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1543-1548.

Simulating Evapotranspiration on Semi-Arid Rangelands, G. N. Flerchinger, C. L. Hanson, W. P. Kustas and M. A. Weltz, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p424-429.

Some Thoughts About Ecosystems: Management, Control, and Uncertainty, Daniel E. Willard, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, , David A. Moser, ed. and Eugene Z. Stakhiv, ed.,

1996), p191-206.

Status Report - Task Committee on GIS Models and Dis-tributed Models of the Watershed, Rafael G. Quimpo, Paul A. DeBarry and E. James Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2915-2920.

Storm-Water Management Implementation through Modeling and GIS, Uzair M. Shamsi, WR Mar./Apr. 96, p114-127.

Stormwater Management Plan Updated for Climate System Changes, Yuan Cheng, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1846-1851.

Stream Instability in Loess Base Channels, Jon A. Zellars, Rollin H. Hotchkiss and Thomas Franti, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3369-3374.

Sustainable Watershed Management in Developing Water-sheds, Thomas H. Cahill, Joel McGuire and Wesley R. Horner, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3969-3974.

Traditional People and a Modern Mining Company Work-ing Towards Sustainability in Indonesia, Bruce E. Marsh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2982-2992.

The Treatment Train Detention Concept, Charles G. Boehm, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2270-2275.

Two-dimensional Sheetflow Modeling for Wetland Restoration, Robert A. Laura and Ananta K. Nath, (North American Water and Environment Congress & Destruc-

tive Water, Chenchayya Bathala, ed., 1996), p.263-267. Water Balance of the Niger Basin, D. R. Maidment, F. Olivera, Z. Ye, S. M. Reed and D. C. McKinney, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3411-3416.

Water Based Land Use Regulations Using GIS Water Budgeting Model, H. William Sellers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3962-3968.

Chehenayya Bantala, ed., 1770), p3702-7003.
Water Quality Modeling of the Rouge River Watershed, Philip N. Brink, Gary Mercer and Richard Wagner, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p2415-2420.

Watershed Characteristics and Hydrological Parameters vs. Sediment Yield - Northern Regions of Pakistan, Muhammad Ashiq, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1669-1674.

Watershed Modeling and Flood Routing for Safety Assess-ment of an Existing Dam, C. F. Lee, WR Sept./Oct. 96, p334-341.

Waterways

American Rivers Rates Worst Waterways, CE Oct. 96,

Applicability of Scour Equations in Tidal Areas, J. R. Richardson, E. V. Richardson and B. L. Edge, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1980-1989.

Design of Pressure Class Ductile Iron Pipe on Supports, L. Gregg Horn, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p222-229.

Manno, Ca., 1990, p. 22-22-23.
Distributions of Return Flow in Navigable Waterways, Ta Wei Soong, Renjie Xia and Nani Bhowmik, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2855-2860.

History and Heritage of German Coastal Engineering, Hanz D. Niemeyer, Hartmut Eiben and Hans Rohde, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p169-213.

Hydrodynamic Changes Associated with Navigation Traffic on the Upper Mississippi River System, Nani G. Bhowmik, Ta-Wei David Soong and Renjie Xia, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2849-2854.

Improving the Speed of Double Lockages, Mary K. Spence, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p2867-2872.

Modeling Unsteady Open-Channel Flows Having Longitu-dinally Varied Fluid Density, Chintu Lai and Tsan-Wen Wang, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1905-1910.

Role of Vegetation in Hydraulics of Channel Restoration, Marcelo H. García, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p2607-2612.

Site Selection for Pipeline Waterway Crossings, Brian J. Doeing and David T. Williams, (Pipeline 1996, Lawrence F. Catalano, ed., 1996), p365-372.

Smithfield Interceptor Force Main River Crossings, Fredrick M. Muncy, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p173-179.

Study of Wind Waves in Gulf Intracoastal Waterway at Aransas National Wildlife Refuge, Darla A. Hershberger and Francis C. K. Ting, WW Sept./Oct. 96, p239-244.

At AWWA Conference, Public Utilities Put Up a Fight, CE Sept. 96, p24-25.

Praise for Ancient Water Works, Wilson V. Binger, Jr., CE Mar. 96, p26.

Water Wisdom, Caption Mistakes, Sanjay Chauhan and Kent C. Turner, CE May 96, p26.

Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996, 0-7844-0154-3, 1065pp.

A Dynamic Submerged Breakwater, A. N. Williams and W. G. McDougal, WW Nov/Dec. 96, p288-296.

Geometry of Sand Ripples due to Combined Wave-Current Flows, Hitoshi Tanaka and Van To Dang, WW Nov/ Dec. 96, p298-300.

Modeling Non-Uniform-Sediment Fluvial Process by Characteristics Method, Keh-Chia Yeh, Shian-Jang Li and Wen-Lin Chen, HY Feb. 95, p159-170.

Surf-Zone Modeling, Ib A. Svendsen and Uday Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p13-32.

Wave Motion in Vegetated and Non-Vegetated Coastal Zones, Stanisłław R. Massel, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), pl-12.

Neptune--An Integrated Approach to Determining NW Eu-ropean Coastal Extremes, Jerzy Graff and Witold Cieślikiewicz, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1035-1046.

Prototype Monitoring Study of Wave Climate and Beach Profile in the Surfzone, Joachim Grüne, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p559-570.

Wave crest

Wave Overtopping and Pressure Dependent on Crest Eleva-tion, Tsutomu Sakakiyama, (*Coastal Dynamics* '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p209-220.

Wave diffraction

Combined Refraction-Diffraction - Wave-Current Interac-tion Over a Complex Nearshore Bathymetry, B. A. O'Connor, P. B. Sayers and N. J. MacDonald, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p173-184.

Evaluation and Validation of the Mild Slope Evolution Equation Model Using Field Data, Suzana Ilić and Andrew Chadwick, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p149-160.

Longshore Nonuniformities of Nearshore Currents, F. E. Longsnore Nonunitorinites of Nearsnore Currents, F. Sancho, I. A. Svendsen, A. R. Van Dongeren and U. Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p425-436.
Multiple-Pit Breakwaters, William G. McDougal, A. Neil Williams and Keizo Furukawa, WW Jan/Feb. 96, p27-

33

Wave Scattering by Submerged Elliptical Disk, S. Zhang and A. N. Williams, WW Jan./Feb. 96, p38-45.

Wave dispersion Numerical Simulation of 1993 Southwest Hokkaido Earth quake Tsunami around Okushiri Island, Shinji Sato, WW Sept./Oct. 96, p209-215.

Wave Overtopping and Pressure Dependent on Crest Eleva-tion, Tsutomu Sakakiyama, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

p209-220.

Wind Wave Simulation in Coastal Zone, Tatjana Talipova Efim Pelinovsky and Eliezer Kit, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p105-115.

Wave energy
Mitigation Measures for Eroding Muddy Shores, Ashish J.
Mehta and Robert Kirby, (North American Water and
Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3728-3733.
Numerical Simulation of 1993 Southwest Hokkaido Earthquake Tsunami around Okushiri Island, Shinji Sato, WW
Sent /Oct. 96, p209-215.

Sept./Oct. 96, p209-215.

Parameterisation of Triad Interactions in Wave Energy Models, Y. Eldeberky and J. A. Battjes, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p140-148.

Wave equations Finite Analytic Method for Mild-Slope Wave Equation, Xiping Yu, EM Feb. 96, p109-115. Setup and Relaxation in Glacial Sand, Donald L. York,

Walter G. Brusey, Frank M. Clemente and Stephen K. Law, GT Sept. 94, p1498-1513.

Time of Concentration and Peak Discharge Formulas for Planes in Series, Tommy S. W. Wong, IR July/Aug. 96, p256-258.

Wave forces

Wave forces
2D Velocity Distributions in Nearshore Currents, Marck Szmytkiewicz, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p366-376.
Application of the Model SPECIES to Kaneohe Bay, Oahu, Hawaii, Clifford J. Hearn, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p355-366.

1996), p355-366.

Comparison and Evaluation of Different Riprap Stability Formulas Using Field Performance, Mahrez Ben Bel-fadhel, Guy Lefebvre and Karol Rohan, WW Jan/Feb. 96, p8-15.

90, po-13.
90, po-13.
Dynamics of Sand Bars in Coastal Zones, B. Boczar-Karakiewicz, J. L. Bona, A. Naguszewski and W. Romańczyk, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p862-867.
Influence of Foundation Nonlinearity on Offshore Towers Response, Mohamed H. El Naggar and Milos Novak, GT Sant 106, 7217, 724

Sept. 96, p717-724.

Nonlinear Performance of Offshore Platforms in Extreme Storm Waves, R. G. Bea, WW Mar./Apr. 96, p68-74.

Optimal Fitting of a Model to Observations of Sediment Concentration in the Irish Sea, J. N. Aldridge, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p416-428.

Response Statistics of Moored Floating Structures Subjected to General Nonlinear Random Wave Forces, Shunji Kato and Takashi Okasaki, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p158-161.

Use of Quadratic Transfer Functions to Predict Response of Tension Leg Platforms, Inyeol Paik and Jose M. Roesset, EM Sept. 96, p882-889.

Wave Forces on an Array of Vertical Cylinders, Shohachi Kakuno, Yoshihiro Nakata and Philip L.-F. Liu, WW

May/June 96, p147-149.

Wave Induced Reaction Forces and Tension in TLP Tendons, John M. Niedzwecki, Dadi S. Soemantri and Oriol R. Rijken, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p586-587.

Wave Scattering by Submerged Elliptical Disk, S. Zhang and A. N. Williams, WW Jan. Feb. 96, p38-45.

Wave functions

Time Domain Fundamental Solution to Nonclassical Ther-moelasticity with One Relaxation Time Part I: Three-Dimensional Solution, Jianming Chen and Alexander H.-D. Cheng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p80-83.

Time Domain Fundamental Solution to Nonclassical Thermoelasticity with One Relaxation Time Part II: Two-Dimensional Solution, Jianming Chen and Alexander H.-D. Cheng, (Engineering Mechanics, Y. K. Lin and T.

C. Su, 1996), p88-91.

Wave generation

Evaluation of the UK Coastal Research Facility, Richard R. Simons, Richard J. S. Whitehouse, Ruairi D. MacIver, Jonathan Pearson, Paul B. Sayers, Yingdao Zhao and Adrian R. Channell, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p161-172.

Looking for Wave Groups in the Surf Zone, Merrick C. Haller and Robert A. Dalrymple, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

Slowly-varying Components of Hydrodynamic Field at the Wall of Breakwater of Gdańsk North Port, Piotr Wilde and Eugeniusz Sobierajski, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p69-80.

Viscous Ship Waves on Water of Finite Depth, Andy T. Chan and Allen T. Chwang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p515-518.

Influence of Short and Long Waves Coupling on Sand Sus-pending, Sergey Yu. Kuznetsov and Nikolay V. Pykhov, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p720-727.

Looking for Wave Groups in the Surf Zone, Merrick C. Haller and Robert A. Dalrymple, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p81-92.

Modeling Time- and Depth-Varying Currents at Supertank, Jane McKee Smith and Ib A. Svendsen, (Coastal Dy-namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p245-256.

Wave Groups Approaching a Beach: Full Irrotational Flow Computations, T. C. D. Barnes and D. H. Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), pl 16-127.

Constitutive Modeling of Composites in Opto-Mechatronics, Tau C. Fan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p632-636.

K. Lin and I. C. Su, 1990), po32-030.
Experimental Study of Reinforced Concrete Beams Using Acoustic Surface Waveguides, Yidong He and Roger H. L. Chen, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p869-875.
Optical Waveguide Solar Energy System for Lunar Materials Processing, T. Nakamura, J. A. Case and C. L. Senior, (Engineering, Construction, and Operations in

ior, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p783-790.

Breaking Waves in Surfzones, Ke Yu and Ib A. Svendsen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p329-340.

Effect of Sampling Variability on Hindcast and Measured Wave Heights, George Z. Forristall, John C. Heideman, Ian M. Leggett, Bram Roskam and Luc Vanderschuren, WW Sept. Oct. 96, p216-225. Experimental Study of the Flow Around a Breakwater, Mathieu Mory and Luc Hamm, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p501-512

Probabilistic Analysis of Tendon Loads for a TLP in Deep Water, Charles G. Acquaah and Robert B. Gilbert, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p162-165.

Simulating Nature Wind Waves in a Wave Flume, John Z. Yim, C.-R. Chou and M.-Y. Lai, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p45-56.

Stochastic Determination of Wave Heights for Flood Control Channels, Scott E. Stonestreet, (North American Water and Environment Congress & Destructive Water. Chenchayya Bathala, ed., 1996), p4058-4063.

Study of Wind Waves in Gulf Intracoastal Waterway at Aransas National Wildlife Refuge, Darla A. Hershberger and Francis C. K. Ting, WW Sept./Oct. 96, p239-244.

Validation of Numerical Model for Wind Waves and Swell in Harbors, Edward F. Thompson, H. S. Chen and Lori L. Hadley, WW Sept./Oct. 96, p245-257.

Beach Profile Evolution Under Mean Conditions, José-María Medina V., Luis Moreno and José C. Santás, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p595-606.

Effects of Southern California Kelp Beds on Waves, M. Hany S. Elwany, William C. O'Reilly, Robert T. Guza and Reinhard E. Flick, WW Mar/Apr. 95, p143-150.

On the Origin of Infragravity Waves in the Surf Zone of a Dissipative Multiple Bar System, B. G. Ruessink, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p93-104.

Physical and Numerical Study of Wave Induced Currents in Wave Basins of Various Sizes, Peyman Badiei and J. William Kamphuis, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p377-388.

Study of Surf-Zone Macroturbulence and Mixing Using Delta '93 Field Data, A. Rodriguez, A. Sánchez-Arcilla, J. Gomez and E. Bahia, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p305-316.

Wave pressure

Evaluation of Design Wave Impact Pressures, G. Müller and T. J. T. Whittaker, WW Jan./Feb. 96, p55-58.

Wave Overtopping and Pressure Dependent on Crest Eleva-tion, Tsutomu Sakakiyama, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p209-220.

Wave propagation

Analysis of Liquid-Core Cylindrical Acoustic Waveguides Embedded in Solid Media, Hung-Liang (Roger) Chen and Yidong He, EM Jan. 96, p1-9.

A Boussinesq Model for Inshore Zone Sediment Transport Using an Energetics Approach, Theofanis V. Karambas, Howard N. Southgate and Christopher Koutitas, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p841-849.

Breaking Waves in Surfzones, Ke Yu and Ib A. Svendsen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p329-340.

Characterization of Granular Material by Low Strain Dy-namic Excitation and ANN, Salome Romero and Sibel Pamukcu, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1134-1148.

Comparison of Computed Three-Dimensional Wave-Driven Currents with Measurements, Philippe Péchon and Arnaud Desitter, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p513-520.

Diffraction Around Circular Canyon in Elastic Wedge Space by Plane SH-Waves, V. W. Lee and R. I. Sherif, EM June 96, p539-544.

A Finite Element Analysis of Mach Reflection by Using the Boussinesq Equation, Shoichiro Kato, Toshimitsu Takagi and Mutsuto Kawahara, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3440-3445.

Flow Properties of the Swash Zone, M. Brocchini and D. H. Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p221-232.

Interparticle Contact Behavior and Wave Propagation, Giovanni Cascante and J. Carlos Santamarina, GT Oct. 96, p831-839.

90, ps.31-839.
90, ps.31-839.
Currents Over Barred Beaches, A. J. H. M. Reniers, E. B. Thornton and T. C. Lippmann, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p413-424.
Modulated Waves in Porous Media Saturated by Liquid and Gas, Inna Edelman, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p653-656.
Multi-Counted Dicordered Periodic Systems Circly Y. Oiu.

Multi-Coupled Disordered Periodic Systems, Cindy X. Qiu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p539-542.

Oblique Wave Interaction with Vertical Wall Structures, Xugui Ren and Keh-Han Wang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p507-510.

On the Origin of Infragravity Waves in the Surf Zone of a Dissipative Multiple Bar System, B. G. Ruessink, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p93-104.

One-Dimensional Modelling of Individual Breaking Waves, K. M. Wijnberg and L. C. van Rijn, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p341-354.

Pulse Transmission System for Measuring Wave Propaga-tion in Soils, Koichi Nakagawa, Kenichi Soga and James K. Mitchell, GT Apr. 96, p302-308.

Rate Dependent Damage Model for Concrete in Dynamics, Jean-François Dubé, Gilles Pijaudier-Cabot and Chris-tian La Borderie, EM Oct. 96, p939-947.

Recent Developments in Stochastic Mechanics Relevant to Earthquake Engineering, M. Shinozuka, (*Probabilistic* Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p1-1.

Scientific Visualization Techniques for Wave Transforma-tion Models, David A. Leenknecht and Wayne W. Tan-ner, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p704-710.

Shock Compression in Granular Media Using DFEM, Abdolreza Joghataie and Jamshid Ghaboussi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p426-429.

Subharmonic Edge Waves. Stability Analysis, Antonio Lechuga, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p281-292.

Wave Propagation in Shallow Waters: Modelling and Real Data, José C. Santás and José M. de la Peña, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p128-139.

Waves on a 1:100 Slope: Experiments and Numerical Models, G. Liberatore, M. Petti, M. Drago and M. Sclavo, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p355-365.

A Dynamic Submerged Breakwater, A. N. Williams and W. G. McDougal, WW Nov./Dec. 96, p288-296.

Estimation of Frequency-Dependent Reflection Coefficients Using Current and Elevation Sensors, David A. Huntley, David J. Simmonds and Mark A. Davidson, (Coastal D namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p57-68.

Evaluation and Validation of the Mild Slope Evolution Evaluation and Validation of the Mild Slope Evolution Equation Model Using Field Data, Suzana Ilić and An-drew Chadwick, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p149-160.
Flexible-Membrane Wave Barrier, I. Analytic and Numeri-cal Solutions, M. H. Kim and S. T. Kee, WW Jan/Feb.

96, p46-53.

A Morphology Model to Predict Erosion Near a Seawall, K. A. Rakha and J. W. Kamphuis, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p879-890.

Oblique Reflection Characteristics of Rubble-Mound Structures, Michael Isaacson, David Papps and Etienne Mansard, WW Jan./Feb. 96, p1-7

Wave Reflection and Overwash of Dunes, Nobuhisa Koba-yashi, Yukiko Tega and Mark W. Hancock, WW May/ June 96, p150-153.

Wave refraction

Wave Testastion Combined Refraction-Diffraction - Wave-Current Interac-tion Over a Complex Nearshore Bathymetry, B. A. O'Connor, P. B. Sayers and N. J. MacDonald, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.

Zeidler, ed., 1996), p173-184. Evaluation and Validation of the Mild Slope Evolution Equation Model Using Field Data, Suzana Ilić and Andrew Chadwick, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p149-160.

Dally, ed. and Ryszard B. Zeidler, ed., 1996), p149-160. Improving Input Wave Data for Use with Shoreline Change Models, Kevin R. Bodge, Christopher G. Creed and Andrew W. Raichle, WW Sept./Oct. 96, p259-263. Influence of Seabed Topography and Roughness on Longshore Wave Processes, Terry M. Hume, Brett Beamsley, Malcolm O. Green, Willem P. de Lange and D. Murray Hicks, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler ed. 1996) n975-986. Ryszard B. Zeidler, ed., 1996), p975-986.

Longshore Nonuniformities of Nearshore Currents, F. E. Sancho, I. A. Svendsen, A. R. Van Dongeren and U. Putrevu, (Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, cd., 1996), p42-436. Spingat, Frank, Hans-H. Dette and Karsten Peters, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p477-488.

Wave Field in the Efflux of River Water, Akira Mano and Subandono Diposaptono, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p185-196.

Wave runup
Finite Amplitude Shear Wave Instabilities, H. Tuba Özkan
and James T. Kirby, (Coastal Dynamics '95, William R.
Dally, ed. and Ryszard B. Zeidler, ed., 1996), p465-476.

Flow Properties of the Swash Zone, M. Brocchini and D. H. Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p221-232.

Groundwater Dynamics in Beaches and Coastal Barriers, Peter Nielsen and Hong-Yoon Kang, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p521-532.

Stochastic Determination of Wave Heights for Flood Control Channels, Scott E. Stonestreet, (North American

trol Channels, Scott E. Stonestreet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4058-4063. Wave Run-Up: Recent IBW PAN Investigations, Jerzy Kolodko, Jaroslaw Kapiński, Marek Szmytkiewicz and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p197-208.

Effect of Sampling Variability on Hindcast and Measured Wave Heights, George Z. Forristall, John C. Heideman, Ian M. Leggett, Bram Roskam and Luc Vanderschuren, WW Sept/Oct. 96, p216-225.

Equilibrium-Range Spectrum of Waves Propagating on Currents, Kyung Duck Suh, Yoo-Yin Kim and Dong Young Lee, WW Sept./Oct. 94, p434-450.

Estimation of Frequency-Dependent Reflection Coefficients
Using Current and Elevation Sensors, David A. Huntley,
David J. Simmonds and Mark A. Davidson, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.
Zeidler, ed., 1996), p57-68.

HF Interference in Space from Terrestrial Sources, Marisa McCoy, John P. Basart and Monte Taylor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p854-860.

Arameterisation of Triad Interactions in Wave Energy Models, Y. Eldeberky and J. A. Battjes, (Coastal Dy-namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p140-148.

Simulating Nature Wind Waves in a Wave Flume, John Z. Yim, C.-R. Chou and M.-Y. Lai, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p45-56.

Slowly-varying Components of Hydrodynamic Field at the Wall of Breakwater of Gdańsk North Port, Piotr Wilde and Eugeniusz Sobierajski, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p69-80.

Waves with Two-peaked Spectrum in the Gdańsk Bay, Bar-bara Paplińska, (Coastal Dynamicx '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p33-44.

Wave tanks
Model of Beach Profile Change Under Random Waves,
Magnus Larson, WW July/Aug. 96, p172-181.
Modeling Time- and Depth-Varying Currents at Supertank,
Jane McKee Smith and Ib A. Svendsen, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B.
Zeidler, ed., 1996), p245-256.
Wave Reflection and Overwash of Dunes, Nobuhisa Kobayashi, Yukiko Tega and Mark W. Hancock, WW May/
June 96, p150-153.

Wave velocity

Wave velocity

Estimating Wave-Induced Kinematics at Sloping Structures, Steven A. Hughes and Jimmy E. Fowler, WW

July/Aug. 95, p209-215.

Influence of Short and Long Waves Coupling on Sand Suspending, Sergey Yu. Kuznetsov and Nikolay V. Pykhov,

(Coastal Dynamics '95, William R. Dally, ed. and
Ryszard B. Zeidler, ed., 1996), p720-727.

Interaction Between Nearshore Natural Processes on

Macro-Tidal Beaches. Case Study Along the Capricorn

Coast, Australia, Jerzy Piorewicz and Paul Boswood,

(Coastal Dynamics '95, William R. Dally, ed. and

Ryszard B. Zeidler, ed. 1996), p889-500. (Coastal Dynamics '95, William R. D. Ryszard B. Zeidler, ed., 1996), p489-500.

Model of Shear Wave Speed as a Function of Depth in Water-Saturated Sand, Nicholas P. Chotiros and Adrienne M. Mautner, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p804-807.

Pulse Transmission System for Measuring Wave Propaga-tion in Soils, Koichi Nakagawa, Kenichi Soga and James K. Mitchell, GT Apr. 96, p302-308.

Slowly-varying Components of Hydrodynamic Field at the Wall of Breakwater of Gdańsk North Port, Piotr Wilde and Eugeniusz Sobierajski, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

Statistical Analyses of Acoustical Wave Velocity in Porous Seafloor, M. Badiey, A. H-D. Cheng and Y. Mu, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

p800-803

Study of Surf-Zone Macroturbulence and Mixing Using Delta '93 Field Data, A. Rodriguez, A. Sánchez-Arcilla, J. Gomez and E. Bahia, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p305-316.

Subharmonic Edge Waves. Stability Analysis, Antonio Lechuga, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p281-292.

anti Ryszard B. Zestief, ed., 1596), p.281-292.
Velocity Measurements of Post-Breaking Turbulence Generated by Plunging Breakers, Paul A. Quinn, Timothy C. D. Barnes, Simon T. Lloyd, Clive A. Greated and D. Howell Peregrine, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p.293-304.

Waves
Analysis Tools of Transitioning and Turbulent Flows, M. R. Hajj. (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p434-437.
Beach and Nearshore Profile Evolution at Different Temporal Scales: The Case of Duck, North Carolina, U.S.A. Michele Capobianco, Rina Basana and Riccardo Pesaresi, (Coastal Dynamics '95, William R. Dally, ed. 1994), p. 1964. and Ryszard B. Zeidler, ed., 1996), p629-638.

Characterization of Turbulent Scales in Atmospheric Wind by Orthonormal Wavelets, M. R. Hajj, H. W. Tieleman and M. Bikdash, (Engineering Mechanics, Y. K. Lin and

T. C. Su, 1996), p971-974.

C. Su, 1996), p971-974.
 Comparison Between Linear Stability and Direct Numerical Simulation of Waves in a Trailing Vortex, Saad Ragab, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1058-1061.
 Effect of Internal Length on the Vibration of Granular Solids, Ching S. Chang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p873-876.

Effects of Southern California Kelp Beds on Waves, M. Hany S. Elwany, William C. O'Reilly, Robert T. Guza and Reinhard E. Flick, WW Mar./Apr. 95, p143-150.

Exterior Reflections in Elliptic Harbor Wave Models, Bin-gyi Xu, Vijay Panchang and Zeki Demirbilek, WW May/June 96, p118-126.

Field Measurements of Erosion across a Shallow Water Es-tuarine Mudflat, M. C. Christie, K. R. Dyer, M. J. Fen-nessy and D. A. Huntley, (Coastal Dynamics '95, Wil-liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p759-770

Influence of Seabed Topography and Roughness on Long-shore Wave Processes, Terry M. Hume, Brett Beamsley, Malcolm O. Green, Willem P. de Lange and D. Murral Hicks, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p975-986.

Instability Analysis of an Inclined Tower in Waves, Subrata K. Chakrabarti, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p836-839.

Interparticle Contact Behavior and Wave Propagation, Giovanni Cascante and J. Carlos Santamarina, GT Oct. 96, p831-839.

Multiple-Pit Breakwaters, William G. McDougal, A. Neil Williams and Keizo Furukawa, WW Jan/Feb. 96, p27-

Oblique Wave Interaction with Vertical Wall Structures, Xugui Ren and Keh-Han Wang, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p507-510.

Observations of Seiche Forcing and Amplification in Three Small Harbors, Michele Okihiro and R. T. Guza, WW

Sept./Oct. 96, p232-238. A One-Dimensional Cross-Shore Transport Model, J. Ni-cholson and B. A. O'Connor, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed.,

1996), p795-805. Optimum Smoothing Filter for Geophysical Tomography by the Extended Bayesian Method, Yusuke Honjo, Toshiaki Yamaue and Nobuaki Kudo, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed.

and Mircea D. Grigoriu, ed., 1996), p942-945. Plane Waves and Pore Pressure in a Saturated Sand, R. Staroszczyk and L. W. Morland, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p943-946.

1. A. Lin and T. C. Su, 1990, p.943-940.
Hobability Based Design Requirements for Ship Structures, Alaa E. Mansour, Paul H. Wirsching, Bilal M. Ayyub and Gregory J. White, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p98-101.

Radiation Hydrodynamics of a Slightly-Submerged Body, P. Ananthakrishnan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p832-835.

Relationship between Kelp Beds and Beach Width in Southern California, M. Hany S. Elwany and Reinhard E. Flick, WW Jan./Feb. 96, p34-37.

Shear Stresses and Hydrodynamics of Combined Waves and Currents, R. D. MacIver, R. R. Simons and A. J. Grass, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p676-685.

Kyszard B. Zeiuler, ed., 1990), po/6-083.
Stochastics of Sediment Transport, Shore Evolution and Their Input, Rafall Ostrowski, Zbigniew Pruszak, Grzegorz Różyński and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p963-974.

Stream-Aquifer Interaction Model with Diffusive Wave Routing, Samuel P. Perkins and Antonis D. Koussis, HY Apr. 96, p210-218.

Study of Clay-Cement Slurries with Mechanical and Elec-tromagnetic Waves, M. A. Fam and J. C. Santamarina, GT May 96, p365-373.

Towards Predicting Sediment Transport in Combined Wave-Current Flow, Zhihong Li and Alan G. Davies, WW July/Aug. 96, p157-164.

Transport of Fine Sands by Currents and Waves. II, Leo C. Van Rijn and Fred J. Havinga, WW Mar./Apr. 95, p123-133.

Validation of a Model for Cross-Shore Sediment Transport, Irene Katopodi and Nikos Kitou, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p806-817.

- Wavelets in Random Processes Representation, Marina Vannucci, Antonio Moro and Pol D. Spanos, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p672-675.
- With Respect to Coasts, Darryl Hatheway, CE Dec. 96, p29-30.

Weapons

A Paradox at the rocky Mountai Arsenal, Colorado: Benefits of Applied Research, Robert D. Jarrett, Joseph P. Capesius and Mark A. Gonzalez, (North American Water and Environment Congress & Destructive Water, Chenchavya Bathala, ed., 1996), p1553-1554.

New Approach for Optimization of Overall Construction Schedule, Shirong Li, CO Mar. 96, p7-13.

- Assessing Integrity of Weather Data for Reference Evapotranspiration Estimation, Richard G. Allen, IR Mar./Apr. 96, p97-106.
- Flood Forecasting Based on Radar Rainfall Measurements, M. A. Mimikou and E. A. Baltas, WR May/June 96, p151-156.
- pi31-130.
 Signal Processing Study for an FM/CW Collision Avoidance System, Pascal Deloof, Atika Menhaj, Jamal Assaad, Nathalie Haese and Christian Bruneel, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p661-665.
- Simple Irrigation Scheduling Calendars, Robert W. Hill and Richard G. Allen, IR Mar./Apr. 96, p107-111.

Weather forecasting

Weather forecasting High-Resolution, Short-Term Lake Forecasts for Lake Erie, John G. W. Kelley, David J. S. Welsh, Keith W. Bed-ford, David J. Schwab, Jay S. Hobgood and Brendon Hoch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p367-378.

Weather modification

Reader Questions Sea Level Prediction, Leland B. Jones, CE Sept. 96, p32,35.

Weathering

- Appalachian Piedmont Regolith: Relations of Saprolite and Residual Soils to Rock-Type, Milan J. Pavich, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p1-11.
- Artificial Neural Networks and Durability of Sphinx Lime-stone, Jayanta K. Bandyopadhyay, Srinivas S. Yerrapra-gada and K. Lal Gauri, MT Aug. 95, p174-177.
- Assessing Corrosion on Steel Structures Using Corrosion Coulometer, Richard D. Granata, James C. Wilson and
- John W. Fisher, IS Sept. 96, p139-144. Comparative Simulation of Oil Weathering, Hector R. uentes, Rudolf Jaffé, Vassilios A. Tsihrintzis and Rahul V. Shrotriya, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p559-564.
- Effect of Degree of Weathering on Dynamic Properties of Residual Soils, Emir José Macari and Laureano Hoyos, Jr., GT Dec. 96, p988-997.
- Northern Climate Weathering Tests on Sealed Concrete, Luh-Maan Chang, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p141-
- Predicting the Mode, Susceptibility, and Rate of Weathering of Shales, Paul M. Santi and Engin C. Koncagul, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996),
- Weathering Rates of Marble in Laboratory and Outdoor Conditions, Srinivas S. Yerrapragada, Surendra R. Chir-ra, John H. Jaynes, S. Li, Jayanta K. Bandyopadhyay and K. L. Gauri, EE Sept. 96, p856-863.

Lateral Distortional Buckling of Monosymmetric Beams under Point Load, Owen Hughes and Ming Ma, EM Oct. 96, p1022-1029.

Webs

- Webs
 Bending and Shear Behavior of Web Elements with Openings, M. Y. Shan, R. A. LaBoube and W. W. Yu, ST Aug, 96, p854-859.
 Bolted Field Splices for Steel Bridges, Firas Sheikhlbrahim and Karl H. Frank, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p290-297.
 Editor's Note, David Darwin, ST Aug, 96, p843-844.
 Shear Lag in Shear/Core Walls, A. K. H. Kwan, ST Sept. 96, p1097-1104.
 Shear Strength of Beams with Corrupated Webs. Melanand
- Shear Strength of Beams with Corrugated Webs, Mohamed Elgaaly, Robert W. Hamilton and Anand Seshadri, ST
- Elgany, Robert W. Hamilton and Anana Sessiant, 3-Apr. 96, 1990-398.

 Web Buckle at I-40 Bridge Test, John Minor and Clinton Woodward, BE Feb. 96, p34-36.

 Web Buckling in Thin Webbed Castellated Beams, Walid Zaarour and Richard Redwood, ST Aug. 96, p860-866.

Wedges

- Diffraction Around Circular Canyon in Elastic Wedge Space by Plane SH-Waves, V. W. Lee and R. I. Sherif, EM June 96, p539-544.
- Not So Suspicious, H. Nierlich, CE Sept. 96, p30-31.
 "Suspicious" Implications Allayed, William F. Powers, III,
 Kerry B. Allen and Michael P. Bruen, CE Sept. 96, p31-

Weibull density function

- Probabilistic Aspects of Material Failure, David F. Bizup and Nozer D. Singpurwalla, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p474-447.
 - Simulating Nature Wind Waves in a Wave Flume, John Z. Yim, C.-R. Chou and M.-Y. Lai, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p45-56.

- A Bridge Live Load Model Including Overloads, Gongkang Fu and Osman Hag-Elsafi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-
- cea D. Grigoriu, ed., 1996), p34-37.

 Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST May 94, p1471-1488.
- Clay Brick Masonry Weight Variation, Clayford T. Grimm, AE Dec. 96, p135-137.
- Measurement of the DWPF Canistered Wasteform Weight and Free Volume, D. T. Herman, J. R. Harbour, M. K. Andrews and C. A. Cicero, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p402-403.
- Optimization Sensing and Control in Design of Antennas Mehdi S. Zarghamee and Joseph Antebi, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p147-153.
- Water Vapor Effects on the Corrosion of Steel, John C. Es-till and Gregory E. Gdowski, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p457-458.
- WLS Method for Parameter Estimation in Water Distribu-tion Networks, P. V. Niranjan Reddy, K. Sridharan and P. V. Rao, WR May/June 96, p157-164.

Weighting functions
Weighted Factors in Computer-Aided Land Leveling,
Thomas S. Zissis, Aristotelis H. Papadopoulos and Ilias
S. Teloglou, IR Nov./Dec. 96, p336-338.

- Discharge Coefficient of Rectangular Side Weirs, R. Singh, D. Manivannan and T. Satyanarayana, IR July/Aug. 94,
- D. Mathvallan and F. Sugara.

 Bil-1819.

 Eliminating Backflow in Retrofit BNR Systems, Gregory J.

 Daviero and Terry W. Sturm, EE Oct. 96, p950-995.

 Features of a Chevron Weir Rock Ramp, R. J. Wittler,

 (North American Water and Environment Congress &

 Destructive Water, Chenchayya Bathala, ed., 1996), p111-116.
- A Modified Dam for Fish Up the River, CE Dec. 96, p16-
- Optimal Design of Sloping Weir, Prabhata K. Swamee, Govinda C. Mishra and Adel A. S. Salem, IR July/Aug. 96, p248-255.

Weir Aeration: Models and Unit Energy Consumption, Ning H. Tang, N. Nirmalakhandan and R. E. Speece, EE Feb. 95, p196-199.

Buckeye Water Transmission Main Keswick Dam Cross-ing, D. Todd Kotey, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p194-201.

Hot-Spot Fatigue Design of Aluminum Joints, Maurice L. Sharp, Glenn E. Nordmark and Craig C. Menzemer, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1027-1036.

Housner, "Father of Earthquake Engineering," Leads ASCE's Disaster Mitigation Conference, NE Sept. 96,

pl.4.

Mean Stress Effects in Fatigue of Welded Steel Joints, Shahram Sarkani and David P. Kihl, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p50-53.

Welded Steel Moment Frame Joint Testing Programs, Thomas A. Sabol and Michael D. Engelhardt, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1228-1235

Copper Precipitation Hardened, High Strength, Weldable Steel, Semyon Vaynman, Morris E. Fine, Gautam Ghosh and Shrikant P. Bhat, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1551-1560.

Development of High Performance Steels for Commercial and Military Applications, Eric M. Focht and Thomas W Montemarano, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p91-99.

Effect of Welding on a High-Density Polyethylene Liner, Reda M. Bakeer and Michael E. Barber, MT May 96,

p94-100.

Fabrication and Testing of High Performance Steel I-Girders Research in Progress, William Wright, (Materi-als for the New Millennium, Ken P. Chong, ed., 1996), p1571-1578.

High-Performance Metals for Civil and Marine Structures, John W. Fisher, Richard Sause and Robert J. Dexter, (Materials for the New Millennium, Ken P. Chong, ed.,

1996), p23-37.

Material Development for High-Performance Bridge Steels, J. M. Chilton and S. J. Manganello, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p100-107.

Optimization of a 550-/690-MPa High-Performance Bridge Steel, A. B. Magee, J. H. Gross and R. D. Stout, (Materi for the New Millennium, Ken P. Chong, ed., 1996),

p1561-1570.

Orthotropic Steel Deck for the Williamsburg Bridge Reconstruction, R. B. Gajer, J. Patel and D. Khazem, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

Steel Moment Frames with Welded Connections, Helmut Krawinkler, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996, p1115-1122.

Three Repair/Retrofit Procedures for Welded Moment Frames, J. C. Anderson, Z. Yin and X. Duan, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), p768-771.

Water Pipeline Crossings of the Pitt and Fraser Rivers, Tim R. Jervis and Jim V. Young, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p202-213.

Welded Steel Moment Frame Joint Testing Programs, Thomas A. Sabol and Michael D. Engelhardt, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1228-1235.

A Program for the Reduction of Seismic Hazards Posed by Welded Steel Moment Frame Structures, Stephen A. Mahin, Ronald O. Hamburger and James O. Malley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p157-158.

Decay of Residual Stress in Stochastic Fatigue, Loren D. Lutes and Shahram Sarkani, ST Jan. 96, p92-98.

icious Inspection Begs ASCE Intervention, Marshall D. Collins, CE Dec. 96, p28.

Well construction

Mammoth Well Gurgles to Life, CE July 96, pl 1-12.

Well performance

Combining Geophysical and Well Data for Identifying Best Well Locations, Geza Pesti, William E. Kelly, Istvan Bo-gardi and Robert J. Kalinski, WR Mar./Apr. 96, p97-104. Mammoth Well Gurgles to Life, CE July 96, p11-12.

Rethinking Well Efficiency, Otto J. Helweg and Timothy Mays, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p954-959.

Biological Clogging and Rehabilitation of Drains and Well Systems and the Implications on Groundwater Quality, George Alford and D. Roy Cullimore, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p34-39.

Combining Geophysical and Well Data for Identifying Best Well Locations, Geza Pesti, William E. Kelly, Istvan Bo-gardi and Robert J. Kalinski, WR Mar./Apr. 96, p97-104.

Demonstrating Brine Water Wells and Toilets for Deering, Alaska, Robert H. Lundell, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p558-569.

1990), p238-309.

Effect of Surface Water and Ground Water Interaction on Atrazine Transport to Pumping Wells, Chittaranjan Ray, David Soong, Deva K. Borah and George R. Roadcap, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996).

Fifets of Ignoring Well Losses on the Specific Capacity Function, Otto J. Helweg and Timothy Mays, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2224-2229.

Implications of Using Approximate Expressions for Well Function, Rajesh Srivastava, IR Nov./Dec. 95, p459-462. Mammoth Well Gurgles to Life, CE July 96, p11-12.

Monitor Well Design, Installation, and Documentation at Hazardous and/or Toxic Waste Sites, U.S. Army Corps of Engineers, 1996, 0-7844-0150-0, 51pp. A New Direction in Remediation, Paul P. Parmentier and

A New Direction in Remediation, Paul P. Parmentier and Ronald M. Klemovich, CE Apr. 96, 525-57.

Numerical Modeling of Deep Well Injection Near a Fault, Peikang Jin and Michael E. Barber, (Uncertainty in the Geologic Environment: From Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p912-926.

Operation and Maintenance of Ground Water Facilities (M&R No. 86), Committee on Ground Water of the Irrigation and Drainage Division, American Society of Civil Engineers, (Lloyd C. Fowler, chmn.),

0-7844-0139-X, 180pp.

Preliminary Studies of a Karst Warm Spring in Mt. Kräuterin, Austria, Dachang Zhang, Rudolf Pavuza, Hans Fischer and Karl Mais, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1279-1284.

Reliability Based Design for Oil Country Tubular Goods, P. R. Brand, D. B. Lewis and M. A. Maes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p534-537.

Seismic Behavior of Masonry Walls: Modeling of Hysteretic Rules, Miha Tomaževič and Marjana Lutman, ST Sept. 96, p1048-1054.

mulation of Unsaturated Zone Virus Transport Adjacent to Municipal Wells, D. D. Adelman and M. A. Tabidian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1742-1747.

Site Vulnerability Assessment for Wellhead Protection Planning, Wade E. Hathhorn and Tyler Wubbena, HE Oct. 96, p152-160.

Two-Dimensional Hydraulies of Recirculating Ground-Water Remediation Wells in Unconfined Aquifers, W. M. Stallard, K. C. Wu, N. Shi and M. Yavuz Corap-

cioglu, EE Aug. 96, p692-699.

Use of Artificial Neural Networks for Agricultural Chemical Assessment of Rural Private Wells, Chittaranjan Ray and Kristopher K. Klindworth, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1687-1692.

Volumetric Leaky-Aquifer Theory and Type Straight Lines, Zekai Şen, HY May 96, p272-280.

Wellhead Protection Area Predictions and Implications for the Biscayne Aquifer in Miami, Florida, Hector R. Fuentes, Vassilios A. Tsihrintzis and Jose H. Olivo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p960-965.

Wellhead Protection: Local and Community Efforts, Sharon Lien, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p966-969.

West Virginia

Protecting an American Folklore Legend, Arthur J. Sortet, III and Harry B. Thomas, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p274-275.

Acquisition and Restoration of a Drainage District in the Snohomish River Valley, John Engel, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3950-3955.

Anatomy of a Wetland, Jim Renner, CE Jan. 96, p58-60.

Application of a Hydrodynamic Model in Design of the Kingman Lake Wetland Restoration Project, Karen M. Nook and William G. Grosskopf, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p58-63.

Application of One- and Two-Dimensional Flow Models for an Evaluation of Riverine Wetland Hydrologic Func-tions, C. Charles Tai, Chou Fang and Apurba K. Borah, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Bird Use of an Evaporation Basin and a Mitigation Wet-land, Andrew G. Gordus, Jeff Seay and Scott B. Terrill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p518-523.

Buying Wetlands, CE Aug. 96, p20.

Closure to Disscussion of Environmental Engineering Forum: Long-Term Effects of Wetland Treatment of Mine Drainage (November/December 1993, Vol. 119, No. 6), Thomas M. Walski, EE Jan. 96, p85-86.

Commercial Wetland Hits Milestones, CE Apr. 96, p12,14. Commercial Wetland Mitigation Banking, Robert Brum-baugh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4233-4238.

Concept Ecology Integrated Project Engineering and Environnent; Relating a Project to the Surroundings, David S. Reutter, Roger J. Menendez, Peter J. Bottone and Robert L. Whitman, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p753-758.

Constructed Wetlands for Metals Removal, Charles R. Williams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p1184-1189.

Discharge Measurements and Predictions in Wetlands, Vassilios A. Tsihrintzis, David A. Sikkema, Marcia Levinson and Jose L. Oliveros, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p274-279.

Discussion of Environmental Engineering Forum: Long-Term Effects of Wetland Treatment of Mine Drainage (November/December 1993, Nov. 119, No. 6, by Thom-as M. Walski (Environmental Engineering Forum)), Robert S. Hedin, EE Jan. 96, p83-84.

Discussion of Environmental Engineering Forum: Long-Term Effects of Wetland Treatment of Mine Drainage (November/December 1993, Vol. 119, No. 6, by Thomas M. Walski (Environmental Engineering Forum)), Frederick M. Williams and Lloyd R. Stark, EE Jan. 96, p84-85.

Drainage Ponds and Demonstration Wetlands, Joseph Skorupa, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p394-399.

Drop Structures in the Real World: Guidelines for Drop Structures in Grass Lined and Wetlands Channels, Wil-liam C. Taggart, William G. DeGroot, Katherine J. Chase and Peter L. Nelson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p594-599.

Engineering Aspects of Wetland Mitigation, A. Mahendra Rodrigo, Kenneth P. Dunne, Lewis O. Morgan and Rao Nivargikar, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2027-2032.

Environmental Permitting for the Canal Electric Project, Gene F. Crouch, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p237-244.

Evaluation of Potential Impacts to Endangered Species That Use Wetland Areas: A Case Study, Andrea Rosenthal, David Reutter, Roger Menendez and Barbara Michael, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2033-2038.

An Experimental Study on the Use of Constructed Wetlands for Stormwater Management, Shih-long Liao, Shaw L. Yu and Stephen J. Long, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2462-2467

Feasibility of Modeling Phosphorus Dynamics in Stormwa-ter Wetlands, Karina T. Lopez Ivich, William James, Isobel W. Heathcote and John Fitzgibbon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p524-529.

Firm Serves As a Model for its Piers, CE Oct. 96, p97.

Groundwater Flow Component of a Wetland-Dynamics Model, Hector R. Bravo and Gregory H. Brown, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2793-2798.

How Did a California Dam Get a Section 404 Permit? Gary W. Darling and Joel B. Butterworth, (North American Water and Environment Congress & Destructive Water,

Chenchayya Bathala, ed., 1996), p976-981.

Hydraulic and Engineering Considerations in Designing Constructed Treatment Wetlands for a Lake Restoration, C. Charles Tai, Donthamsetti V. Rao and Jonathan Polinkas, (North American Water and Environment Congress & Des p257-262.

Hydraulic Design of Subsurface Flow Wetlands, Edward L. Marsteiner, Thomas L. Theis, Anthony G. Collins and Thomas C. Young, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2421-2426.

Hydraulic Studies for a Large Wetland, Stephane Asselin, Phillip R. Mineart and Pierre-Yves Saugy, (North Ameri can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p512-517.

Hydraulics of Subsurface Flow Constructed Wetlands, A. T. Hjelmfelt, Jr. and A. L. Thompson, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p52-57.

The Importance of Plant Community Structure on Form and Function of Created Wetland Systems, Richard A. Or-son, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1197-1202.

Liability of Engineers When Wetlands Laws Change, Peter J. Coote, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Buthala, ed., 1996), p970-975. Mitigation Wetland Losses for a Major Transportation Imingation Weitani Doses for a Major Hampshire, Craig A. Wood, William J. Barry, Albert S. Garlo and William Arcieri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p982-987

p/982-981.
North American Water and Environment Congress & Destructive Water, CD-ROM (Windows version only), Chenchayya Bathala, ed., 1996, 0-7844-0166-7, 1340pp.
Optimizing Municipal Wastewater Treatment in Cold Climates: Scale, Process and Benefits, Isobel W. Heathcote and William J. Jewell, (North American Water and Enviman William J. Swell, Work in Merkali water and and room proment Congress & Destructive Water, Chenchayya Bathala, ed., 1996, p1419-1424.
Roadkill Studied, CE Sept. 96, p27.
Salinity and Hydraulic Issues at a Constructed Wetlands,

W. G. Hines, J. E. Burkstaller and A. F. Gove, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1178-1183. Santa Ana River Salt Marsh Restoration: Orange County,

California, U.S.A. Lan-Yin Li Weber, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p536-540. Sims Bayou: The Public Speaks - The Corps Listens, Don

gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3314-3319.

Soil Water Chemistry of Irrigation with Drainwater, B. R. Faulkner and J. C. Guitjens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1483-1488.

ome Thoughts About Ecosystems: Management, Control, and Uncertainty, Daniel E. Willard, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p191-206.

A Study into Effectiveness of Urban Best Management Practises, Robert G. Traver, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1852-1857.

Technological Advances in the Design and Construction of Water Mains for Crossing Under Rivers and Other Barri-ers, Donald E. Eckmann and William F. Nabak, (*Pipeline* Crossings 1996, Lawrence F. Catalano, ed., 1996), p403-408

Treating Wastewater in Developing Nations, CE Aug. 96,

p10.

Two-dimensional Sheetflow Modeling for Wetland Restoration, Robert A. Laura and Ananta K. Nath, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p263-267

The Use of Hydrologic Budget Techniques in Assessing Site Suitability for Wetland Creation, William R. Arcieri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3956-3961.

Water Control Structure Choice for Wetland Restoration/ Creation, Roger C. Smith, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p268-273.

Westlake Farms Demonstration Wetlands A Cooperative Effort, John M. Shelton, (North American Water and Environment Congress & Destructive Water, Chenchayya

wironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p388-393.

Wetland Designs for Environmental Protection—Application in India, Subijoy Dutta, Dennis A. Haag and Jon B. Kraft, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, 2020, 20 ed., 1996), p3722-3727.

Wetland Mitigation Evaluation Ten Years After Florida Keys Bridge Replacement, Roy R. Lewis, III, Curtis R. Kruer, Sally F. Treat and Stephanie M. Morris, (North

Kruer, Sally F. Treat and Stephanie M. Morris, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p759-763. Wetland Restoration in Southern North Sea Coastal Areas: The Experience of Britain and The Netherlands, Henk Smit and John S. Pethick, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3740-3745. Wetlands Score at Coors Field, CE Apr. 96, p26.

Wetting front

Relating the Wettability of Contaminated Sands to NAPL Composition, William H. Anckner, Jr. and Susan E. Powers, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p502-512.

Wettability of NAPL-Contaminated Sands, Susan E. Powers, William H. Anckner and Thomas F. Seacord, EE Oct. 96, p889-896.

Wharves

Seismic Design Criteria for Navy Wharves, J. M. Ferritto and C. S. Putcha. (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p353-354

Bicycle-Wheel Spoke Patterns and Spoke Fatigue, Henri P.

Bicycle-Wheel Spoke Patterns and Spoke Patigue, Henri P. Gavin, EM Aug. 96, p736-742.

Development of a Mobile Instrument Deployment Device (MIDD), Lutz Richter, Klaus Schilling, Marco C. Bernasconi, Christoph Jungius and César Garcia-Marirrodriga, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p283-289.

Flywheels for Energy Storage in Space Using Superconducting Bearings, T. L. Wilson, W. K. Chu, K. Ma and H. Xia, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p355-359.

A Wheeled Mobile Robot for Automated Pavement Crack Sealing, K. J. Mueller, D. Hong and S. A. Velinsky, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p178-184.

White noise

White noise
Application of the Concurrent Finite Element Method to Solution of the Fokker-Planck Equation, W. Yi, B. F. Spencer, Jr. and L. A. Bergman, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p10-13.
Approximate Solutions to Nonlinear Random Vibration Problems and the Fokker-Planck-Kolmogorov Equation, David C. Polidori and James L. Beck, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed. 1996), p044-07.

chands ac Structural Rettachity, Dati M. Prangopol, ed. and Mircea D. Grigoriu, ed., 1996), p94-97. Approximated Correlations Response of Nonlinear Systems Under Normal White Noise Inputs, M. Di Paola and G. Falsone, (Probabilistic Mechanics & Structural Reliability). ity, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p926-929.

Approximations for Elasto-Plastic Oscillations with Gaussian White Noise Excitation, Roger Pettersson, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p506-509.

Experiments with Elasto-Plastic Oscillator, S. Randrup-Thomsen and O. Ditlevsen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p518-521.
Generalized Random Decrement Method for System Iden-

tification, P. D. Spanos and B. A. Zeldin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p850-853

Influence of Support Stiffness for Cantilever Beams Sub-jected to Modulated Filtered White Noise, Gongkang Fu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p689-692

Nonlinear Systems with Poisson White Noise, Mircea Grigoriu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p120-123.

Observation and Conditional Stochastic FEM, M. Hoshiya and I. Yoshida, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Gri-

goriu, ed., 1996), p178-181.

An Overview of Techniques for Analyzing a System Mod-elled as a Duffing Oscillator Driven by Deterministic and Stochastic Excitations, M. A. Tognarelli and A. Kareem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

path Integration Applied to Structural Systems with Uncer-tain Properties, Søren R. K. Nielsen and H. Ugur Köyliögiu, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p6-9.

Random Response to Periodic Excitation with Correlated Disturbances, Zhikun Hou, Yunshen Zhou, Mikhail F. Dimentberg and Mohammad Noori, EM Nov. 96, p1101-1108.

Random Vibration of a Hysteretic Oscillator, Arvid Naess and Vibeke Moe, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p514-517.

Random Vibrations of an Isochronous SDOF Bilinear System with Secondary Structure, Mikhail Dimentberg and Philip Muller, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p958-961.

Response Spectral Densities of Stochastically Excited Non-linear Systems, G. Q. Cai and Y. K. Lin, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangool, ed. and Mircea D. Grigoriu, ed., 1996), p732-735.

Simple ATMD Control Methodology for Tall Buildings Subject to Wind Loads, Seshasayee Ankireddi and Henry

T. Y. Yang, ST Jan. 96, p83-91.

Stochastic Prediction and Control of Uncertain Nonlinear Dynamical Systems, R. Ghanem and M. Grigoriu, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p277-280.

Stochastic Response of a Hysteretic System Under Nonstationary Excitations, Ismail I. Orabi, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p392-395.

Time-Delay Linear Systems with Gaussian White Noise Input, M. Grigoriu, T. T. Soong and A. Reinhorn, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p422-425.

Wide area networks

Designing a PC Network to Meet the Specific Needs of Eners, Shawn A. Dent, Daniel P. Davis and Thomas gineers, Shawn A. Dent, Daniel P. Davis and Inomas Gdula, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p937-943.

Networked Multimedia Tools for Architectural Engineer-ing, Anthony C. Webster, AE Mar. 96, p11-19.

Numerical Simulation of Widening and Bed Deformation of Straight Sand-Bed Rivers. I: Model Development, Stephen E. Darby and Colin R. Thorne, HY Apr. 96,

Numerical Simulation of Widening and Bed Deformation of Straight Sand-Bed Rivers. II: Model Evaluation, Stephen E. Darby, Colin R. Thorne and Andrew Simon, HY Apr. 96, p194-202.

Pier Width and Local-Scour Depth, Robert Ettema, Bruce W. Melville and Brian Barkdoll, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p251-256.

Relationship between Kelp Beds and Beach Width in Southern California, M. Hany S. Elwany and Reinhard E. Flick, WW Jan./Feb. 96, p34-37.

Simplified Dean's Method for Beach-Fill Design, James R. Houston, WW May/June 96, p143-146.

EPA Targets Suspected Fertility Disrupters, CE July 96, p25.

Wildlife conservation

Bird Use of an Evaporation Basin and a Mitigation Wetland, Andrew G. Gordus, Jeff Seay and Scott B. Terrill, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

An Evaluation of Drainage Conditions in the San Joaquin Valley, M. Manucher Alemi and George Nishimura, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Roadkill Studied, CE Sept. 96, p27.

Water Control Structure Choice for Wetland Restoration/ Creation, Roger C. Smith, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p268-273.

Wildlife habitats

Application of GIS Technology to Floodplain & Habitat Analyses, Scott E. Stonestreet, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1393-1398.

Benefits of the Santa Ana River Mainstern Project, William L. Zaun, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed.,

1996), p.2176.
Concept Ecology Integrated Project Engineering and Environment; Relating a Project to the Surroundings, David S. Reutter, Roger J. Menendez, Peter J. Bottone and S. Robert L. Whitman, Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p753-758.

Design and Construction of the Santa Ana River Wash Crossing of the Inland Feeder, Burt Yu, Jay Arabshahi, Birger Schmidt and Roy Cook, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1789-1795.

Design of Riparian Habitat Replacement in Active Flood-plains, Bruce M. Phillips, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1406-1412.

Drainage Ponds and Demonstration Wetlands, Joseph Skorupa, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,

1996), p394-399.

Engineers Outfox Nature to Bury Sewer Line, CE Dec. 96,

Environmental Planning for Water Resources Develop-ment, Cuatro Cienegas Region, Coahuila, Mexico, James r. Kunkel and Dario Rodríguez-Bejarano, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1249-1254.

Evaluation of Potential Impacts to Endangered Species That Use Wetland Areas: A Case Study, Andrea Rosenthal, David Reutter, Roger Menendez and Barbara Michael, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2033-2038.

Habitat Preservation and Enhancement Associated with San Diego Creek Flood Control Channel Improvement, Yen-Hsu Chen and Ruh-Ming Li, (North American Water and Environment Congress & Destructive Water, Chen-

chayya Bathala, ed., 1996), p530-535.

Mitigation Wetland Losses for a Major Transportation Improvement Project in New Hampshire, Craig A. Wood, William J. Barry, Albert S. Garlo and William Arcieri, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p982-987

South Florida Water Management District: Reconstructing the Everglades Ecosystem, James Phillip Lee, (North

American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), pl 190-1196. Water Control Structure Choice for Wetland Restoration/ Creation, Roger C. Smith, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p268-273. Zoo Treats Aquatic Exhibits with Ozone, CE Nov. 96, p8.

Wildlife management
Drainage Ponds and Demonstration Wetlands, Joseph
Skorupa, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,
1996), p394-399.

Wilson, Basil Wrigley
Basil Wilson, Noted Oceanographic Engineer, Was South
Africa Native, NE May 96, p15.

A Comprehensive Relational Database of Structural Damping Data, Sandeep Khare and Nicholas P. Jones, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1236-1243.

p1230-1235.
Current U.S. - Japan Collaborative Activities in Wind Engineering, B. Bienkiewicz, T. Ohkuma and K. Fujii, (Bullding an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1075-1082.

Determination of Reaeration Coefficients: Whole-Lake Approach, Rakesh K. Gelda, Martin T. Auer, Steven W. Effler, Steven C. Chapra and Michelle L. Storey, EE Apr. 96, p269-275.

Emer, Steven C. Chapra and Michelle L. Storey, B.E. Apr. 96, p269-275.

Editor's Note, David Darwin, ST May 96, p469.

Environmental Assessment of a Site for Civil Construction, S. M. Govorushko, UP Mar. 96, p18-31.

Glazed Opening Designs for Windborne Debris Impact, Joseph E. Minor, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p117-118.

High-Resolution, Short-Term Lake Forecasts for Lake Erie, John G. W. Kelley, David J. S. Welsh, Keith W. Bedford, David J. Schwab, Jay S. Hobgood and Brendon Hoch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p367-378.

Hurricanes Erin, Marilyn and Opal, Kishor C. Mehta, James R. McDonald and Douglas A. Smith, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p46-47.

Making Windows Safer, CE Dec. 96, p8.

Mitigation of Windstorm Disasters, Kishor C. Mehta and Ernst W. Kiesling, (Natural Disaster Reduction, George

Ernst W. Kiesling, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p205-

No More Flapping in the Wind, CE Aug. 96, p14. Practical Modeling of Hurricane Surface Wind Fields, Edward F. Thompson and Vincent J. Cardone, WW July/ Aug. 96, p195-205.

A Strategy for Active Control of Tall Civil Structures Using Regenerative Electric Actuators, A. C. Nerves and R. Krishnan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p503-506.

Texas DOT Wants Damper on Galloping, CE Mar. 96, p10.
Use of GIS Mapping to Illustrate the Sensitivity of Wind
Hazard Insurance Loss Estimation to Modeling Parame-

Hazard Insurance Loss Estimation to Modeling Parameters, Andrew Steckley, Lawrence A. Twisdale and Peter J. Vickery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p201-202. Vibration Control of Tall Buildings under Seismic and Wind Loads, Lih-Shing Fur, Henry T. Y. Yang and Seshasayee Ankireddi, ST Aug. 96, p948-957.

Wave Climate Variability in Southern California, Richard Seymour, WW July/Aug. 96, p182-186.

Wind Engineering Co-operation: A Perspective of Europe and of China, Brian E. Lee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1069-1074.

Wind bracing
Learning Flexible Concepts for the Wind Bracing Problem,
Brahim F. Imam, (Computing in Civil Engineering,
Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),
p859-866.

po.57-600. Wind-Resistant Tie-Downs for Mobile Homes, Anatol Longinow, Donald F. Meinheit and John E. Pearson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p966-973.

Wind energy Effect of Load Models and Limited Data on Load and Resistance Factors for Fatigue Design, Clifford H. Lange and Steven R. Winterstein, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p58-61.

2D Velocity Distributions in Nearshore Currents, Marek Szmytkiewicz, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p366-376.

Accuracy of a 3D Hydrodynamic Model Verification due to the Relative Magnitude of Forcing Functions, Bernard B. Hsieh, (North American Water and Environme gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3452-3457.

Approximations for Elasto-Plastic Oscillations with Gaussi an White Noise Excitation, Roger Pettersson, (Probabilistic Mechanics & Structural Reliability, Dan M. Fran-

gopol, ed. and Mircea D. Grigoriu, ed., 1996), p506-509. The Car as a Wind Shelter for Mobile Home Residents, Thomas W. Schmidlin and Paul S. King, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p137-138. Central Pacific Hurricanes-What Do We Know? Thomas A. Schroeder, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p291-292.

Comparison of Flow Around Circular Cylinder Using FE and FD Procedures, R. Panneer Selvam, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996). p1021-1028.

Correlation of Component Damage, Insurance Losses and Wind Storm Severity, Timothy A. Reinhold, Gregory L. F. Chiu and Robert Akins, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p191-192.

A Damage Simulation Model for Buildings and Contents in a Hurricane Environment, N. Stubbs and D. C. Perry, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p989-996.

Dynamic and Quasi-Static Design of High-Rise Buildings Subjected to Wind Loads, Okey Onyemelukwe and Guil-lermo Claure, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p141-142.

An Emerging Technology: Damping Design for Wind and Seismic Events, Robert J. McNamara, (Building an In-ternational Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1252-1260.

p1232-1260.

Evaluation of a 47-Story Building Subjected to Hurricane Alicia, Lawrence G. Griffis, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p960-965.

Extreme Winds as a Component of Catastrophic Risk, Gregory L. F. Chiu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p498-501.

A Framework for Estimating Losses Due to Hurricane Ex-treme-Winds, Gregory L. F. Chiu, (Natural Disaster Re-duction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p287-288.

Hurricane Disaster Mitigation Through Real-time Wind Analysis, Mark D. Powell, Samuel H. Houston and Ignacio Ares, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p289-290.

A Knowledge-Based System For International Hurricane Knowledge-Based System For International Hurricane Risk Management, Surya K. Gunturi, Chris Austin, Aida RiveraMarzan, Ping Zhang, John Lieberman, Paul VanderMarck, Mark Broido and Auguste C. Boissonnade, (Matural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p15-16.

Melnikov Processes and Noise-Induced Exits from a Well. Emil Simiu and Michael R. Frey, EM Mar. 96, p263-270. Natural Hazards Mitigation in South Carolina, Charles Lindbergh and Maurice R. Harlan, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p86-87.

New Jersey Nearshore Hypoxia During the Summer 1976, Ross W. Hall and Mark S. Dortch, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p608-617.

Numerical Modeling of Wind-Structure Interactions, Dahai Yu and Ahsan Kareem, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1005-1012.

Numerical Simulation of Internal Kelvin Waves with Z-level and Sigma Level Models, David J. Schwab, Dmitry Beletsky, William P. O'Connor and David E. Dietrich, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p298-312.

Performance of Laminated Glass Units under Simulated Windborne Debris Impacts, Richard A. Behr and Paul A. Kremer, AE Sept. 96, p95-99.

Post-Hurricane Investigations: Quantifying Damage, Greg-ory L. F. Chiu, Sara Wadia-Fascetti and Mussaddeque Hossein, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p74-75.

Progress of the ASTM Standard on Fenestration Relative to Windstorms and its Relationship to Building Codes, David B. Hattis, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p119-120.

Protection of the Building Envelope in Maintaining Structural Integrity, Clifford Oliver, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., tion, George W. 1997), p121-122.

Simulating the Transport of an Algae Bloom off the West Coast of Vancouver Island, M. G. G. Foreman, J. F. R. Gower, R. E. Thomson and J. Y. Cherniawsky, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p180-191.

Stochastics of Sediment Transport, Shore Evolution and Their Input, Rafall Ostrowski, Zbigniew Pruszak, Grzegorz Różyński and Ryszard B. Zeidler, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p963-974.

Storm-Driven Trajectories of Rain near Balconies on Tall Building, Fillmer W. Ruegg, AE Sept. 96, p100-106.

Stress Factors Explained, Robert T. Ratay, CE Dec. 96, p27

Structural Aerodynamics (Available only in Focus on Structures Special Edition). Bob Lang and Hugh Muirhead, CE Jan. 96, p3A-7A.

Structural Control: Basic Concepts and Applications, Y. Fujino, T. T. Soong and B. F. Spencer, Jr., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

Three-Dimensional Modeling of Wind-Driven Upwelling of Anoxic Bottom Water 'A-oshio' in Tokyo Bay, Keiji Nakatsuji, Jong Sung Yoon and Koji Muraoka, (Estua-rine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p618-631.

Tornadoes and Severe Storms in Russia, Nikolay A. Popov, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p133-134.

Train/Vehicles Wind-Induced Hazard and Its Mitigation, Masaru Matsumoto and Tatsuo Maeda, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p131-132.

Wind Hazards for Low-Rise Structures and Single Family Dwellings: A Possible Mitigation, H. W. Tieleman, T. A. Reinhold and M. R. Hajj, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p389-390.

Wind Hazards in the United States, Peter J. Vickery, Law-rence A. Twisdale and Andrew C. Steckley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p139-140.

Wind Protection Tie-Downs for Manufactured Homes, John E. Pearson, Anatol Longinow and Donald F. Meinheit, SC Nov. 96, p126-140.

Wind-Induced Failure of Buildings and Structures Caused by Typhoons in Japan, Yukio Tamura, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p62-65.

'A Comprehensive Strategy for Mitigation', R. T. Severn, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p13-14.

The Aerodynamic Forces on Low-Rise Structures: The Effects of Incident Turbulence, H. W. Tieleman, M. R. Hajj and T. A. Reinhold, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p975-978.

Analysis Tools of Transitioning and Turbulent Flows, M. R. Hajj, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p434-437.

Application of Structural Optimization to Practical Tall Steel Building Design, Chun-Man Chan and Joohyuk Park, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p123-134.

An Assessment of Wind Damage to Wood-Frame Houses, Maher Jaafari and Henry Liu, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p347-348.

Characterization of Turbulent Scales in Atmospheric Wind by Orthonormal Wavelets, M. R. Hajj, H. W. Tieleman and M. Bikdash, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p971-974.

Collapse of Transmission Line Towers in Typhoon Gay. Panitan Lukkunaprasit, (Natural Disaster Reduction, George W. Housner, ed., and Riley M. Chung, ed., 1997), p351-352.

Computational Model for Wind-Induced Pressure Under-Computational model for wind-induced Pressure Under-neath Paver Roofing Systems, Yawei Sun, Bogusz Bienkiewicz and Sungsu Lee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1013-1020. Control of Mega-Sub Building Against Wind Loads, Win-

ston Chai and Maria Q. Feng. (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p486-489.

Design of Vibration Control System for High-Rise Residential Buildings in Consideration of Wind-Induced Response, Yukio Tamura, Kiyoshi Uesu and Takeshi Ohkuma, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1244-1251.

Dynamic and Quasi-Static Design of High-Rise Buildings Subjected to Wind Loads, Okey Onyemelukwe and Guillermo Claure, (Natural Disaster Reduction, George W. Houser, ed. and Riley M. Chung, ed., 1997), 141-142.
Effect of Uncertainty on an Active Mass Damper System,
H. S. Deoskar, R. V. Tappeta and B. F. Spencer, Jr.,
(Probabilistic Mechanics & Structural Reliability, Dan

M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), Effects of Non-Structural Elements on the Acceleration Re-

sponse of Tall Multi-Story Buildings Under Wind Excitation, Cindy X. Qiu, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p974-977. An Expert System for Wind-Resistant Residential Con-

struction, James R. McDonald, Douglas A. Smith and Kishor C. Mehta, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p315-316

316.
An Expert System for Wind-Resistant Residential Construction, James R. McDonald, Douglas A. Smith and Kishor C. Mehta, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p982-988.
Fatigue Testing of Anchor Bolts, James P. Van Dien, Mark R. Kaczinski and Robert J. Dexter, (Building an International Community of Structural Engineers, S. K. Ghosh.

tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p337-344.

ture Response, K. Pan, N. P. Jones and J. H. Ellis, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p482-485. Identification of Wind Spectral Characteristics from Struc-

Low Building Wind Load Variability for Code Applica-tions, T. C. Eric Ho, (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1053-1060.

Method of Non-Linear Stochastic Dynamics - A Compara-tive Discussion, G. I. Schuëller and H. J. Pradlwarter, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p966-969.

Minimum Design Loads for Buildings and Other Struc-tures, Revision of ANSI/ASCE 7-93 (St No. 95-007), American Society of Civil Engineers, 1996,

0-7844-0092-X, 220pp.

Minimum Design Loads for Buildings and Other Structures: American Society of Civil Engineers Standard 7-

95, Frederick S. Merritt, AE June 96, p80-81. Numerical Simulation of Flow Field Around Buildings, Da-hai Yu and Ahsan Kareem, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p490-493.

On the Response of Transmission Structures to High Winds, Acir Mércio Loredo-Souza and Alan Garnett Davenport, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p272-273.

Reducing the Vulnerability of Transmission Lines in Hurricane Regions by Choosing Minimum Life Cycle Cost Designs, Peter J. Vickery and Lawrence A. Twisdale, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p245-246. Reliability of Code Provisions for Wind-Induced Discom fort, Rwey-Hua Cherng, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p494-497.

Resistance Factors for High Strength Blind Bolts, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,

1996), p784-787

Resistance of Wood Members and Connections to Dynamic Loading, Laura Brantley, Robert Emerson and Kenneth Loading, Laura Brantiey, Kooert Emerson and Renneur Fridley, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), p771-777. The Response of Long Span Bridges to Wind Action, Robert L. Wardlaw, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p66-69. Roof Sheathing Uplift Resistance for Hurricanes, Edward Sutt, Kallem Muralidhar and Timothy Reinhold, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p974-981

Safety of Concrete Members Designed by ACI 318 Chapter 9 and Appendix C Load Combinations, Sami W. Tabsh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

Simple ATMD Control Methodology for Tall Buildings Subject to Wind Loads, Seshasayee Ankireddi and Henry T. Y. Yang, ST Jan. 96, p83-91.

Some Computational Issues in the Control of Distributed Systems, Weiming Xu, Sami F, Masri and Bingen Yang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p747-750.

Structural Evaluation of Existing Buildings for Seismic and Wind Loads, Charles Lindbergh, Maurice R. Harlan and James L. Lafrenz, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p317-318

System and Input Identification with Partially Correlated Load Processes, K. Pan, N. P. Jones and J. H. Ellis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996). p138-141

p138-141.
Toward Risk-Consistent Wind Hazard Design/Mitigation Criteria Using Probabilistic Methods, Lawrence A. Twisdale, Peter J. Vickery and Andrew C. Steckley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p256-257.
Vulnerability Curves for Buildings in Tropical-Cyclone Regions, John Holmes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Crinopia ed. 1969, 978-81.

tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996, p78-81.

Wind Loads for Low-Rise Buildings on Escarpments, Brad Means, Timothy A. Reinhold and Dale C. Perry, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1045-1052.

Wind-Induced Accidents of Train/Vehicles and their Countermeasures, Tatsuo Maeda, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-

structurat Rettability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p70-73.
Wind-Induced Failures of Steel Roof Decks, Víctor Figueroa Díaz, Ali Saffar, Samuel I. Díaz Santiago and Bernardo Deschapelles, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), 894-897.
Wind-Revistant Tic-Dewage for Mahir.

Wind-Resistant Tie-Downs for Mobile Homes, Anatol Longinow, Donald F. Meinheit and John E. Pearson, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996),

Wind-Tunnel Studies of Buildings and Structures, ASCE Aerospace Division Task Committee on Wind Tunnel Studies of Buildings and Structures, AS Jan. 96, p19-36.

Wind pressure Area-average Wind Pressures on a Low-rise Building, Russ D. Leffler and Jack E. Cermak, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1037-1044.

Computational Model for Wind-Induced Pressure Under-neath Paver Roofing Systems, Yawei Sun, Bogusz Bienkiewicz and Sungsu Lee, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1013-1020. Numerical Modeling of Wind-Structure Interactions, Da-hai Yu and Ahsan Kareem, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1005-1012.

An Overview of Field Experiments on a Low-Rise Build-ing, Douglas A. Smith, Kishor C. Mehta and Praveen Sandri, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1029-1036.

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Performance of Laminated Glass Units under Simulated Windborne Debris Impacts, Richard A. Behr and Paul A.

Kremer, AE Sept. 96, p95-99.
Testing of Prestressed Clay-Brick Walls, Gary L. Krause, Ravi Devalapura and Maher K. Tadros, Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p37-48.

Wind Loads for Low-Rise Buildings on Escarpments, Brad Means, Timothy A. Reinhold and Dale C. Perry, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1045-1052

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Optimum Risk Management with Uncertain Hazard and Vulnerability Information, Lawrence A. Twisdale and Peter J. Vickery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p88-

An Overview of Field Experiments on a Low-Rise Building, Douglas A. Smith, Kishor C. Mehta and Praveen Sandri, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1029-1036.

A Predicting Method of Typhoon Wind Damages, Yasushi Mitsuta, Takeshi Fujii and Ichiro Nagashima, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p970-973.

Reliability of Code Provisions for Wind-Induced Discomfort, Rwey-Hua Cherng, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p494-497.

Wind tunnel models
Wind Tunnel Modeling of Atmospheric Dispersion in the
Vicinity of Buildings, P. Saathoff, H. Wu and T. Stathopoulos, (Engineering Mechanics, Y. K. Lin and T. C. Su,
1996), p1131-1134.

Wind-Tunnel Studies of Buildings and Structures, ASCE Aerospace Division Task Committee on Wind Tunnel Studies of Buildings and Structures, AS Jan. 96, p19-36.

Analytical Solution for Galloping Oscillations, Mykhaylo I. Kazakevych and Oleksiy H. Vasylenko, EM June 96, p555-558.

Area-average Wind Pressures on a Low-rise Building, Russ Area-average Wind Pressures on a Low-rise Building, Russ D. Leffler and Jack E. Cermak, (Building an Internation-al Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1037-1044. Cape Girardeau Bridge Over the Mississippi River, Steven T. Hague, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p952-959.

Shonanman, ed., 1990, pp.32-93.

Characterization of Turbulent Scales in Atmospheric Wind by Orthonormal Wavelets, M. R. Hajj, H. W. Tieleman and M. Bikdash, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p971-974.

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Identification of Aerodynamic Indicial Functions, Partha P. Identification of Aeroxynamic Indical Functions, Partia F. Sarkar and Mehmet Metin Kose, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1127-1130.
Identification of Vortex-Induced-Response Parameters in Time Domain, Himanshu Gupta, Partha P. Sarkar and Kishor C. Mehta, EM Nov. 96, p1031-1037.

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Traint/Vehicles Wind-Induced Hazard and Its Mitigation, Masaru Matsumoto and Tatsuo Maeda, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p131-132.
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Johnson, ed., 1996), p1245-1251.
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Community of Structural Engineers, S. K. Ghosh, ed.
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International Collaboration in the Design of Three Boundary, Layer Wind Tunnels, César Engil (Building on Inter-

ry Layer Wind Tunnels, César Farell, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1061-1068.

he Response of Long Span Bridges to Wind Action, Robert L. Wardlaw, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p66-69.

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Aerial Pipeline Crossings - Inspection and Rehabilitation, Thomas Spoth, (Pipeline Crossings 1996, Lawrence F.

Catalano, ed., 1996), p298-305.

Mechanism of Bluff Body Aerodynamics and Its Stabilization, Masaru Matsumoto and Fumitaka Yoshizumi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p74-77

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Statistical Dynamics of Pipe-Line with One-Side Contact Supports Under Turbulence of Cross-Wind Loads, Ana-I. Menyailov and Christian G. Bucher, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p986-989.

Parameterisation of Triad Interactions in Wave Energy Models, Y. Eldeberky and J. A. Battjes, (*Coastal Dynamics* '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p140-148.

Slowly-varying Components of Hydrodynamic Field at the Wall of Breakwater of Gdańsk North Port, Piotr Wilde and Eugeniusz Sobierajski, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p69-80

Study of Wind Waves in Gulf Intracoastal Waterway at Aransas National Wildlife Refuge, Darla A. Hershberger and Francis C. K. Ting, WW Sept./Oct. 96, p239-244. Validation of Numerical Model for Wind Waves and Swell in Harbors, Edward F. Thompson, H. S. Chen and Lori L. Hadley, WW Sept./Oct. 96, p245-257.

Wind Wave Simulation in Coastal Zone, Tatjana Talipova Efim Pelinovsky and Eliezer Kit, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p105-115.

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Evaluation of Dormant Season Evapotranspiration, Jerry L. Hatfield, John H. Prueger and Thomas J. Sauer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p418-423.

Vehicle Traction Performance Comparison for Alaska Winter Seasons, J. John Lu, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996). p664-675.

Wortley's Winter Wanderings: A Narrative, C. Allen Wort-ley, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), p837-854.

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A Decision Making Approach for Stormwater Management Measures—A Case Example in the City of Waukesha, Wisconsin, James A. Bachhuber, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3981-3986.

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Sanitary Sewer System Modeling Model Comparison Ra-cine, Wisconsin, Robert W. Carr and Thomas J. Bunker, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

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Procurement Issues, Delon Hampton, ME Nov./Dec. 94,

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Women Engineers Get Leadership Training, CE Dec. 96,

Women Engineers Take High Road in California's Trans-portation Scene, NE July 96, p11.

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New Compression Based Design Principals for Reinforced Glulams, Daniel A. Tingley and Stephen Cegelka, (Mate-rials for the New Millennium, Ken P. Chong, ed., 1996),

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Performance of Single Family House Foundations During Northridge Earthquake, Robert W. Day, SC May 96,

Probabilistic Evaluation of Wood-Joist Floor Vibrations, Omar A. Jaradat, Arshad A. Al-Foqaha'a and Kenneth J. Fridley, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p342-345.

Serviceability System Factor for Design of Wood Floors, K. J. Fridley, D. V. Rosowsky and P. Hong, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p792-

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An Analysis of Damage from Hurricane Andrew; A Dissenting View, Leonard J. Morse-Fortier, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p293-294.

An Assessment of Wind Damage to Wood-Frame Houses, Maher Jaafari and Henry Liu, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p347-348.

Building Codes and Natural Disasters - 2 Case Studies, Kenneth R. Andreason, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p758-764.

A Copied Design? Patrick J. Murray, CE Nov. 96, p32.

Deflection Serviceability Design for Wood Members and Systems, D. Rosowsky and K. Fridley. (Building an In-ternational Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p452-

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Marine Borers Date Back 60 Million Years, Raymond C. Oliger, CE Dec. 96, p31.

Mechanical Connections in Wood Structures (M&R No. 84), Task Committee on Fasteners of the Committee on Wood of the Structural Division of the American Society

Wood of the Structural Division of the American Society of Civil Engineers, (Lawrence A. Soltis, chmn.), 1996, 0-7844-0110-1, 245pp.
Parameter Study of an Internal Timber Tension Connection, Stephen F. Duff, R. Gary Black, Stephen A. Mahin and Marcial Blondet, ST Apr. 96, p446-452.
Probabilistic Modeling of Metal Plate Connections, Robert N. Emerson and Kenneth J. Fridley, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p330-333.
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tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p804-811. Resistance of Wood Members and Connections to Dynamic

Loading, Laura Brantley, Robert Emerson and Kenneth Fridley, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p771-777.

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Standard for Load and Resistance Factor Design (LRFD) for Engineered Wood Construction (St No. 95-016), American Society of Civil Engineers and American For-est & Paper Association, 1996, 0-7844-0041-5, 125pp. Standard for Load and Resistance Factor Design (LRFD)

Standard for Load and Resistance Factor Design (LRFD) for Engineered Wood Construction (AF&PA/ASCE 16-95), AE Sept. 96, p121.
System Effects and Uplift Capacity of Roof Sheathing Fasteners, S. Murphy, S. Schiff, D. Rosowsky and S. Pye, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p765-770.
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System Factors for Design of Wood Structural Assemblies, Bradford K. Douglas and Philip Line, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p798-

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X-ray Radiography of Fracture Flow and Matrix Imbibi-tion, Jeffery J. Roberts and Wunan Lin, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p89-91.

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Influence of the Yield Strength of Steel Fibres on the Toughness of Fibre Reinforced High Strength Concrete, Lucie Vandewalle, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p496-505.

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The System for the Hydrological Forecasting in Serbia, Bo-jan Palmar and Borjanka Palmar, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p716-717.

Intracrystalline Diffusion in Clinoptilolite: Implications for Radionuclide Isolation, Sarah K. Roberts, Brian E. Viani and Douglas Phinney, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p48-49.

Zinc

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Land-Use Policy Decisions Based on a Probabilistic Assessment of Landslide and Debris Flow Risks after the 1991 Oakland Hills Firestorm, Scott R. Huntsman and Ram B. Kulkarni, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p535-549.

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Seismic Microzonation and Development of an Earthquake Damage Scenario for Istanbul, Turkey, Mustafa Erdik and Jennifer N. Swift-Avci, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p341-342.

Zonification of Areas with Inundation Risk by Means of Mathematical Modeling in the Rosario Region, Argentina, G. A. Riccardi, E. D. Zimmermann and R. A. Navarro, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3704.

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Calculation of Stress Intensity Factors Using Finite Elements and the Compliance Approach, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), with Sameer A. Hamoush, p154-159

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see Wu, Tien H., (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p76-90

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Active Vibration Control of Machine Foundation, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Hasan Al-Sanad, p566-573

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Three-Fluid Phase Flow in Heterogeneous Subsurface: Perturbation and Numerical Analyses, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Jagath J. Kaluarachchi, p513-525

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Managing Construction Risks, AE Mar. 96, p3-10

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Simulation of Catchment Response Using RC Network, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with W. T. Dickinson and R. P. Rudra, p3381-3386

Fracture Mechanics Modeling with Fracture Surface Image Data, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with David A. Lange, p741-750

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"Marriage" of Fiber Optic and Wireless Communications Supporting Intelligent Transportation Systems, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p248-255

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Estimating Trenching Productivity Using Neural Networks, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Brenda McCabe and Wissam Saadi, p220-226

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Anelastic Strain Recovery of Deep Cores with Presence of Pore Pressure, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with A. H-D. Cheng, p935-938

see Bai, M., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p48-51

see Cui, L., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p471-474

Aboutaha, Riyad S.

Repair and Retrofit of Reinforced Concrete Columns, (Nat-ural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p313-314

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see McCullouch, Bob, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Abraham, John E.

Restaurants and Roadways: Food for Thought, CE Apr. 96,

Gain-Scheduled Adaptive Control of a Hybrid Structure, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with James R. Morgan and Alexander G. Parlos, p260-261

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Roth, ed., 1996), p1113-1133

Abrams, Daniel P.
Rehabilitation of Masonry Buildings per the ATC-33
Guidelines, (Building an International Community of
Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1131-1138

The Return of Masonry as a Structural Material, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p1-12

E. Schultz, ed. and S. L. McCabe, ed., 1990, p1-12. see Costley, Andrew C., (Worldwide Advances in Structur-al Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p135-140 see Tena-Colunga, Arturo, ST Apr. 96, p439-445

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see Pennell, Kurt D., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p221-232

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Abrishami, Homayoun H. Analysis of Bond Stress Distributions in Pullout Specimens, with Denis Mitchell, ST Mar. 96, p255-261

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la, ed., 1996), p340-345

see Wittler, R. J., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3829-3834

Abt, Steven

Hydraulic Structures by P. Novak, A. I. B. Moffat, C. Nalluri, and R. Narayanan, HY Nov. 96, p674

Scour at Culvert Outlets: Considerations Present and Future, (North American Water and Environment Congress de Destructive Water, Chenchayya Bathala, ed., 1996), with Phillip L. Thompson, p3927-3931 see Dudley, Syndi J., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3656-3661

Abudayyeh, Osama A Multi-Media Information System for Construction Delay Management, (Computing in Civil Engineering, Jorg Vanegas, ed. and Paul Chinowsky, ed., 1996), p593-599

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Computer Modelling for a Discrete Particle System, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p731-734

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Wilstein, Charles G. Frobabilistic Analysis of Tendon Loads for a TLP in Deep Water, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Robert B. Gilbert, p162-165

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Adachi, Toshihisa

Modeling Aspects Associated with Time Dependent Be-havior of Soils, (Measuring and Modeling Time Depend-ent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), with Fusao Oka and Mamoru Mimura, p61-95

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Performance of a Passively Refrigerated Gravel Pad Foundation in Fairbanks, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p13-22

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Pipeline Crossings and the Corps Regulatory Process in New England, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with David H. Killoy, p409-417

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Adminsk, Andrey Adminsk, Andrey Adminsk, Andrey Multicriteria Traffic Control with Video Feedback, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p620-627

Leaching of PCBs from a NAPL Entrapped in Porous Media, (Non-Aqueous Phase Liquids (NAPLs) in Subsur-Media, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Richard G. Luthy and David A. Dzombak, p649-660 see Mercer, James W., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996),

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Simulation of Unsaturated Zone Virus Transport Adjacent to Municipal Wells, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with M. A. Tabidian, p1742-1747

see Tabidian, M. Ali, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3332-3337

see Wittler, R. J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p340-345

see Wittler, R. J., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3829-3834

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Moisture Conditions and Control in Buildings in Fairbanks, Alaska, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p372-383

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Optimization and Simulation in Design and Operation of Reservoirs, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with F. Peyrovian, p1956-1961

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Optimum Storage Reallocation and Gate Operation in Multipurpose Reservoirs, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Hamid MoradKhani, p1962-

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Large River Diversion Optimization Considering the Un-certainties Involved, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with A. Afshar and H. Parvazian, p4347-4352

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Hybrid Control of Seismic Response Using Nonlinear Output Feedback, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with J. N. Yang, p339-349

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Optimal Polynomial Control of a Duffing System, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Jann N. Yang, p890-893

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Stability of Actively Controlled Civil Engineering Structures with Actuator Saturation, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Ashish Das and Jann N. Yang, p756-759

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ater-Price Effect on Residential and Apartment Low-Flow Fixtures, with R. Bruce Billings, WR Jan./Feb. 96, p20-23

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Behavior of Two Long-Span High Strength Concrete Pre-stressed Bridge Girders, (Worldwide Advances in Struc-nural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Carol K. Shield and Catherine W. French, p141-152

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Parametric Estimating: An Object-Oriented Approach, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Praveen K. Ommi, p254-260

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Statistical Distributions and Natural Hydrograph, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p292-297

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ed. and Ryszard B. Zeidler, ed., 1996), p1024-1034

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see Dallaire, Éric, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p555-563

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see Ghumman, A. R., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3794-3799

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Akin, David L.
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The Resonance Drives with Adaptive Control, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p947-950

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Condition Assessment for Bridge Management, with Daniel N. Farhey, David L. Brown, Vikram Dalal, Arthur J. Helmicki, Victor J. Hunt and Stuart J. Shelley, IS Sept.

Issues Related to Intelligent Bridge Monitoring, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Arthur J. Helmicki and Victor J. Hunt, p750-757

On Structural Identification of Constructed Facilities, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with James T. P. Yao, p651-658

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Detection of ASR in PCC Using Ultrasonic Waves, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with I. L. Al-Qadi and M. R. Hajj, p897-904

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Earthquake Response of Structures by Structural Mixture Theory, with O. M. Kirkely and Gregory Gillette, ST Oct. 96, p1198-1207

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Appropriate Technology for Sustainable Development, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3247-3252

Education and Research Needs for Appropriate Technology, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2760-2765

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Implications Derived from Recent Research in Mexico on Confined Masonry Structures, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p82-92

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Optimal Fitting of a Model to Observations of Sediment Concentration in the Irish Sea, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p416-428

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An-Hall, M. Manucher
An Evaluation of Drainage Conditions in the San Joaquin
Valley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,
1996), with George Nishimura, pl77-182

Ales, Joseph M., Jr.

Ales, Joseph M., Jr. Connection of a Steel Cap Girder to a Concrete Pier, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Joseph A. Yura, p475-482

Alesch, Daniel I.

Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p367-368

A Two-Level Approach for the Control of Freeways, (Ap-Pilications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with A. Di Febbraro and A. Ferrara, p429-433

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see Al-Tabtabai, Hashem, (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p227-232

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Gator Communicator Design of a Hand Held Digital Data Mapper, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p1052-1057

Alfogaha, Arshad

Alfoqana, Arshad Sensitivity Study of Waste Rollover Using Probabilistic Fi-nite Element Analysis, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), with William Cofer and M. A. Khaleel, p914-917

Al-Foqaha'a, Arshad A.

al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p342-345

Alford, George

Biological Clogging and Rehabilitation of Drains and Well Systems and the Implications on Groundwater Quality, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with D. Roy Cullimore, p34-39

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Al-Hartiny, A. S., Reliability Analysis of Masonry Walls, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with D. M. Frangopol, p338-341

Al-Harthy, Ali

Ar-Harthy, An. See Sivakugan, Nagaratnam, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p938-941

Al-Harthy, Ali S.

see Basma, Adnan A., (*Probabilistic Mechanics & Struc-*tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p788-791

Al-Hussaini, T. M. Active Isolation of Machine Foundations by In-Filled Trench Barriers, with S. Ahmad, GT Apr. 96, p288-294 see Ahmad, S., GT June 96, p454-461

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see Hoque, Bilquis A., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3916

Allal, Chafik

Design Tools for Public Cars Transportation Systems, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with François Dumontet and Michel Parent, p6-18

Allard, Michel

see Fortier, Richard, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p459-470

Allen, Aaron

see Puppala, Anand J., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p559-562

Allen, Carlton C.

Volcanic Glass -- Oxygen Ore on the Moon, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with John M. Woodell and David S. McKay, p756-761

see McKay, David S., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996),

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see McKay, David S., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p673-679

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see Harik, I. E., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p464-471
see Whitney, M. W., BE May 96, p47-58

Allen, Don R.

Sims Bayou: The Public Speaks - The Corps Listens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3314-3316.

Allen, J. H.

see Cao, L., ST Jan. 96, p11-19

CERCLA Liability and the Environmental Professional— An Overview of Judicial Developments, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), 935-41

Allen, Kerry B.
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Allen, M. E.

How through Vertical Barrier Screens - A Numerical Model, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with M. P. Cherian and L. J. Weber, pl111-1116

Allen, R. B.

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Assessing integrity of weatine Data for Receivence Evapor transpiration Estimation, IR Mar/Apr. 96, p97-106 Nongrowing Season Evaporation in Northern Utah, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p225-230

water Conservation Definitions From a Hydrologic View-point, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Charles Burt, A. J. Clemmens and L. S. Willardson, p899-904

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see Boursier, Patrice, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

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Almand, Kathleen H.

Evaluating Innovative Concrete Technologies through the HITEC Process: the JMI Channel Bridge, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p161-166

Almánzar, Leonel I.

see Godoy, Luis A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1155-1158

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see Lopez-Anido, Roberto, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p914-923

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see Al-Akhras, N. M., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p897-904

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Field Evaluation of GEOSYNTHETICALLY STABI-LIZED PAVEMENTS, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), with Thomas L. Brandon and Salman A. Bhutta, 9328-337 see Gahvari, Fariborz, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p133-143

see Haddad, Rami H., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1139-1149

Alsaffar, Adna

Assallar, Admin Design Modification of Water Supply Intakes in Mountainous Regions, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Yifan Zheng and Karim Khalifa, p4046-4051

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see GangaRao, Hota V. S., (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p394-399

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Sensitivity Studies of Unsaturated Groundwater Flow Modeling for Groundwater Travel Time Calculations at Yucca Mountain, Nevada, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Clifford K. Ho, Bill W. Arnold and Sean A. McKenna, p190-192

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A Flexible Machine-Vision System for Traffic Monitoring Applications, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p171-175 Alwan, Jamil M.

Matrix First Cracking Strength in Continuous Fiber Cement Composites, (Worldwide Advances in Structural Con-crete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Antoine E. Naaman, p474-483

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see Gates, Timothy K., HY Nov. 96, p652-661

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see Ariaratnam, S. T., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p542-545

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Griffith Energy Balance Model for Crack-Growth Predic-tion in Reinforced Concrete, EM July 96, p683-689 err: EM Sept. 96, p919

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Enhancing AVM Systems by Operator Support DRS Func-tionalities, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with M. Boero and P. Sassoli, p413-417

Urban Control Services Integration the Innovative Compo-nents of THERMIE-JUPITER Architecture in Florence, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), with M. Boero, L. Niccolai, M. Romanazzo and M. Turrini, p515-519

see Giannattasio, P., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p500-504

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Local Damage Assessment of Metal Barriers under Turbine Missile Impacts, with Amir Mirmiran and Thomas A. Walter, ST Jan. 96, p99-108

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see Arockiasamy, M., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1050-1053

American Society of Civil Engineers, American Water Works Association, and the U.S. Environmental Protection Agency

Management of Water Treatment Plant Residuals, AWWA Technology Transfer Handbook U.S. EPA/625/R-95/008 (M&R No. 88), 1996, 0-7844-0181-0, 315pp. American Society of Civil Engineers

Minimum Design Loads for Buildings and Other Structures, Revision of ANSI/ASCE 7-93 (St No. 95-007), 1996, 0-7844-0092-X, 220pp.

American Society of Civil Engineers and American Forest & Paper Association

Standard for Load and Resistance Factor Design (LRFD) for Engineered Wood Construction (St No. 95-016), 1996, 0-7844-0041-5, 125pp.

Amick, James P.

Coping with EPA's Storm Water Permit for Hazardous Waste Facilities, Industrial Landfills, Wastewater Treatment Plants, and Recyclers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2631-2635

Reconstruction of Bergstrom Air Force Base to Austin-Bergstrom International Airport, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), with John Almond, p1-11

Investigation into the Possibilities of Using Bristol Channel Models for Tidal Predictions, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with R. A. Flather, p41-52

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disc. (of System Identification and Its Application to Esti-mating Soil Properties, by Steven Glaser, GT July 95, p553-560), GT Oct. 96, p868

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Utilizing Information Technologies to Better Educate Engineers of Tomorrow, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p965-971

Aminti, Pierluigi

Multiscale Shore Variability at Two Coasts, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Zbigniew Pruszak and Ryszard B. Zeidler, p617-628

see Sheppard, Marsha I., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p240-243

see Papagiannakis, A. T., TE Mar./Apr. 96, p140-145

Amparano, Felix E.

see Xi, Yunping. (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1185-1188

Computational Enclosures of Lyapunov Exponents, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with W. Wedig, p820-823

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Use of a National Loss Estimation Methodology for Risk Management, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Scott Lawson, Jawhar Bouabid and Mourad Bouhafs, p.249-

Anand, Subhash C.

Prestress Loss Due to Creep in Post-Tensioned Clay Ma-Masonry, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Naresh Bhatia, p49-60

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Fabric Anisotropy and Its Relationship to Macroscopic Constitutive Behavior of Clays, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p877-880

Macroscopic Constitutive Behavior of Clays from Microscopic Considerations, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with J. Chen, p709-712

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Ananthakrishnan, P.

Radiation Hydrodynamics of a Slightly-Submerged Body, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Anckner, William H.

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Anckner, William H., Jr.

Relating the Wettability of Contaminated Sands to NAPL Composition, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Susan E. Powers, p502-512

Anderberg, Yngve

European Experiences in Fire Design of Structural Steel, Building an International Community of Structural Steet, gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p357-364

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Anderson, D. R.

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Anderson, J. C.

Three Repair/Retrofit Procedures for Welded Moment Frames, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Z. Yin and X. Duan, p768-771

Anderson, Jamie D.

Modeling Combined Stresses on Aquatic Ecosystems, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Ian P. King and Gerald T. Orlob, p3998-4003

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Anderson, Michael L.

Analyzing Drought with a Simplified Climate Model, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with M. Levent Kavvas, p1075-1080

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Laboratory and Field Electrochemical Monitoring Techniques of Reinforcement Corrosion, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with C. Alonso, p1501

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Building Codes and Natural Disasters - 2 Case Studies, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p758-764

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Andres, R. J.
Automobile Emissions Under Arctic Conditions Using Un-leaded and 10 Percent Ethanol Admixed Gasolines, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), with J. D. Goldbach and F. L. Williams, p792-803

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Estimating Transverse Strength of Masonry Infills, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Joseph Uzarski, p101-111

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Angulo, Mauricio

Groundwater Monitoring System Design Using a Probabi-listic Observation Method for Site Characterization, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Wilson H. Tang, p797-812

see Tang, Wilson H., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1195-1209

Anketell, Surendra

Sewer Crossing of Creek with Bridge Widening, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p275-281

Ankireddi, Seshasayee Simple ATMD Control Methodology for Tall Buildings Subject to Wind Loads, with Henry T. Y. Yang, ST Jan. 96, p83-91 see Fur, Lih-Shing, ST Aug. 96, p948-957

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Field-Scale Application of In-Situ Cosolvent Flushing:
Evaluation Approach, (Non-Aqueous Phase Liquids
(NAPLs) in Subsurface Environment: Assessment and
Remediation, Lakshmi N. Reddi, ed., 1996), with P. S. C.
Rao, R. K. Sillan, K. Hatfield, W. D. Graham, A. L.
Wood and C. G. Enfield, p212-220

Annandale, George W.

Impacts of Reservoir Sedimentation on Decommissioning of Dams, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2114-2119

Scour in Erodible Rock I: The Erodibility Index, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Steven P. Smith, p1342-1348

Scour Power, with Steven P. Smith, Robert Nairns and J. Sterling Jones, CE July 96, p58-60
see Smith, Steven P., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1349-1357

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Posttesting Correction Procedure for Membrane Compli-ance Effects on Pore Pressure, with Ayfer Erken, GT Jan. 96, p27-38

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see Borovetz, Harvey, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p35

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Connections of Large Steerable Antennas, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Mehdi S. Zarghamee, p505-509 see Zarghamee, Mehdi S., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p147-153

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Antle, John M.

see Hotchkiss, Rollin H., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3399-3404

Antoniades, Charalambos N.

Single-Station Incident Detection Algorithm (SSID) for Sparsely Instrumented Freeway Sites, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Yorgos J. Stephanedes, p218-221

Antorena, Juan M.

Time Effects on Pile Skin Resistance, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with G. Thomas McDaniel, p582-589

Antsaklis, P. J.

see Burton, Scott A., EM Sept. 96, p897-906

Anumba, Chimay J.

A Conceptual Model for Construction Clients' Requirements Processing. (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Nosa F. O. Evbuomwan, p431-437

A System for the Institution of Effective Repairs to Concrete Structures, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with John Bowron, p160-166

see Evbuomwan, Nosa F. O., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p424-430

Anwar, Habib D.

Velocity Profile in Shallow Coastal Waters, HY Apr. 96, p220-223

Anyika, Azuka Benjamin Game Model Approach to Multi-Purpose/Multi-Objective ame Model Approach to Multi-Purpose/Multi-Objective Water Resources Related Environmental Protection Pro-ject Planning and Management in Developing Nations: A Nigerian Example, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1057-1062

Aoki, Tomoyuki Measurement of the Undrained Pore Pressure Response of a Shale in Triaxial Tests, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Chee P. Tan, Rory H. T. Cox and William E. Bamford, p1086-1089

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see Arcieri, Franco, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p315-319

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see White, D. C., (North American Water and Environment
Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1645-1650

Apted, M. J.

see Zhou, Wei, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p276-278

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see Yu, Burt, (North American Water and Environment Congress & Destructive Water, Chenchavva Bathala, ed., 1996), p1789-1795

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Analytical Solutions for Two-Dimensional Transport Equation with Time-Dependent Dispersion Coefficients, with Boshu Liao, HE Jan. 96, p20-32

Arango, Ignacio
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Arboteaa, Gustavo

Effects of Approach Flow Conditions on Pump Sump Design, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Mutasem El-Fadel, p376-381

Effects of Approach Flow Conditions on Pump Sump Design, with Mutasem El-Fadel, HY Sept. 96, p489-494

Archer, Graham

A New Software Architecture for Finite Element Analysis, New Software Architecture for Finite Element Analysis, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Christopher Thewalt and Gregory L. Fenves, p683-689

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see Steele, John P. H., (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p262-275

HERMES: An Integrated Environment for the Design of On-Line Decision Support Systems, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Ettore Apolloni, p315-319

Arcieri, William

see Wood, Craig A., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p982-987

Arcieri, William R.

The Use of Hydrologic Budget Techniques in Assessing Site Suitability for Wetland Creation, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3956-3961

see Prinos, P., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582

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see Volta, E., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p243-247

Ardinon, Emmanuel
Implementation of Variance Reduction Techniques Using
Monte Carlo Stratified Sampling in the COMPROMIS
Code Version 2, (Probabilistic Mechanics & Structural
Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Patrice Pitner and Bernard Lapeyre, p692-695

Arditi, David A.

Life-Cycle Costing in Municipal Construction Projects, with Hany M. Messiha, IS Mar. 96, p5-14

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Multiphase Flow in Deforming Porous Media by the Finite Element Method, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Emir J. Macari, p420-425

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see Powell, Mark D., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p289-290

Arguello, Emilia K.

Studying the Ozone Layer from Space, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1259-1261

Ariaratnam, S. T.

Dynamic Stability of Viscoelastic Structures under Stochastic Loading, (Probabilistic Mechanics & Structural

emissic Louding, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with G. Amaniampong, p542-545 Role of Moment Exponent in Stochastic Bifurcation, (Prob-abilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p554-557

Uniqueness in Analysis of Semirigid Frames, with L. Xu, ST Jan. 96, p110-111

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see Mobasher, B., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1677-1686

Armaghani, Jamshid M.

see Chini, S. Abdol, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p154-162

Armanios, Erian A.

Finite-Displacement Analysis of Laminated Composite Strips with Extension-Twist Coupling, with Andrew Makeev and David Hooke, AS July 96, p80-91

An Analysis of Strong-Discontinuities in Inelastic Solids with Applications to the Finite Element Simulation of Strain Localization Problems, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with K. Garikipati, pl 36-

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see Theno, Steven, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p424-435

Arnold, B. W.

see Barnard, R. W., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p193-195

Arnold, Bill W.

Changes in Water Table Elevation at Yucca Mountain in Response to Seismic Events, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p102-104

Numerical Modeling for Saturated-Zone Groundwater Travel Time Analysis at Yucca Mountain, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with George E. Barr, p187-189

see Altman, Susan J., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p190-192

see Eaton, Roger R., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p76-78

see Ho, Clifford K., (High Level Radioactive Waste Management, Technical Program Committee, 1996), agement, p184-186

Arnold, James Andrew

Data Exchange: File Transfer, Transaction Processing and Application Interoperability, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Paul Teicholz, p438-444

A Knowledge Based Information Model for Components in the Process Industry, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Paul Teicholz, p586-592

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see Hotchkiss, Rollin H., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3399-3404

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Arnoush, Wafic M., P.E. see Crumit, Max D., P.E., CE Aug. 96, p40-43

Arockiasamy, M. Concrete Beams and Slabs Retrofitted with CFRP Lam-inates, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Ahmed Amer and M. Shahawy, p776-779

Long Term Behavior of Concrete Columns with CFRP, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Ahmed Amer, S. Chidambaram and M. Shahawy, p1050-1053

see Shahawy, Mohsen A., BE May 96, p76-86 see Shahawy, Mohsen A., BE May 96, p87-97

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see Kocer, Fatma Y., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p111-122
see Kocer, Fatma Y., ST July 96, p804-814
see Kocer, Fatma Y., ST Nov. 96, p1347-1356

Fundamental Modeling of Chloride Diffusion in Concrete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with B. N. Popov and R. E. White, p203-212

see Leaf, Robert T., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p812-817

Arrage, A. A.
see White, D. C., (North American Water and Environment
Congress & Destructive Water, Chenchayya Batha-

see Lowe, Philip O., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1870-1874

Artymiak, Piotr see Bukowski, Lech, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p780-783

Artz, Ira Mark

Picacho Reservoir Enhancement Study for Water Recharge, Reparian Enhancement, and Water-Based Recreation Purposes, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1413-1418

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see de Vries, Marten J., (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p64-67

Asabina, E. A.

Asaotins, E. A., Estimation of High Spring Floods Causing Inundation in Non-Studied Rivers of the West Siberian Plain, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3702-3703

LP Type Dynamic On-Ramp Traffic Control Model for Urban Expressway, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Asano, Takashi

Environmental Engineering Forum, with George Tchobano-glous, EE Aug. 95, p548 disc: Daniel A. Okun, EE May 96, p446-447

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ASCE Aerospace Division Task Committee on Wind Tunnel Studies of Buildings and Structures Wind-Tunnel Studies of Buildings and Structures, AS Jan.

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ASCE Task Committee on Design Criteria for Compos-ite Structures in Steel and Concrete

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ASCE Task Committee on Hydraulic Engineering Re-search Advocacy

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ASCE Task Committee on Modeling of Oil Spills of the Water Resources Engineering Division State-of-the-Art Review of Modeling Transport and Fate of Oil Spills, HY Nov. 96, p594-609

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disc. (of Seismic Shear Strength of Reinforced Concrete Columns, by M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329) with Jack P. Moehle, ST Apr. 96, p461-463

Ashida, Fumihiro

Temperature Determination for a Contacting Body Based on an Investe Piezothermoelastic Problem, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Theodore R. Tauchert, p784-787

At-A-Station Temporal Variations in Flow Under Drought and Flood Conditions and Associated Sediment Problems, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1881-1886

Watershed Characteristics and Hydrological Parameters vs. Sediment Yield - Northern Regions of Pakistan, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1669-1674

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U.S. Light-Water Reactor Spent Fuel Inventory—Fissile
Distribution, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with
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Effectiveness Factor of Concrete in Continuous Deep
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Askew, A. J

Water in the International Decade for Natural Disaster Reduction, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl

Aspnes, John Cold-Related Electric Power System Considerations, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with James Cote, p436-

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Effects of Faulty Design and Construction on Building Maintenance, with Abdul-Mohsen Al-Hammad and Mansoor Al-Shihah, CF Nov. 96, p171-174

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Hydraulic Studies for a Large Wetland, (North American
Water and Environment Congress & Destructive Water,
Chenchayya Bathala, ed., 1996), with Phillip R. Mineart
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Astarita, Vittorio

Astarita, Vittorio
The Analysis of Freeway Reconstruction Impacts on Travellers, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996, p460-464
Flow Propagation Description in Dynamic Network Loading Models, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p599-603

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Design of Microtunneling and Jacking Pipe, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996),

Microtunneling Database for the USA and Canada From 1984 to 1995, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), with Paul Hadala, p332-339

Recreational Impoundments Retrofit of Existing and Design of New Facilities, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with Michael P. Rudinica, p2945-2950

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Safety Assessment of a Robotic System Handling Nuclear Material, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with David G. Robinson, p255-

Atkins, Blake L.

US/Mexico Border Drinking Water Study, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2120-2125

Atkins, Joel E.

Impacts of Cathodic Protection on Waste Package Performance, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Joon H. Lee and Robert W. Andrews, p459-461

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Important Parameters in the Performance of a Potential Repository at Yucca Mountain (TSPA-1995), (High Level Radioactive Waste Management, Technical Program Committee, 1996), with S. David Sevougian, Joon H. Lee, Robert W. Andrews and Jerry A. McNeish, p291-292

Atkinson, C.

Cracks in Poroelastic Materials with a Highly Anisotropic Fluid Response, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with R. V. Craster, p212-215

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see Cheng, Chen-Yu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3746-3751

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see Frizell, K. Warren, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p316-321

Atkinson, T.

see Reaveley, L. D., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1123-1130

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Design—Cornerstone of Your Career: Advice for Young Engineers, El July 94, p241-245 disc: Ananda D. Moonasingha, El July 96, p135

Statistical Characteristics of Strength and Load Random Adsictant Characteristics of Stringth and Dook Raindoor Variables of Ship Structures, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), with Ibrahim Assakkaf and Bilal M. Ayyub, p106-109

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see Broad, Richard, III, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996),

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see Pseiner, Klaus, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p145-154

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see Modaressi, Hormoz, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1082-1085

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see Lee, Jonah H., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p828-836

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see Pope, Richard, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p75-80

Aubrey, David G.

see Ramsey, John S., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Auchard, B.

Effect of Pump-Ins on California Aqueduct Water Quality, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with C. Edwards, M. Morris, J. R. Phillips, L. A. Soo and Sun Liang, p4004-4009

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Austin, Deron N.

Protecting Dredged Material Containment Levees Along the Houston Ship Channel, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Marc S. Theisen, p3121-3128

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see Freeman, Delma C., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p385-391

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Stochastic Finite Element Method in Geomechanics, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Amine Bouayed, Sandra Orlandi and Arturo López, p1239-1253

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Development and Implementation of a Capital Improverement Program for a Small Water Utility, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Jorge Gar-cia, Louis Grijalva and Antonia M. Romero, p3236-5240

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Supervise, Inspect, or Observe? The Structural Engineer's Role in Construction, SC Aug. 96, p79-80

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Design Guidelines for UV Disinfection Facilities, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Jeff Kuo and Jamal Awad, p2999-3004

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Bathala, ed., 1996), p1009-1014

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Streamflow Forecasting for Han River Basin, Korea, with Juan B. Valdés and Pedro J. Restrepo, WR Sept/Oct. 94, p651-673

disc: Yang-Su Kim, Yong N. Yoon and Hyoseop Woo, WR May/June 96, p228 clo: WR May/June 96, p228-229

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Efficient Pump Representation for Fixed-Grid MOC in
Pipeline Systems, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), with Bryan W. Karney, p370-375 Modeling Low Velocity/High Dispersion Flow in Water Distribution Systems, with Bryan W. Karney, WR May/ June 96, p218-221

Ayala, L.
The Analysis of the Failure of the Minte Stream Culvert, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with E. Brown, p3018

Ayars, J. E. Shallow Ground Water Management with a Modified Subsurface Drainage System, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with R. A. Schoneman, F. Dale and P. Shouse, p.2130-2135

Ayars, James E.

Alternatives for Managing Shallow Ground Water in Arid Irrigated Areas, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p183-188

Impact of Agricultural Water Conservation on Water Quality in Arid Irrigated Areas, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Kenneth K. Tanji and Thomas J. Trout, p905-910

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see Shahalam, A. B., EE Dec. 96, p1085-1093

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see Wirsching, P. H., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p114-117

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Loading Cycles for Fatigue Reliability Assessment of Miter Gates at Navigation Locks on the Upper Mississippi River, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p854-857

1990, po.24-0.7 Probability Based Design Requirements for Unstiffened Panels in Ship Structures, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed. 1996), with Gregory J. White, Alaa E. Mansour and Paul H. Wirsching, p102-105
Paliability. Accessment Mathodology for Stiding Stability.

Reliability Assessment Methodology for Sliding Stability of Gravity Structures, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Ru-Jen Chao, p858-861

Structural Strength of Bridge Decks Reinforced with Weld-ed Wire Fabric, with Naji Al-Mutairi and Peter Chang, ST Sept. 96, p989-997

Uncertainty Measures in Reliability Assessment of Ship Structures, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Kwan-Ling Lai, p621-626

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see Mansour, Alaa E., (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p98-101

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Error Estimate in Einstein's Suspended Sediment Load Method, HY May 96, p282-285

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Non-Destructive Method for Prestress Evaluation, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Armin B. Mehrabi, Bruce Keeler and John Rohde, p900-907

Computation of Shallow Recirculating Flow Dominated by Friction, with M. Nassiri and V. H. Chu, HY July 96, p367-372

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Fluidized Bed Denitrification of Secondary Effluent During Wastewater Reclamation in Southern California, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Kapal Madireddi and Michael K. Stenstrom, p788-793

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see Massarelli, Peter J., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p450-453

Babic, Marijan

Theory and Simulations of Relaxation and Cyclic Granular Flows, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with William J. Bocchieri, p108-111

Performance of Baffle-Sluice Modules with Changed Mod-ule Dimensions, with P. K. Mishra and T. Satyanarayana, IR Sept./Oct. 96, p310-313

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A Decision Making Approach for Stormwater Management Measures—A Case Example in the City of Waukesha, Wisconsin, (North American Water and Environmen Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3981-3986

lachman, Robert

Major New Seismic Provisions Proposed for the 1997 UBC, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p333-334

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Thermohaline Buoyancy Effects on Turbulent Flows, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p454-457

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Baddour, Raouf E.

see Zhang, Hua, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p919-922

Badger, Thomas C.
Blasting Densifies Volcanic Debris (Available only in Focus on Geo/Environmental Special Issue), CE Mar. 96, p8A-12A

Radiei, Peyman

Badlet, reyman Physical and Numerical Study of Wave Induced Currents in Wave Basins of Various Sizes, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with J. William Kamphuis, p377-388

Badiey, M.

Statistical Analyses of Acoustical Wave Velocity in Porous Seafloor, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with A. H-D. Cheng and Y. Mu, p800-803

Modeling the Dynamic Nonlinear Response of Single Piles, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Nicos Makris, p1091-1098

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see Williams, Mark, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1009-1014

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Advanced Oxidation Processes for Removal of Natural Organics and Pesticides from Drinking Water, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Mas-soud Pirbazari, p3010-3016

see Man, Malcolm K., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1209-1214

see Ravindran, Varadarajan, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1367-1372

see Rowe, R. Kerry, GT Dec. 96, p965-975

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Practical Geoenvironmental Visualization, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), with J. A. Zarge and J. Shapiro, p56-62

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Bahner, Chris D.

Hydraulic Model Study of the Prado Dam Spillway, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3800-3805

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Parametric Thermal Evaluations of Waste Package Em-placement, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Thomas W. Doering, p445-447 Bahr, Jean M.

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Some Thoughts on Thermoporoelastic Coupling, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Y. Abousleiman and J.-C. Roegiers, p48-51

Contaminant Transport in Nonisothermal Fractured Porous Media, with Jean-Claude Roegiers and Hilary I. Inyang, EE May 96, p416-423

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Development of a Robotic Bridge Painting System, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Leonhard E. Bernold, p185-191

Bailey, Simon F.

Bailey, Simon F.
Traffic Action Effect Reduction Factors, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Rolf Bez, p22-

Baird, Drew C.

see Samad, Mohammed A., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2288-2293

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Effect of Welding on a High-Density Polyethylene Liner, with Michael E. Barber, MT May 96, p94-100 see Chunduru, Surya, MT Nov. 96, p201-206

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The Taller the Deeper (Available only in the Geo/
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Review of Factors Affecting In Situ Air Sparging, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Craig H. Benson, p292-310

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The Importance of Dissemination and Instruction in Hurricane Warnings, (Natural Disaster Reduction, George W Housner, ed. and Riley M. Chung, ed., 1997), p391-392

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see Nickerson, David A., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1379-1386

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see Bertz, Michael, (Computing in Civil Engineering, Jorge Vanegas, ed., and Paul Chinowsky, ed., 1996). p348-354

see Boyd, Martin C., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p466-472

Baker, T. H. W.

Comparison of Electromagnetic and Other Surveys to Lo-cate Extensive Water Main Corrosion, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with S. E. McDonald and R. J. H. Brousseau, p829-836

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Use of Fibers to Improve Cracking Characteristics of Concrete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p183-192

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Distribution of Reynolds Stress above a Packed Bed in Open Channel Flow, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Clinton Dancey, Thanais Papanicolaou and Panos Diplas, p665-668

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Nine-Component Vertical Seismic Profiling at Yucca Mountain, Nevada, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Cemal Erdemir, R. W. Spengler and W. Clay Hunter, p155-156

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Surface Reactivity of High Level Waste Matrices Characterized by Radiometric Emanation Method, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Zdeněk Málek and A. Clearfield, p474-476

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see Elkouh, Nabil, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p297-300

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Reliability and Restoration of Water Supply Systems Fol-lowing Earthquakes, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p203-204

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The Financial-Economic Evaluation of ATT Systems in Road Freight Transport, (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p465-469

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see Aoki, Tomoyuki, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1086-1089

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see Zhang, Xiao, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remedia-tion, Lakshmi N. Reddi, ed., 1996), p175-186

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Performance of San Fernando Dams During 1994 North-ridge Earthquake, with C. A. Davis, GT July 96, p554-

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Experiences in Cleaning Up the Influence of Oil Spill on the Water Bodies, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with N. A. Rubanova and I. M. Saipulaev, p2534

The Use of Monitoring of Russian Water Objects for the Decrease of Disaster Consequences, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with G. M. Ostrovski, p1341

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see Ettema, Robert, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p251-256

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Models for Estimating Core-Cycle Rate of Penetration at Yucca Mountain, Nevada, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Dale D. Daffern, p468-470

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Shakedown Tests of One-Third-Scale Composite Bridge, with P. M. Bergson, C. E. French, R. T. Leon, T. V. Galambos and F. W. Klaiber, BE Feb. 96, p2-9

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Evaluation of Groundwater Travel-Time Calculations for Yucca Mountain, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with S. J. Altman, B. W. Arnold, C. K. Ho and S. A. McKenna, p193-195

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The Reliability Analysis of a Major Dam Project, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with D. Majors, Y. Moriwaki, R. Kulkarni and R. Davidson, p1367-1382

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see Klosky, J. Ledlie, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p903-911

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Dissolution of Lead Paint in Aqueous Solutions, with Allen P. Davis, EE July 96, p663-666

Barnes, Robert W.

High Performance Highway Bridge Substructures, (World-wide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with John E. Breen, p176-187

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Wave Groups Approaching a Beach: Full Irrotational Flow Computations, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with D. H. Peregrine, p116-127

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see Quinn, Paul A., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), Dally, ed p293-304

Ecosystem Management in the State of Florida, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Jim Lewis, p3586-3591

Barnett, M. Brian

"Fifteen Years of Commercial Space in Retrospect", (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p162-169

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see Peck. ck, Timothy J., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996),

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Incorporation of Time-Intensity and Spatial Variability Into Probable Maximum Precipitation (PMP) Estimates, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p64-65 The Predictability of Extreme Floods and the Role of the

Coupled Land-Atmosphere-Ocean System, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Rajat Bindlish, p229-230

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Barsoom, Joseph Determining Rehabilitated Sewer Flow Capacity, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p97-

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Analysis of Damped and Undamped Systems Using DFT, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with William F. Carroll, p951-954 Dynamic Effects from the Space Shuttle Liftoff, (Engineer-

ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with William F. Carroll, p1190-1196

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Fly Ash and Tire Chips for Highway Embankments, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with C. Vipulanandan and M. W. O'Neill, p593-602

Bashford, Howard H.

Small Business in the Construction Industry, SC Aug. 96. p71-73

Basma, Adnan A.

Reliability Based Design of Reinforced Earth Structures, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Ali S. Al-Harthy, p788-791

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see Kiremidjian, Anne, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p355-356

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see Webster, Todd S., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p571-576

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see Abarbanel, Jenine E., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996, p1069-1075

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see Ebert, W. L., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p399-

see Finn, P. A., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p390-

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Damage Analysis of a Water Distribution System Subject to Natural Hazards, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Matthew J. Cassaro and Michael A. Cassaro, p357-358

Bathala, Chenchayya

North American Water and Environment Congress & Destructive Water, CD-ROM (Windows version only), 1996, 0-7844-0166-7, 1340pp.

Bathala, Chenchayya T.

The Birth and Success of Orange County's Hydrology and Hydraulics Technical Group, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2259-2263

see Dawes, Thomas, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2378-2383

Bathurst, James C.

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see Lee, Jong Seh, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p887-896

Battaini, M.

Hysteretic Systems: Chaotic Region and Control, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with F. Casciaii and L. Faravelli, p499-502

Parameter Identification of a Hysteretic Structure, (Proba-

bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p430-433

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see Eldeberky, Y., (Coastal Dynamics '95, William R.
Dally, ed. and Ryszard B. Zeidler, ed., 1996),

Baudoin, P.

Radwaste Disposal in Granite—E.C. Everest Project, IPSN Contribution, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), with C. Serres, p168-169

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Simplified Transformation between NAD27 and NAD83 in Southeastern Wisconsin, with Earl F. Burkholder, SU Feb. 96, p26-39

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Verifying the Timing Requirements of Multiprocessor Control Systems, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p278-285
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nn, Duane D.

Baumann, Dawis D. S., (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p396-400

Baumann, Hanns U.

Ductile Masonry Construction in California, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p93-100

Baumgartner, Charles A

Returning Veteran, with William E. Beyer, CE Apr. 96, p68-71

Baumgartner, Eric

see Gonzalez-Galvan, Emilio, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p57-63

Characterization of Canal Operations under Ideal Anticipa-tory Control, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with A. J. Clemmens and T. S. Strelkoff, p1887-1892

see Dedrick, A. R., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3470-3475

Baxter, Sarah C.

Response of MMC Tubes with Internal Fiber Cracks, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Marek-Jerzy Pindera, p412-415

see Meyer, Christian, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p666-673

see Meyer, Christian, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1388-1397

Bayer, Veit

A Simulation Procedure for First Passage Problems of Non-linear Structures, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with Christian Bucher, p816-819

On Concept of Lateral Change of Acceleration, SU Aug. 96, p132-141

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see Rizzo, Paul C., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p127-128

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Analysis of Work-of-Fracture Method for Measuring Fracture Energy of Concrete, EM Feb. 96, p138-144

Cohesive Crack Model with Rate-Dependence and Viscoelasticity, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Yuan-Neng Li, p852-856

Compression Failure in Reinforced Concrete Columns and Compression ratiure in Reinforced Concrete Columns and Size Effect, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Yuyin Xiang, p443-451

Is No-Tension Design of Concrete or Rock Structures Always Safe?—Fracture Analysis, ST Jan. 96, p2-10

Microplane Model for Concrete: I: Stress-Strain Boundaries and Finite Strain, with Yuyin Xiang and Pere C. Prat, EM Mar. 96, p245-254

Microplane Model for Concrete: II: Data Delocalization and Verification, with Yuyin Xiang, Mark D. Adley, Pere C. Prat and Stephen A. Akers, EM Mar. 96, p255-262

Softening-Induced Dynamic Localization Instability: Seismic Damage in Frames, with Milan Jirásek, EM Dec. 96.

Statistical Aspects of Size Effects in Quasibrittle Fracture, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Jaime Planas, p1179-1180

Zero-Brittleness Size-Effect Method for One-Size Fracture Test of Concrete, with Zhengzhi Li, EM May 96, p458-

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Magnitude-Distance Contours for Probabilistic Seismic Hazard Analysis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with S. R. Winterstein, T. C. Ude and C. A. Cornell, p202-205

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Roanoke Valley Flood Hazard Mitigation, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1976-1977

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see Hume, Terry M., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p975-986

Beard, Jeffrey L.

see Stephan, Dean E., CE Aug. 96, p26,28

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see Stokes, Grant, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p46-53

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Building Seismic Safety Council Project '97, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with R. Joe Hunt, p335-336

Flood Hazard Zonation in a Multihazard Environment, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Frank H. Thomas, p345-346

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see Papadimitriou, C., (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p574-577

Beck, James L.

Class of Masing Models for Plastic Hysteresis in Structures, (Building an International Community of Structur-al Engineers, S. K. Ghosh, ed. and Jamshid Mohamma-di, ed., 1996), with Paramsothy Jayakumar, p1083-1090

Structural Model Updating Using Expanded Modeshapes, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Michael W. Vanik, p152-155

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Road and Airfield Maintenance, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), with David C. Esch, p249-270

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Information Models for Integrated Building Design at the Preliminary Stage, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p246-252

see Nguyen, Tang Hung, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1020-1026

Bedford, Keith W.

see Kelley, John G. W., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Bedini, Daniele

Title: "Self-Constructing Space Systems", (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1032-1037

Bednarcyk, Brett A.

Inelastic Thermal Response of Gr/Cu with Nonuniform Fiber Distribution, with Marek-Jerzy Pindera, AS Oct.

Mechanical Response of Woven Graphite/Copper Composites, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Christopher C. Pauly and Marek-Jerzy Pindera, p628-631

Bednarouk, S. E. The Largest Water Reservoirs of Russia in Flood Control, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2538

Beech, M.

see Brown, P., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p13-19

Backwater Computation for Transcritical River Flows, HY Dec. 96, p745-748

Dec. 90, p140-1908
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NPC Integrator and Its Unconditional Stability for Response Analysis of Constrained Structures, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Xiaojian Liu, p1237-1244
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Behloul, Mouloud

Non Linear Computation of Fiber Reinforced Micro-Concrete Structures, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Régis Adeline and Gérard Bernier, p518-529

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Performance of Laminated Glass Units under Simulated Windborne Debris Impacts, with Paul A. Kremer, AE Sept. 96, p95-99

Seismic Performance of Architectural Glazing Systems, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p115-116

Behr-Andres, Christina

See Ogbe, Abigail A., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996, p780-791

Behrens, Jon

Moving from a Model to a Decision Support System: Salt River Project's Experience with a Reservoir Simulation System, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Yvonne Reinink, p4113-4118

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see Raman, Mahadev, CE June 96, p43-45

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Smart Composite Rebars with Enhanced Ductility, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with K. Chandrashekhara and S. E. Watkins, p788-791

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Average Stress-Strain Relationships of Rebars in RC Panels, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Amlan K. Sengupta, p743-746

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see Schwab, David J., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p298-312

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Comparison and Evaluation of Different Riprap Stability
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see Vagliasindi, Federico G. A., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p81-86
see Vagliasindi, Federico G. A., (North American Water

and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1801-1806

Beliveau, Yvan J.

How to Build a Consortium to Advance Computing and Technology Transfer to the Project, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p793-799

Real Time Positioning and Equipment Control for Hostile Environments, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p64-70

Bell, John P.

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Bell, Leonard

Wastewater System Design and Evaluation, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Troy Norris, p949-957

see Shoureshi, Rahmat A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p902-905

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A Log-Linear Model for Path Flow Estimation, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Caroline M. Shield, p695-699

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River Meander Zones and Floodplain Reconnection, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Peter C. Klingeman and Hiram W. Li, p2613-2618

Use of OMT in a Transport Human Engineering Prospect, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), with H. Tattegrain-Veste,

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Technologies in Transportation Engineering, Yorgos
J. Stephanedes, ed. and Francesco Filippi, ed., 1996),
p455-459 see Koutsopoulos, Haris N., (Applications of Advanced

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Consensus as the Measure of Sustainability, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Slobodan P. Simonovic, p4148-4153

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An Alternate Method for Prediction of the Macromechanical Properties of Laminated Composites, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Mark A. Kenamond and Keith S. Haberman, p1014-1017

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Effects of Ground Subsidence on a House, with E. C. Drumm, G. Lin, T. Triplet; and L. Powell, CF Nov. 96, p152-158

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Three-Dimensional Nonlinear Transient Dynamic Accident Analyses of Waste Packages, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Zekai Ceylan and Thomas W. Doering, p382-384

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Particulate Sampler to be Carried on a High Altitude Bal-loon, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Jared Whitaker, p1334-1338

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see Foose, Gary J., GT Sept. 96, p760-767 see Yesiller, Nazli, CR Mar. 96, p6-24

Benson, Lowell A.

Minnesota Intelligent Transportation Systems' Laboratory, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Dennis L. Foderberg and Yorgos Stephanedes, p525-534

Benson, Richard C.

Uncertainty in the Geologic Setting and Its Impact on Site Characterization, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed.,

Neston, et al. and Mary J. S. Roth, ed., 1996), with Lynn Yuhr and Devraj Sharma, p91-103 see Yuhr, Lynn, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed. Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p195-209

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Durability and Long Term Performance of Cementitious Composites, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1502

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Multi-Scale Models of the Diffusivity of Concrete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Edward J. Garboczi, p574-582

disc. (of Assessment of Kinematic Wave Time of Concentration, by Richard H. McCuen and Jill M. Spiess, HY Mar. 95, p256-266), HY Aug. 96, p472

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see Shuys, L. J., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1181-1184

Berg, J. S.

Derg, J. S. Concrete Pavements in Tunnels, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with P. M. Noss, p911-922

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Accidental Situations: Application of Surface-Water Moni-toring Data, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with T. Vasiljeva, p1338-1339

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Testing and Effectiveness of a New Urban BMP Stormcep-tor 19 (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Graham J. Bryant, p1864-1869

Bergado, D. T.

Soft Ground Improvement in Lowland and Other Environ-ments, with L. R. Anderson, N. Miura and A. S. Balasu-bramaniam, 1996, 0-7844-0151-9, 433pp.

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Arizona Local Government Bridge Scour Evaluation Study, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Raymond C. Jordan, p479-488

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Planning and Analysis of Airport Access Using GIS: SLCIA Example, (Meeting the Challenge: Rebuilding In-ner City Airports, Prianka Seneviratne, ed., 1996), with Massoud Javid and Prianka Seneviratne, p89-95

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Microbiological Influenced Corrosion (MIC) of Carbon
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Technical Program Committee, 1996), with Pati Castro,
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See Yi, W., (Probabilistic Mechanics V. K. Lin and T. C.

see YI, W., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p685-688

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Architecture on the Moon: The Importance of Human Fac-tors Considerations in the Design of a Lunar Base, (Engimeering, Construction, and Operations in Space, Stewart W. Johnston, ed., 1996), p1038-1044

see Schwartz, Milton, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1027-1031

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see Quattrone, Robert F., (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1045-1054

Bernard, Robert S.

Preliminary Validation of the MAC3D Numerical Flow Model, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3434-3439

see Finnie, John, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p301-305

Bernardini, Alberto

A Combined Fuzzy and Random-Set Approach to the Mul-tiobjective Optimization of Uncertain Systems, (Probabi-listic Mechanics & Structural Reliability, Dan M. Fran-gopol, ed. and Mircea D. Grigoriu, ed., 1996), with Fulvio Tonon, p314-317

Bernasconi, Marco C.

see Richter, Lutz, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p283-289

Bernd, Daniel

see Huang, Xiaodong, CO Mar. 96, p91-96

Berndes, Stefan

Transferring Knowledge about High-Level Waste Reposi-tories: An Ethical Consideration, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Klaus Kornwachs, p494-498

Bernier, Gérard

see Behloul, Mouloud, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p518-529

Bernold, Leonhard

see Huang, Xiaodong, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p213-219

Bernold, Leonhard E.

see Bai, Yong, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p185-191

see Dunston, Phillip S., (Analysis and Computation, Frank-lin Y. Cheng, ed., 1996), p492-501

see Huang, Xiaodong, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p502-509

see Huang, Xiaodong, CO Mar. 96, p91-96

see Lin, Chaun-Ping, GT Oct. 94, p1684-1703 see Moon, Sungwoo, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p79-85

see Rihani, Rami A., (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p171-177

Bernstein, Harvey M.

Solving the Innovation Puzzle, with Andrew C. Lemer, 1996, 0-7844-0023-7, 130pp.

Bert, Charles W.

Static Analyses of Beams and Plates by Spline Collocation Method, with Youngkwang Sheu, EM Apr. 96, p375-378 see Kang, Kijun, ST June 96, p657-662

Berthelot, Curtis F.

Mechanistic-Probabilistic Vehicle Operating Cost Model, with Gordon A. Sparks, Terry Blomme, Lyle Kajner and Mark Nickeson, TE Sept./Oct. 96, p337-341

Berthouex, P. M.

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Berthouex, P. Mac

see Parker, Wayne J., EE Sept./Oct. 94, p1266-1283

Bertini, Quinto Riccardo

Package System for Supporting Decisions in a County Area, (Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Pietro Antonio Cappa, p408-412

Bertz, Michael

CELL - A Vertically Integrated Learning Resource, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Nelson C. Baker, p348-354

Besan, Raore.
See Murakami, Satoshi, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p181-194

see Biron, Pascale, HY Dec. 96, p676-682

Beswick, Paul G.

Establishing the Relative Process Risks for Chlorination and Ozonation - A Case Study Illustrates the Need to Evaluate the Process Hazard Implications of a Change in Drinking Water Disinfection Process due to D/DBP Regulations, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Craig E. Brackbill and L. Donald Duke, p1021-1026

The Management Improvement Program: An Irrigation District's Perspective of the Demonstration Program. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Gary Sloan, p3480-3485

Bethel, James

see Marshall, John, SU Nov. 96, p168-179

see Panariello, G. F., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p760-763

Dynamic Interaction Between Embedded Foundations by the Substructure Deletion Method, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), with Euclides de Mesquita Neto and Edivaldo Romanini, p314-317

see DiGiano, Francis A., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1638-1644

see Stenback, Greg A., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p180-194

Beyer, William E.

see Baumgartner, Charles A., CE Apr. 96, p68-71

see Bailey, Simon F., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p22-25

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Design Formulas for Block Revetments, with Mark Klein Breteler, WW Nov/Dec. 96, p281-287 Bhagvati, Chakravarthy

see Grivas, Dimitri A., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p426-433

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Bhat, Shrikant P.

see Vaynman, Semyon, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1551-1560

Bhatia, Naresh

see Anand, Subhash C., (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p49-60

Bhattacharja, S.
see Jehng, J-Y., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),
p600-607

Bhattacharya, Baidurya

A CDM-Based Approach to Stochastic Damage Growth, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Bruce Ellingwood, p772-775

A Damage Mechanics-Based Approach to Structural Deterioration, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Bruce Ellingwood, p588-591

835

Bhattacharya, Sanjoy K. see Jin, Peikang, EE July 96, p590-598 see Qu, Mingbo, EE Aug. 96, p749-756

Bhattacharya, Sujan K.

Surfactant Enhanced Electrokinetic Remediation of Gasoline Contaminated Soils, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with David H. Foster and J. Mohan Reddy, p311-322

Bhattacharyya, Kalyan K.

see Yang, Hang, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p417-

Bhatti, M. Asghar

Modeling Damage to Rigid Pavements Caused by Subgrade Pumping, with Jeffery A. Barlow and James W. Stoner, TE Jan./Feb. 96, p12-21

Bhave, Pramod R.

see Gupta, Rajesh, EE Jan. 96, p51-54

see Gupta, Rajesh, WR May/June 96, p214-217

see Johnson, Samee Lal, (disc), EE July/Aug. 94, p974-980

see Soong, Ta Wei, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2855-2860

Bhowmik, Nani G.

Hydrodynamic Changes Associated with Navigation Traffic on the Upper Mississippi River System, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Ta-Wei David Soong and Renjie Xia, p2849-2854

Bhutta, Salman A.

see Al-Qadi, Imad L., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p328-337

Bićanić, N.

see Balabanić, G., EM Dec. 96, p1113-1122

Bicknell, Jill C.

A California Handbook for Developing an Industrial/ Commercial Storm Water Inspection Program, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2625-2630

Controlling the Impacts of Development on Storm Water Quality through Proper Site Planning and Design, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Lisa Horowitz McCann, p3097-3102

Biddlecome, Howard C.

see Brahma, Chandra S., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p838-844

Biedenharn, David S.

see Watson, Chester C., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p286-291

Biedermann, Julia D.

Addressing Current Issues in Structural Design Software, CP Oct. 96, p286-294

Bienhoff, Dallas G.

Lunar Settlement Foundation: A Private Community, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p942-948

The Federal Government's Existing Building Inventory, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p161-162

Bieniawski, Z. T.

Classroom Simulation of Public Involvement in H.L.W. Issues Featuring STS Concepts, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p505-506

Bienkiewicz, B.

DREIMAGEWICE, 30.
Current U.S. - Japan Collaborative Activities in Wind Engineering, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with T. Ohkuma and K. Fujii, p1075-

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Long-Term Pile Load Testing System Performance in Sa-line and Ice-Rich Permafrost, with D. C. Sego and R. P.

nne and 1ce-Rich Permafrost, with D. C. Sego and R. P. Stahl, CR Sept. 96, p149-162
Vertical Migration of Diesel into Silty Sand Subject to Cyclic Freeze-Thaw, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with J. C. R. Neufeld, p116-127

Estimating Effects of TLC Into Urban Public Road Transport, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Massimo Di Gangi and Bruno Montella, p66-70

Biggs, David T.

Octave Chanute: One of the First in Flight, NE Feb. 96, p15 Bigham, Robert E.

Calculations Substitute for Actual Knowledge, CE Jan. 96, p29

Bignell, Dale T.

Making a Case for "Cost-Effective" Compliance, (High Level Radioactive Waste Management, Technical Pro-gram Committee, 1996), p305-307

Understanding How to Maintain Compliance in the Current Regulatory Climate, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Jeffry L. Newman and Ronald D. Burns, p298-299

Bliker, Eco W.

History and Heritage in Coastal Engineering in The Netherlands, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p390-412

Bikdash, M.

see Hajj, M. R., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p971-974

Bille, Matthew A.

Space Applications of Surplus Ballistic Missiles, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p406-412

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Billings, R. Bruce see Agthe, Donald E., WR Jan./Feb. 96, p20-23

Billings, Tom

Faster, Cheaper, Better: Teleoperated Space Robots, (Ro-botics for Challenging Environments, Laura A. Demsetz, ed., 1996), p150-156

Billington, David P.

see Jadik, Tamara, ST Feb. 95, p328-335 see Matteo, John, ST Nov. 94, p3197-3211

Billman, Daniel

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Bimbas, Iraklis see Ganoulis, Jacques, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p401-415

Bindlish, Rajat

see Barros, Ana Paula, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p229-230

Binger, Wilson V., Jr. Praise for Ancient Water Works, CE Mar. 96, p26

Bingner, R. L.

Effect of Grade Control Structures on DEC Streams, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with E. J. Langendoon, L. Li and C. V. Alonso, p280-285

Binienda, Wieslaw K.

Complex Crack Interaction in Composite Plate, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p408-411

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Biora, F.

see Montgomery, F. O., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p680-684

see Montgomery, F. O., (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

p685-689

Birchier, Deborah R. Landfill Leachate Treatment by Evaporation, with Mark W. Milke, A. Leigh Marks and Richard G. Luthy, EE Sept./ Oct. 94, p1109-1131

disc: Peter Eisner, Konrad Leonhard and Peter A. Wilderer, EE Feb. 96, p163

EE Feb. 96, p163

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Birkland, Sara A.

see Rowings, James E., CO Mar. 96, p83-90

Birman, Victor

Review of Constitutive Equations for Shape Memory Alloys, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p792-795

Biron, Pascale Effects of Bed Discordance on Flow Dynamics at Open Channel Confluences, with James L. Best and André G. Roy, HY Dec. 96, p676-682

Bishop, John, P.E. see Russell, Jeff, ME Nov./Dec. 96, p17-29

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Bishop, Walter J.

Dissiop, Watter J.
Decision Process for Mitigating Seismically Vulnerable
Water Facilities, (Natural Disaster Reduction, George
W. Housner, ed. and Riley M. Chung, ed., 1997), with
Ernesto A. Avila, p209-210

Bitter, Paul R.

Performance Evaluation of the Aeration Curtain at Hill Air Force Base, Utah, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with David A. Hoffman, p776-787

Bittnar, Zdeněk

Numerical Methods in Structural Mechanics, Co-published with Thomas Telford, U.K., with Jiří Šejnoha, 1996, 0-7844-0170-5, 422pp.

Bitzarakis, S.

see Papadrakakis, M., EM May 96, p423-431

Bixler, Brian

see Foshee, Jon, GT Nov. 94, p2026-2040

Bizup, David F.

Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Nozer D. Singpurwalla, p474-477

Bjorhovde, Reidar

see Hellesland, Jostein, ST Oct. 96, p1216-1224 see Hellesland, Jostein, ST Nov. 96, p1275-1283

Black, R. Gary

see Duff, Stephen F., ST Apr. 96, p446-452

Blackburn, T. R. see Vo, T. V., (Risk-Based Decision Making in Water Re-sources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p326-

Blackburn, Thomas W.
Competition Should Be Based on Quality, CE June 96, p28

New Materials and Methods for Insitu Rehabilitation of Underground Pipe, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1298-1307

Blain, Cheryl Ann

An Evaluation of Tidal Predictions in the Yellow and East China Seas, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p429-441

Blair, Brad R.

Blair, Brad R.
Fluidized Drilling for Lunar Mining Applications, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p813-820
Lunar Sample Return: A Near-Term Marketing Opportunity?, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p194-199
see Neil, David M., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p806-805

Blair, S.

see Lin, W., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p122-124

Blair, Stephen C.

Uniaxial Compression Behavior of Small Blocks of Welded Tuff, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Patricia A. Berge, p409-411

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see Sun, Yung-Hsin, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4359-4364

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Blaisdell, Fred W.

Pipe Plunge Pool Energy Dissipator, with Clayton L. An-derson, HY Mar. 91, p303-323 disc: Emmett M. Laursen, HY Oct. 92, p1448-1449 disc: M. Shafai-Bajestan and M. L. Albertson, HY

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err:

disc. (of Local Scour Downstream of Hydraulic Structures, by Gijs J. C. M. Hoffmans and Krystian W. Pilarczyk, HY Apr. 95, p326-340), HY July 96, p419-420

see McDonald, David B., (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1266-1275

Blaker, F.

see Bruschi, R., IS Sept. 96, p145-151

Bland, Richard L.

Bar Codes in the Design Office, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p951-957

Blandford, G. E.

see Gupta, Pratyoosh, ST July 96, p748-755

Blandford, George E. Large Deformation Analysis of Inelastic Space Truss Struc-tures, ST Apr. 96, p407-415

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Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, with Paolo Foraboschi, ST Aug. 94, p2288-2309

disc: Thomas E. Boothby, ST Aug. 96, p978-979 clo: ST Aug. 96, p979-980

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see Smith, Marcia, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4365-4370

see Lin, W., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p122-124

Blitch, John G.

Alternative Scenarios for Military Deployment of Un-manned Ground Vehicles, (Robotics for Challenging En-vironments, Laura A. Demsetz, ed., 1996), with Robin R.

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An Expert System Application for Robot Assisted Urban Search and Rescue, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p199-205

Applications of Space Technology to Aid in Identification of Seismic Hazards, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Robert Crippen, Andrea Donnellan, Gilles Peltzer and Paul Rosen, p305-306

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Nanotechnology and Orbital Debris, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Thomas L. Wilson, p328-333

see Wilson, Thomas L., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed.,

1996), p861-863
see Wilson, Thomas L., (Engineering, Construction, and
Operations in Space, Stewart W. Johnson, ed., 1996), p864-870

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seville, J.-M.

see Vannoorenberghe, P., (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p119-123

Blotz, Lisa R.

see Abu-Hassanein, Zeyad S., GT May 96, p397-406

see Niu, L., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p330-333

Constitutive Relations for Compressible Elastic Porous Solids, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1090-1093

Blumberg, Alan F.

Modeling Outfall Plume Behavior Using Far Field Circula-tion Model, with Zhen-Gang Ji and C. Kirk Ziegler, HY Nov. 96, p610-616 Transport Modeling of the Coastal Waters of Oahu, Hawaii,

Transport Modeling of the Coastal Waters of Oahu, Hawan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with John P. Connolly, p4084-4089 see Connolly, John P., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4090-4095

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see Peattie, Robert A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p318-321

Use of Probabilistic Methods for Analysis of Cost and Duration Uncertainties in a Decision Ánalysis Framework, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with L. Painton, p250-251

Hydraulic Conductivity of Desiccated Geosynthetic Clay Liners, with David E. Daniel, GT Mar. 96, p204-208

Boardman, Joseph T. see Kent, Edward J., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p489-498

Bobba, A. Ghosh see Piggott, Andrew R., WR Jan./Feb. 96, p1-10

Bobczynski, Norm Utilization of 3-D CADD in Analysis, Design and Con-struction of Mobile Service Tower for Atlas Launch Vehicles, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Matthew Wrona, David Hansen and Harold Howell, pl 197-1204

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see Pellegrini, P. F., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p92-98

Bocchieri, William J. see Babic, Marijan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p108-111

Boczar-Karakiewicz, B.

Dynamics of Sand Bars in Coastal Zones, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with J. L. Bona, A. Naguszewski and W. Romańczyk, p862-867

Improving Input Wave Data for Use with Shoreline Change Models, with Christopher G. Creed and Andrew W. Raichle, WW Sept./Oct. 96, p259-263

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see Inverso, George A., (Pipeline Crossings 1996, Law-rence F. Catalano, ed., 1996), p469-476

Bodnar, Randal F.

Field Verification of Dem-Derived Watershed Response, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Mark Michelini and Rafael G. Quimpo, p3206-3211

Bodvarsson, G. S. see Wu, Y. S., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p73-75

Boehm, Charles G.

GIS Applications in Modern Stormwater Management, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

The Treatment Train Detention Concept, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2270-2275

see Chen, Y.-T., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p119-121

Boehm, R. F.

see Chen, Y.-T., (High Level Radioactive Waste Manu ment, Technical Program Committee, 1996), p125-

Boenau, Ronald E., P.E. In Pursuit of a Stamp, CE Oct. 96, p31-32

see Ambrosino, G., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p413-417

see Ambrosino, G., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p515-519

see Giannattasio, P., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p500-504

Boers, Marien

Contributions to the Momentum Balance in the Surf Zone, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Jan van de Graaff,

Bogabathini, Padmavathy Impacts of Improved Water Supply and Sanitation on the Rural Population of India, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p781

838

Fuzzy Rule-Based Estimation of Flood Probabilities under Climatic Fluctuations, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with Ro-

stoset, ed. and Eugene Z. stakhiv, ed., 1990), with volume from the first and Peter Nachtnebel, p61-79

see Ganoulis, Jacques, (Risk-Based Decision Making in Water Resources VII. Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996),

p401-415

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Bogdani, Miriam

Catastrophic Floods and Their "Risk" in the Rivers of Albania, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p919

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see Smith, Tara A., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4329-4334

Theory and Practice of Projectile's Penetration in Soils, with S. Drabkin, I. Juran and A. Salman, GT Oct. 96,

Boguslawski, A. S.

see Shestopalov, V. M., (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Johinsky, J. A.

Computer Applications to Improve Efficiency of Structural Analysis and Design, (Analysis and Computation, Frank-lin Y. Cheng, ed., 1996), with J. P. Lee, p383-388 see McConnell, D. W., (Analysis and Computation, Frank-lin Y. Cheng, ed., 1996), p389-396

Bohinsky, Joseph A. see Thayne, Harold G., Jr., (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996, p825-831

Bohike, Brenda Myers

Geotech Design Reports Get a Litmus Test, CE Dec. 96,

Boissonnade, Auguste
Use of Risk Models to Mitigate Financial Impacts from
Catastrophic Natural Events, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,
1997), with Peter Ulrich and Richard D. Wales, p199-

see Bouzina, Khalid I., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p19-20

Boissonnade, Auguste C. see Gunturi, Surya K., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p15-16

Bokde, A. L. W.

Experimental Investigation of the Temporal Intermittency in the Transition to Turbulence of a Plane Mixing Layer, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with D. A. Jordan, Jr. and R. W. Miksad, p1070-1073

Boland, Thomas M. see Venkatraman, Sankar N., CE Mar. 96, p14A-16A

Boldt, Oscar C.

Marketing Engineering Services: Partnering Pales by Com-parison, ME Jan./Feb. 96, p3-5

Bole, Catherine D.

Overview of the ISS Large Manipulator Operations, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p497-501

Boles, Walter

see Scott, Wesley, El Jan. 96, p42-43

Boles, Walter W.

Construction Automation and Robotics in Civil Engineer-ing Education Programs, with Jing Wang, El Jan. 96, p12-16

Lunar Excavating Research, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with John F. Connolly, p699-705

Bolognesi, Arnoldo J. L.

disc. (of Liquefaction Behavior of Sand-Gravel Composites, by Mark D. Evans and Shengping Zhou, GT Mar. 95, p287-298), GT July 96, p605-606

Bolonkin, Alexander A. Minimum Weight of Control Devices with Bounded LQG Control, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Duane E. Veley and Narendra S. Khot, p1230-1236

Boman, Brian

Dormant Season Alfalfa Water Balance on the NIIP, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p231-236

see Boczar-Karakiewicz, B., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p862-867

see Duan, Fei, (High Level Radioactive Waste Manage ment, Technical Program Committee, 1996), p412-

Bonacci, John F.

Analysis Requirements for Performance-Based Design of Beam-Column Joints, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p257-265

Bonaccorsi, Peter F. HOV Fix on 1-66, CE July 96, p64-66

Bonacuse, P.

see Gasparini, D. A., EM Feb. 96, p130-137

Bonham, Charles D.

see Dudley, Syndi J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3656-3661

The Effects of Natural Hazards on Pipeline Safety, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Myles Powers, Andy Chernoff, Alan Gregory, Dan Phillips and Donna Roy, p68-69 see Thomas, Wilbert O., Jr., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p303-304

Bonneau, Olivier

see Dallaire, Eric, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p555-563

nneville, David R.

The Kobe Earthquake: Performance of Engineered Buildings, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p917-925

onnough, Ted L.

Physical Sampling for Site and Waste Characterization, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p217-219

Bonowitz, David

Updates on Steel Moment Frames, CE Aug. 96, p30

Third Party Impacts of Proposed Water Banking in the Colorado River Basin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4042-4045

Boon, Richard

Best Management Practices and Community Education, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2648-2653

Boone, K. P. see Fenske, T. E., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p435-443

Boone, Storer J.

Ground-Movement-Related Building Damage, GT Nov. 96, p886-896

Boothby, Thomas E.

disc. (of Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, by Carlo Blasi and Paolo Fora-boschi, ST Aug. 94, p.2288-2309), ST Aug. 96, p978-979 see Rosson, Barry T., (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p223-232

see Lade, Poul V., GT Apr. 96, p309-316 see Yamamuro, Jerry A., GT Feb. 96, p147-154

Borah, Apurba K. see Tai, C. Charles, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p46-51

ng the Lake Decatur Watershed in Illinois to Evaluate Effects of Best Management Practices on Nitrate Loading, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Misganaw Demissie and Laura Keefer, p1681-1686

Borah, Deva K.

see Ray, Chittaranjan, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1575-1580

Borchelt, J. Gregg

Update of Building Code Requirements for Masonry, 1992 to 1995 Editions, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p334-344

Bord, Richard J.

see O'Connor, Robert E., (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996),

see O'Connor, Robert E., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1828-1833

Borda, Charles

Borda, Chartes
Identification of Regional (Third Party) Impacts Associated
with the Truckee River Operating Agreement, (North
American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Tom
MacDiarmid, Rangessan Narayanan, Thomas Harris,
Karl MacArthur and Shawn Stoddard, p4036-4041

see Leder, William, (Meeting the Challenge: Rebuilding In-ner City Airports, Prianka Seneviratne, ed., 1996), p106-114

Borden, Frank W.

Community Preparedness and Disaster Response The City of Los Angeles: Community Emergency Response Team Program, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p323-324

Borden, Roy H.

Dynamic Properties of Piedmont Residual Soils, with Lisheng Shao and Ayushman Gupta, GT Oct. 96, p813-

see Wang, Chainchye E., GT Oct. 96, p822-830

Borella, Andrea

Traffic Control System for Metropolitan Areas Based on Radio Links between Vehicles and Infrastructure, (Appli-cations of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Giovanni Cancellieri, p398-402

Borg, Robert F.

ASCE's Role in the Work of the National Construction Dispute Resolution Committee of the American Arbitra-tion Association, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p1-9

Borghei, S. M.

see Jalili, M. R., (disc), IR July/Aug. 94, p814-819

Borgman, Leon E. see Scheffner, Norman W., WW Mar/Apr. 96, p93-101

Critical State Model at Finite Strains, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), with Claudio Tamagnini, p148-151

Bormann, Noel E.

disc. (of Strange Attractors and Chaos in Wastewater Flow, by Donald I. Angelbeck and Rafic Y. Minkara, EE Jan./ Feb. 94, p122-137) with Eric Kincanon, EE Mar. 96, p240

A Minimum Risk Evaluation Methodology for Fault Toler-Minimum Risk Evaluation Methodology for Fault toler and Automotive Control Systems, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with L. Gortan, R. Librino and M. Osella, p552-

Berovetz, Harvey

Biomechanics and Testing of Mechanical Circulatory Support Devices, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with James Antaki, William Wagner, Marina Kameneva, John Pristas, Stephen Winowich, William Mandarino, Philip Litwak, Robert Kormos and Bartley Griffith, p35

see Federspiel, William, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p43

Borovikova, L. N.

Automatized System of Runoff Forecasting for the Amu-darya River Basin, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with U. G. Konovalov and S. U. Myagkov, p454

Bose, Somnath

see Mazumder, Nitish C., WW May/June 95, p167-175

Boslough, M. B.

Impact-Generated Atmospheric Plumes: The Threat to Sat-ellites in Low-Earth Orbit, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with D. A. Crawford, p88-94

see Crawford, D. A., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p81-87

Bosscher, P. J.

see Benson, C. H., GT Jan. 95, p69-79

Bosscher, Peter J.

see Foose, Gary J., GT Sept. 96, p760-767 see Yesiller, Nazli, CR Mar. 96, p6-24

Construction Waste: Quantification and Source Evaluation. with H. J. H. Brouwers, CO Mar. 96, p55-60

see Piorewicz, Jerzy, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p489-500

A Model for the Design and Control of Urban Electric Traction Systems, (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with G. Farina, p39-43

Bottone, Peter J.

see Reutter, David S., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p753-758

see Peck, T. M., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1024-1034

Bouabid, Jawhar

see Anagnos, Thalia, (Natural Disaster Reduction, Georg . Housner, ed. and Riley M. Chung, ed., 1997). p249-250

Bouayed, Amine see Auvinet, Gabriel, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed. Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1239-1253

Bounzas, Audermanes (of Vertical Uplift Capacity of Horizontal Anchors, by Kanakapura S. Subba Rao and Jyant Kumar, GT July 94, p1134-1147), GT Feb. 96, p163-164

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Boulos, Paul F.

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Bouraoui, Faycal

ANSWERS-2000: Runoff and Sediment Transport Model, with Theo A. Dillaha, EE June 96, p493-502

Bourdeau, P. L. see Espinoza, R. D., GT July 94, p1185-1204

Bourne, R. Gregory

Developing Comprehensive State Ground-Water-Protection Programs, with Sonja Massey, Elizabeth Rolle and Bruce Meighen, WR July/Aug. 95, p294-301 disc: William Whipple, Jr., WR Sept./Oct. 96, p386

Bourodimos, Lampros E. see Goodman, Alvin S., (Risk-Based Decision Making in Water Resources VII, Vacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p154-168

Boursier, Patrice

The Use of Digital Geographic Information in Transporta-tion Engineering, (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Bernard Allouche, Laurent Coudercy and Yonnel Gardes, p403-407

Boussiakou, L. G. see Kalkani, E. C., EE Nov. 96, p1042-1045

Sound Absorption of Dry Porous Media with Single and Double Porosity, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with P. Royer and J. L. Auriault, p796-

Bouzar, Salah Image Monitoring on Motorway: Pedestrian Detection Using Image Processing, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Roland Glachet, Jean-Marc Blosseville and François Lenoir, p124-128

Bouzina, Khalid I.

Tornado and Hail Risk Modeling: An Event Based Approach, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Mohan Sharma, Auguste Boissonnade and Surya Gunturi, p19-

Boward, Joseph F. Clay Liner Crack Propagation, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), with Luis E. Vallejo, p97-113

Bowders, J. J. see Gabr, M. A., GT Nov. 96, p914-919

Bowen, James D.

see Gong, Gavin, (Estuarine and Coastal Modeling, Mal-colm L. Spaulding and Ralph T. Cheng, 1996), p518-529

Bowen, Michael

Developmental Approach for the Use of Expert Systems in Preparing Bidding Documents, (Computing in Civil En-gineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Guillermo F. Salazar, p656-662

Bowles, David S.

Comparison of Hazard and Acceptable Risk Criteria,
(Risk-Based Decision Making in Water Resources VII,
Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with Loren R. Anderson and Terry F. Glover, p346-366

Risk Assessment Approach to Dam Safety Criteria, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), with Loren R. Anderson and Terry F. Glover, p451-473

Bowles, J. C.

see Street, J. S., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p14-21

Bowling, Chester V.

California's Response to Drought, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Scott A. Jercich, p869-874

Bowling, Sandra

Delineating Subsurface Contamination Using Geostatistical and Non-Intrusive Geophysical Methodologies, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Wayne Woldt and Dennis Schulte, p2230-2235

Bowman, Mark D.

see Hassan, Ahmed F., ST Nov. 96, p1337-1346

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see Anumba, Chimay J., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996). p160-166

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see Peck, T. M., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1024-1034

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see Westhaver, David S., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p111-112

Boyd, Darryl

see Brown, Dwain K., (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p140-150

Boyd, Martin C.

A Distributed Engineering Problem Generator, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), with Nelson C. Baker, p466-472

Braatz, Dean T.

see Ingram, John J., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997),

Bracci, Joseph M.

Analytical Modeling of Composite Reinforced ConcreteSteel Systems, (Natural Disaster Reduction, George W. Steel Systems, (watural Disaster Reduction, George w. Housner, ed. and Riley M. Chung, ed., 1997), with Sashi K. Kunnath and Ali O. Atahan, p379-380 Seismic Performance of Confined Sill Plate Connections, with Rebecca F. Stromatt and David G. Pollock, ST Nov.

96, p1357-1363

Brackbill, Craig E.

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Bradford, Mark Andrew

see Ronagh, Hamid Reza, ST Nov. 94, p3137-3155

Bradford, Paul

Theory and Application of Restoring Force Sliding Isola-tion Systems in Low Seismicity Regions, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Ching Shi Liu, p1102-1105

Bradford, Paul F.

Seismic Isolation of Bridges Using Sliding Isolation Systems, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Ronald J. Watson, p41-47

Bradford, Scott F.
Numerical Modeling of Turbidity Currents, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Nikolaos D. Katopodes, p404-415

Bradley, A. Allen Floodplain Mapping Using Continuous Hydrologic and Hy-draulic Simulation Models, with Paula J. Cooper, Ken-neth W. Potter and Thomas Price, HE Apr. 96, p63-68

Bradley, E. Craig Demonstration of the Smart Crane Ammunition Transfer System, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Steven M. Killough and John C. Rowe, p192-198

Bradley, Jeffrey B.

see Walton, Raymond, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p352-357

Bradshaw, Richard R.

Bradsnaw, Richard R.
disc. (of Gabled Hyperbolic Paraboloid Roofs without Edge
Beams, by Tamara Jadik and David P. Billington, ST
Feb. 95, p328-335), ST Feb. 96, p222-223

Bragdon, Clifford

Solving Aviation and Intermodal Transportation Related Issues — "A New Prototype for the 21st Century", (Meeing the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), with Carl Berkowitz, p212-

Brahma, Chandra S.

Computer-Aided Design of Braced Excavations, (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Howard C. Biddlecome, p838-844

Braileanu, Florin

Evaluation of Flow Resistance in Ice-Covered Channels, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Robert Ettema and James Wuebben, p606-616

Brainerd, Michael L.

Evaluation of Cracking of the Miami Marine Stadium Hy-perbolic Paraboloid Roof Structure, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1659-1668

Brame, Scott E.

see Falta, Ronald W., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p257-268

Brame, Scott Eppes see Roeder, Fberhard, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p333-344

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Brand, P. R.

Reliability Based Design for Oil Country Tubular Goods, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with D. B. Lewis and M. A. Maes, p534-537

Brandes, Horst G.

Simulation of Pore Pressures in Triaxial Creep Tests, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), with Armand J. Silva, p96-108

see Silva, Armand J., (Measuring and Modeling Time De-pendent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p228-242

Brandon, Thomas L. see Al-Qadi, Imad L., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p328-337

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Pitch-Based Carbon Fibre Reinforced Concretes, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with L. Kucharska, p271-280 Bransby, M. F.

Difference between Load-Transfer Relationships for Later-ally Loaded Pile Groups: Active P-Y or Passive P-8, GT Dec. 96, p1015-1018

Brant, William M.

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Brantley, Laura
Resistance of Wood Members and Connections to Dynamic
Loading, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Robert Emerson and Kenneth Fridley, p771-777

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see Collins, Anthony G., EE May 96, p339

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Brauner, J. Steven see Waddill, Dan W., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p466-477

Bravo, Hector R.

Groundwater Flow Component of a Wetland-Dynamics Model, (North American Water and Environment Congress & Destructive Water. Chenchaya Bathala, ed., 1996), with Gregory H. Brown, p2793-2798

Turbulence Model for Depth-Averaged Flows in Naviga-tion Installations, with Forrest M. Holly, Jr., HY Dec. 96, p718-727

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Earthquake Fault Rupture Propagation Through Soil, with Raymond B. Seed, Lloyd S. Cluff and H. Bolton Seed, GT Mar. 94, p543-561

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cio: GT Jan. 96, p82-83 Seismic Stability Procedures for Solid-Waste Landfills, with Anthony J. Augello, Gerald A. Leonards, Pedro C. Repetto and R. John Byrne, GT Feb. 95, p139-151 disc: David J. Elton, GT Nov. 96, p951-952 clo: GT Nov. 96, p952-954 see Leonards, Gerald A., CF Nov. 94, p274-292

Seasonal Effects on Generation of Particle-Associated Bac-teria During Distribution, with John T. O'Connor, EE Dec. 96, p1050-1057

Bredell, Pieter J.

An Approach to International High Level Radioactive Waste Management, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Helmut D. Fuchs, p486-488

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see Barnes, Robert W., (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p176-187

Breithaupt, Stephen A.
Simulation of Perilithic Algae as a Biofilm and its Interaction with the Water Column, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Ian P. King and Gerald T. Orlob, p1620-1625

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Brenner, Brian
Central Artery Utility Crossings, (Pipeline Crossings 1996,
Lawrence F. Catalano, ed., 1996), p130-138
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The Dying of the Trees: The Pandemic in America's Forests by Charles E. Little, El July 96, p136-137

see Liao, Sam S. C., (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p119-133

Brenner, C. E.
Reliability Analysis of Nonlinear Structures Using Stochastic Finite Elements, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D.
Grigoriu, ed., 1996), with C. Bucher, p596-599

Bresnahan, William T.
Use of Reclaimed Water in Cooling Towers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Joseph D. Papia, p2660-2665

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Defect Detection (Available only in Geo/Environmental Special Issue), with Larry Olson, CE July 96, p2A-6A

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LATWAK: Impact Test to Obtain Pile Lateral Static Stiffness, with Marc Ballouz, GT June 96, p437-444 see Yeung, Albert T., GT Sept. 96, p736-744

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Brigdon, Shari

Retention-Tank Systems: A Unique Operating Practice for Managing Complex Waste Streams at Research and De-velopment Facilities, (North American Water and Envinent Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1771-1776

Bright, John K.

Cellular Rigid Pavement, with John R. Mays, TE Sept./Oct. 96, p381-387

Brill, E. Downey

Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p325-329 see Rouphail, Nagui M., (Applications of Advanced Tech-

Brink, Philip N.

Water Quality Modeling of the Rouge River Watershed, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Gary Mercer and Richard Wagner, p2415-2420

Broad, Richard, III

DNAPL Recovery System at a Railroad Tie Treating Facility, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with David F. Atwater and Riaz Ahmed, p743-750 Brocchini, M.

Flow Properties of the Swash Zone, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with D. H. Peregrine, p221-232

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Seismic Reflection Evidence Against a Shallow Detachment Beneath Yucca Mountain, Nevada, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with W. Clay Hunter, p148-150

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see Hadjerioua, Boualem, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3188-3193

see Mobley, Mark H., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1311-1316

Brocoum, Stephan J.

Regulatory Perspective on NAS Recommendations for Yucca Mountain Standards, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Miguel A. Lugo, Steven P. Nesbit, Paul M. Krishna and James A. Duguid, p272-273

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see Mangor, Karsten, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p939-950

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The O'Hare International Airport Pavement Management System, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), with George Schwandt and William Weiss, p273-283

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see Zimmerman, Kathryn A., (Meeting the Challenge: Re-building Inner City Airports, Prianka Seneviratne, ed., 1996), p254-262

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Brown, Cheryl A.

Howa, Cheyra.

Hydrodynamic Modeling for Assessing Engineering Alternatives for Elevating the Kennedy Causeway, Corpus Christi, Texas, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Nicholas C. Kraus and Adele Militello, p681-694

Brown, David L.

see Aktan, A. Emin, IS Sept. 96, p108-117

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see Clifford, John, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p1-2

Brown, Dwain K.

Airfield Pavement Reconstruction at DFW International Airport, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), with Darryl Boyd, p140-150

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see Ayala, L., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3018

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see Steele, John P. H., (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p262-275

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Brown, Kevin H.

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Brown, N. A.

see Taft, E. P., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p171-176

Brown, P.

The Danger to Satellites from Meteor Storms-A Case Study of the Leonids, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with J. Jones and M. Beech, p13-19

Brown, R. Dennis

Data Qualification for the Waste Isolation Pilot Plant, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Victor J. Harper-Slaboszewicz, p211-213

Quality Assurance Plays a Key Role in Getting the Waste Isolation Pilot Plant to Operational Status, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p214-216

Brown, R. P.

see Tinnea, John S., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1531-1539

Brown, Robert

see Kim, Won S., (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p43-49

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see Charlie, Wayne A., (disc), GT Oct. 94, p1684-1703

Brown-West, Orikaye G.

Joint Development Planning for Inner City Airport Capital
Improvements, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), pl 99-

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Pile Wall Cuts Off Seepage (Available only in Geo/
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Brucker, Beth A.

Design Information Evolution in a Collaborative Engineering Software Environment, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Annette L. Stumpf, p732-738

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Digital Image Analysis of Two-Dimensional Fluidized Beds at Lunar Gravity, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with L. L. Sorge, M. A. Gibson, C. W. Knudsen and H. Kanamori, p769-775

Brueneman, David J.

see Sorge, Les L., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p776-782

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see Lin, W., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p122-124

Innovative Effluent Management for Sustainability, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Mary Ellen Dick, Eric Rosenblum and David Tucker, p1614-1619

Brumbaugh, Robert Commercial Wetland Mitigation Banking, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4233-4238

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Modeling Natural Hydrodynamic Systems with a Differential-Turbulence Column, with Monroe Weber-Shirk, Anna Jensen, Gerhard Jirka and Leonard W. Lion, HY July 96, p373-380

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Brunner, Gary W.
HEC-RAS (River Analysis System), (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3782-3787 Using HEC-RAS to Compute Scour at Bridges, (North

American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1565-1574

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Predicting the Concentration of Trace Metals in Natural Waters: Application of Co-Precipitation and Co-Dissolution Models, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Lara Duro, p64-66

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disc. (of Comparative Analysis of Bridge Superstructure Deterioration, by David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136), ST June 96, p706

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Bryant, Graham J.

see Berg, Vincent H., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1864-1869

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Buchberger, Steven G.

Intensity, Duration, and Frequency of Residential Water Demands, with Greg J. Wells, WR Jan./Feb. 96, p11-19 see Wu, Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3464-3469

Buche, Brock D.

Removal of Arsenic From Ground Water Using Granular Activated Carbon, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with Lawrence P. Owens, p1173-1177

see Brenner, C. E., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p596-599

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Bucher, Christian see Bayer, Veit, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p816-819

goriu, ed., 1990), po10-819
see Macke, Michael, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p608-611
see Schorling, York, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p604-607

Bucher, Christian G.

see Menyailov, Anatoly I., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p986-989

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Slope Instability from Ground-Water Seepage, with Roger Gobin, HY July 96, p415-417

Surface Thermodynamics of an Organoclay, (Engineered Contaminated Soils and Interaction of Soil Geomem-branes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), with Rossman Giese, p17-30

see Ramakrishnan, S., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p713-716

see Rasmussen, William O., EE Aug. 96, p764-768

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Controlled Excavation Along a Prescribed Path, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Witold Gutkowski, p227-234

Buesing, Jason L.

The Role of Capillary Pressure Curve Selection in Modeling LNAPL Transport in the Vadose Zone, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Marina Pantazidou, p490-501

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see Veshosky, David, ST July 94, p2123-2136

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Urban Knowledge Parks and Economic and Social Development Strategies, UP June 96, p33-45

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see Angieli, Valer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2536

Possibilities of Fracture Mechanics Models Application to Optimisation of Operational Use of Large-Size Machine Components, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Piotr Artymiak, p780-783

Bulkley, Jonathan W.

Critical Evaluation of Risk Assessment: A Look from the Inside Out, (Risk-Based Decision Making in Water Re-sources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p419-421

Risk Reduction of Lead and Mercury in Michigan, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p315-325

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see Covino, B. S., Jr., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1512-1521

Reliability Analysis of Bolted Wood Connections, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Dennis B. Decator, p326-329

System Factors Using First-Order Reliability Methods, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Weifeng Liu, p786-791

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see Imardjoko, Yudi U., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p172-175

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see Quiroga, Cesar A., TE May/June 96, p226-234

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see Carr, Robert W., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1760-1764

Burau, Jon R.

see Lacy, Jessica R., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3357-3362

Burbey, Thomas G.

United States Bureau of Reclamation (USBR) Perspectives on the Management Improvement Program As a Vehicle for Integrated Resource Planning. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Stephen M. Jones, p3490-3495

disc. (of Bearing Capacity of Footings over Two-Layer Foundation Soils, by Radoslaw L. Michalowski and Lei Shi, GT May 95, p421-428) with Sam Frydman, GT Aug. 96, p699-700

Burgess, Edward H. CSO Planning Model Development and Verification Strategy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Thomas Day, James T. Smullen and Larry A. Roesner, p1230-1235

Burgos, William D.

Influence of Sorption Mechanisms on the Bioavailability of Aromatic Hydrocarbons in Soil, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with John T. Novak, p670-680

Burke, Douglas F.

Prefabricated Epoxy-Coated Rebar for the U.S. Navy, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1199-1208

Burke, John

Evaluation of Modelling Needs for Central Valley Project Operations, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Donald Frevert, p806-811

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Oil Spills: Prevention, Prediction, and Preparation, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p770-775

Phytoremediation: Plant Uptake of Atrazine and Role of Root Exudates, with Jerald L. Schnoor, EE Nov. 96, p958-963

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see Wolters, Roger S., CO June 96, p152-157

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see Fanai, Nick, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1525-1530

see Westmacott, Jason R., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1465-1470

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An Innovative Plastic Housing System, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with A. Arenja and L. Holroyd, p545-554

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Burnham, Michael W.

Next Generation Flood Damage Analysis Program, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3788-3793

see Johnson, Stewart W., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p871-880

Burns, Meg

Restoration Design for Urban Streams: Anacostia River Basin, Maryland, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4198-4201

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see Bignell, Dale T., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p298-299 Burns, Susan E.

Magnetic Investigation of a Simulated Hazardous Waste Site, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Kenneth E. Lemons, p813-825

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Laboratory Experiments with Heterogeneous Reactions in Mixed Porous Media, with Kirk Hatfield and N. L. Wolfe, EE Aug. 96, p685-691

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see Cheng, Chen-Yu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3746-3751

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see Allen, Richard G., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p899-904

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Groundwater Monitoring For a Tunneling Project, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with John e. Shamma, p691-696

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Modeling the Response of ER Damper: Phenomenology and Emulation, with Nicos Makris, I. Konstantopoulos and P. J. Antsaklis, EM Sept. 96, p897-906

Structural Control with Electrorheological Dampers: Viscoplastic Behavior and Anticipation, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Nicos Makris, p1261-1268

see Makris, Nicos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p894-897

see Makris, Nicos, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1197-1204

see Makris, Nicos, EM Oct. 96, p1003-1011

Buscheck, Thomas A.

Scoping Analysis of In Situ Thermal-Hydrological Testing at Yucca Mountain, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with John J. Nitao, p130-132

see Danko, George, (High Level Radioactive Waste Management, Technical Program Committee, 1996), agement, p420-422

see Nitao, John J., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p117-118

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see Marshall, Orange S., Jr., (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p932-938

A Rapid Barrier Island Hazard Mapping Technique as a Basis for Property Damage Risk Assessment and Mitigation, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with William J. Neal and Orrin H. Pilkey, p185-186

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see Tobiasson, Wayne, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p398-409

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see Hayes, Scott, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996),

Butch, Gerard K.

Evaluation of Selected Instruments for Monitoring Scour at Bridges in New York, (North American Water and Enviment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4164-4171

Scour-hole Dimensions at Selected Bridge Piers in New York, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3043-3051

Butler, D. Modeling Dry Weather Wastewater Flow in Sewer Net-works, with N. J. D. Graham, EE Feb. 95, p161-173 disc: Martin J. Marriott, EE Aug. 96, p773

EE Aug. 96, p773-774

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Current Status of the Demonstration Management Improvement Program, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with R. E. Ware, p3476-3479

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Accurate Asphalt Mixture Tensile Strength, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Reynaldo Roque and Namho Kim, p163-172

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Laboratory Study of Large Stone Asphalt Paving Mixtures, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with W. W. Crockford and E. G. Fernando, p603-611

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Büyüköztürk, Oral

Constitutive Relationships of Mortar-Aggregate Interfaces in High Performance Concrete, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Brian Hearing, p452-461

Improving the Ductility of High Performance Concrete
Through Mortar-Aggregate Interfaces, (Materials for the
New Millennium, Ken P. Chong, ed., 1996), with Brian Hearing, p1337-1346

Byers, William G.

Railroad Bridge Behavior during Past Earthquakes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996).

Service Life of Timber Trestles, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p720-723

Byle, Michael J.

Building a Landfill on Mud(Available only in Geo/ Environmental Special Issue), with Anne M. Germain, CE July 96, p12A-16A

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A Robotic Inspector for Low-Level Radioactive Waste, (Robotics for Challenging Environments, Laura A. Dem-setz, ed., 1996), with Robert O. Pettus, p276-282

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Column Design in Fire Exposed Steel Frames, (Probabilis-tic Mechanics & Structural Reliability, Dan M. Frango-pol, ed. and Mircea D. Grigoriu, ed., 1996), with Ali Saffar, Robert W. Fitzgerald and Hossein Davoodi, p906-909

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Using NDT to Fasttrack Pavements, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p475-481

Cahill, Thomas H.

Sustainable Watershed Management in Developing Water-sheds, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Joel McGuire and Wesley R. Horner, p3969-3974

Response of an Oscillator with One-Sided Barrier under Non-White Random Excitation, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p112-115

Response Spectral Densities of Stochastically Excited Nonlinear Systems, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with Y. K. Lin, p732-735

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see Moulford, W. E. F. L., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p762-768

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Electromigration of Nitrates in Soil, with Dennis Larson and Donald Slack, IR Sept./Oct. 96, p286-290

Dynamic Response of Hagia Sophia, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with C. L. Mullen and M. N. Natsis, p200-210

see Köylüoğlu, H. Uğur, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p768-771

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Stabilization of a Creeping Slope Using Soil Nails, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p109-121

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Estimation of Leakage Quantity for Long Auxiliary Venti-lation Systems, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Pierre Mousset-Jones, p429-431

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disc. (of Buckle Propagation: Steady-State Finite-Element Analysis, by André C. Nogueira and John L. Tassoulas, EM Sept. 94, p1931-1944), EM Feb. 96, p178

see Hromadka, T. V., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2078-2083

see Hurd, Brian, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1834-1839

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see Kingsley, Gregory R., (Worldwide Advances in Struc-tural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p123-134

Camarena, Arturo

See Marqués, Antonio, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p134-138

Cambell, P. G. C.

see Sreekrishnan, T. R., EE Nov. 96, p995-1002

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Multimode Before Green Line, CE Sept. 96, p38

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see Pezeshk, S., CP Apr. 96, p136-142

See Pezesini, Si, Octoba See Ukovich, Walter, (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Campanella, R. G. see Roy, D., Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1149-1162

Campanella, Richard G. see Roy, Debasis, (disc), GT Dec. 94, p2118-2135

Campbell, C. Warren
Karst Water Inventories Using Thermography, (North
American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Joseph

twe Water, Chenchayya Bathala, ed., 1990), with Joseph W. Foster and Mohamed Abd El Latti, p3910-3914
Periodic Variation in Karst Stream Losses, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Mohamed Abd El Latif and Larry Foster, p1261-1266
Pollution Transport in Karst, (North American Water and Environment Congress)

Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Mohamed Abd El Latif, p4269-4274

Campbell, Charles H.

Johnson Space Center Crew Return Vehicle Activities, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with B. Kent Joosten and Robert E. Meyerson, p392-398

Campbell, Paul F. see Russell, Samuel O., WR May/June 96, p165-170

Campbell, T. I. see Fatemi, M. J., TE Mar./Apr. 96, p173-180 Camper, Anne K.

Physical Distribution System Models for Assessing the Imsystem Distribution System woders for Assessing the impact of Water Quality on Regrowth and Corrosion, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Warren L. Jones and Calvin Abernathy, p1437-1441

A Short Term Forecasting Model for Freeway Traffic Mon-itoring, and Control, (Applications of Advanced Technol-ogies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with G. Longo and F. Santorini, p418-422

Canavan, Gregory H.
Optimal Detection of Short-Warning Near-Earth Object Threats, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p26-31

Space Debris Hazard to Defense Systems, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p20-25

Cancellieri, Giovanni

Stephanedes, ed. and Francesco Filippi, ed., 1996), p398-402

Cannon, Mike

see Vaith, Kartik, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p64-74

Cannon, Robert H., Jr.

see Miles, Eric S., (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p50-56

Cao, Hong see Li, Oiusheng, EM Sept. 94, p1861-1876

Cao, L.

Behavior of RC Bridge Decks with Flexible Girders, with J. H. Allen, P. B. Shing and D. Woodham, ST Jan. 96,

Cao, Quinsan

Henry's Problem and Its Representation --- Representing an Architect's Reasoning Structure, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1058-1064

Saveria

Capaldo, Francesco Saverio
An Automatic System for the Definition of the Setting Rules for Speed Diagrams, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Rodolfo Grossi, p193-197

Cape, Edward G.

VanAuker, Michael D., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p470

see Whitehead, Kevin K., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p334

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Capobianco, Michele

Beach and Nearshore Profile Evolution at Different Temporal Scales: The Case of Duck, North Carolina, U.S.A., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Rina Basana and Riccardo Pesaresi, p629-638

Cappa, Pietro Antonio see Bertini, Quinto Riccardo, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p408-412

Effects of Zero Gravity on Bones, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1262-1264

Capron, Mark R.

Seismic Isolation of Bridges in the Midwest, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p48-55

Capuani, Domenico Continuum Model for Analysis of Multiply Connected Per-forated Cores, with Marco Savoia and Ferdinando Laudiero, EM Aug. 94, p1641-1660

disc: Bernardo Deschapelles, EM Feb. 96, p179-180 clo: EM Feb. 96, p180-181

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see Ramamurthy, A. S., HY Dec. 96, p687-691

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Assessing ESOPs, ME Sept./Oct. 96, p17-19

Card, Robert

see Ruchti, George, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p105-111

see Chroneer, Zenitha, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p313-324

Cardona, Omar D.

Seismic Analysis, Design and Evaluation of Hospitals— Vulnerability Studies by Energy Methods, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Jorge E. Hurtado, p319-320

Cardone, Vincent J.

see Thompson, Edward F., WW July/Aug. 96, p195-205

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see Jolicoeur, Claude, EM July 96, p643-650

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Designing Instream Flows to Satisfy Fish and Human Water Needs, with Henriette I. Jager and Michael J. Sale, WR Sept./Oct. 96, p356-363

Carlson, Axel R.

Thermal and Vapor Performance of Insulated Assemblies, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p384-397

Carlson, J. D.

see Dyke, S. J., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p886-889

see Spencer, B. F., Jr., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p164-167
see Spencer, B. F., Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p361-370

Carlson, Kathryn see Howdyshell, Paul, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p83-92

Carlson, Robert

see Kinney, Thomas C., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996, p196-202

Carlson, Robert F.

Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, 1996, 0-7844-0190-X, 965pp.

Carlson, Stephen L. see Kim, Byung R., EE June 96, p532-539

Carlsson, L. A. see Reddy, D. V., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1579-1591

Carmel, David see Navon, Ronie, AE Dec. 96, p129-134

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Gradient Damage and Size Effects, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p1175-1178

Carmichael, David G.

see Rahayu, Harkunti P., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p35-41

Carol, Ignacio

see Gettu, Ravindra, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p506-517

Carpenter, Bernie F.

hape Memory Release Device Experiment, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p76-79

Carpenter, Bradley M.

Process Research in Support of the Human Exploration and Development of Space: Issues in Program Development, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p509-515

Carpenter, Carl H., P.E. Suggested Name Change for ASCE, CE Oct. 96, p31

Suggester Valley R.
"Ductile Iron Microtunneling Pipe, Non-Traditional Installation Applications", (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Randall C. Conner, p312-321

Carper, Kenneth L. Diagnosis and Treatment of Structures in Distress by R. N. Raikar, CF Feb. 96, p42 Editor's Note, CF Feb. 96, p1

Failures in Civil Engineering: Structural, Foundation and Geoenvironmental Case Studies by Robin Shepherd and J. David Frost, CF May 96, p87

Carpinteri, Alberto see Massabó, Roberta, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p462-473

Carr, James R., P.E. Ethics Will Save Our Society, CE Dec. 96, p30

Carr, Robert W.

Sanitary Sewer System Modeling Model Comparison Racine, Wisconsin, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Thomas J. Bunker, p1760-1764

Integrated Resources Management for Irrigated Agricul-ture: Practical Lessons in Water Management and Conservation from the Arizona Management and Con-servation from the Arizona Management Improvement Program, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p.3486-3489

Carra, Joseph S.

Developing the Infrastructure for Lead Assessment and Abatement, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p70-76

Carrasco, Cesar J.

Comprehensive Modal Tests of a Space Truss Model for Damage Assessment, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Roberto A. Osegueda, Carlos M. Ferregut, Brian Harms, David Meza and Mike Grygier, p1141-1147

Carrasquillo, John see Godoy, Luis A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p997-1000

A Strategy for Urban Transit Route Selection, (Applications of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Stefano Gori, p144-148

Carriere, Patrick

Performance of a Virtual Runoff Hydrograph System, with Shahab Mohaghegh and Razi Gaskari, WR Nov/Dec. 96, p421-427

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see Reed, Brian E., EE Jan. 96, p48-50

see Pepper, D. W., (High Level Radioactive Waste Manage ment, Technical Program Committee, 1996), p105-

Carroll, William F.

see Barsoum, Fady F., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p951-954

see Barsoum, Fady F., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1143-1146

see Barsoum, Fady F., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996),

Carter, T. Michael

Evacuation Strategies for Public Officials, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p109-110

Carvajal, Luis F.

see Mesa, Oscar J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1477-1482

Casadevall, Thomas J.

Volcanic Hazards and Aviation Safety, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Theodore B. Thompson and John W. Ewert, p363-364

Casas, Juan R.

Structural Damage Identification from Dynamic-Test Data, with Angel C. Aparicio, ST Aug. 94, p2437-2450 disc: C. X. Wang and W. J. Yi, ST Jan. 96, p113 clo: ST Jan. 96, p114

see Crespo-Minguillon, Cesar, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p26-29

see Vo, T. V., (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p326-

Interparticle Contact Behavior and Wave Propagation, with J. Carlos Santamarina, GT Oct. 96, p831-839

Cascante, Patricio

see La Motta, Enrique J., EE Mar. 96, p198-204

Cascetta, Ennio

An Evaluation of TLC Systems Benefits and Potential Market in Italy, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Bruno Montella, p59-65

Casciati, F.

see Battaini, M., (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p499-502

Casciati, Fabio

Casciani, Faino.
Managing Multi-Degree-of-Freedom Systems in Structural Fuzzy Control, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Lucia Faravelli, p306-309

Case, J. A.

see Nakamura, T., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p783-790

Casey, Joann

Water Conservation for Boilers and Steam Systems, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Stuart Cooley and Marekat C. Joseph, p2685-2688

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Green Light, CE May 96, p56-59

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U.S. Firm Builds Shake Table for Japan, ET July/Aug. 96, p1,8 Washington Buildup, CE Oct. 96, p64-67

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See Shen, C. L., (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p462-465

see Shen, C. L., (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p470-473

Cassanto, John M.

see Sportiello, Michael G., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p378-384

Cassaro, Matthew J.

see Bates, James, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p357-358

A Continuing Education Program Involving A Partnership Among Building Designers, Constructors, and Code Enforcers, (Natural Disaster Reduction, George W. Hous-

see Bates, James, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p92-96

see Bates, James, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p357-358

Cassidy, Michael Reexamining Vehicle-Actuation Strategies at Isolated Sig-nalized Intersections, with Yu-Hao Chuang and Jeff Vi-tale, TE May/June 96, p235-540

Cassidy, Tim

The Great Technology Transfer, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1265-1269

Cassity, Patrick A., P.E.

Rebound of the Bascule Bridge, with Vinod C. Patel, P.E. and R. Shankar Nair, P.E., ČE Aug. 96, p48-50

Castaneda, Duane E.

Method for Uncoupling Load Factor Determination, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p222-225

Castelli, F.

see Maugeri, M., (disc), GT June 95, p457-465

see Redondo, J. M., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p709-719

Castillo, Jorge see Ruiz-C., V. M., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p818-823

Castro, P.

see Khalil, M., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p9-11

Castro, Pati

see Bergman, Dave, (High Level Radioactive Waste Management, Technical Program Committee, 1996). p12-18

Castro, Protasio F.
Influence of Coatings on Bar-Concrete Bond, MT Nov. 96, p212-214

Casulli, Vincenzo Simulation of Three-Dimensional, Non-Hydrostatic Free-Surface Flows for Estuaries and Coastal Seas, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Stelling Guus S., p1-12 see Cheng, Ralph T., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), 220 (2002).

p240-254

Catalano, Lawrence F. Pipeline Crossings 1996, 1996, 0-7844-0180-2, 510pp.

SOCRATES - From Research Towards Commercial Implementation, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Richard Harris, p588-593

Caughey, T. K. see Masri, S. F., EM Apr. 96, p350-360

Cavallaro, Antoni

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see Collop, A. C., TE Mar/Apr. 96, p131-139

Ceeria, Raju

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Ceplecha, Z.

Sizes and Masses of Satellite Observed Meteoroids, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with R. E. Spalding, C. Jacobs and E. Tagliaferri, p95-101

Cermak, Jack E.

Certnan, Jack E., see Leffler, Russ D., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1037-1044

Certes, Catherine

Radwaste Disposal in Clay—E. C. Everest Project, IPSN Contribution, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Patrick Goblet and André Levassor, p170-171

Cervenak, Douglas Advanced Site Design Software for Landfill Closure and Remedial Design, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p818-824

Cervinka, Vashek

see Muñoz, Rebecca F., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p400-405

Ceylan, Zekai

see Bennett, Scott M., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p382-384

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Classification Methodology for Coupled Shear Walls, with D. Gauthier and P. Malenfant, ST Dec. 96, p1453-1458

Seismic Response of Flexibly Supported Coupled Shear Walls, with N. Ghlamallah, ST Oct. 96, p1187-1197

Chabert d'Hieres, Gabriel

see Etling, Dieter, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p923-926

Chadha, Harpreet S.

Formal Specification of Concurrent Finite Element Systems, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with John W. Baugh, Jr., p166-176

Chadwick, Andrew

see Ilić, Suzana, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p149-160

Chai, Winston

Control of Mega-Sub Building Against Wind Loads, (Prob-abilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Maria Q. Feng, p486-489

Chai, Y. H.

Energy-Based Linear Damage Model for High-Intensity Seismic Loading, with K. M. Romstad and S. M. Bird, ST May 95, p857-864

ST Apr. 96, p468

Sectional Depth of Prestressed Concrete Beams with Excess Capacity, ST July 96, p788-793

Chajes, Michael J.

Dynamic Analysis of Tall Building Using Reduced-Order Continuum Model, with Liyang Zhang and James T. Kirby, ST Nov. 96, p1284-1291

see Reid, Jonathan S., (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p294-297

Chaker, Chiheb

Analysis of Branch Crack in Compression, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Michel Barquins, p366-374

Chakrabarti, Sekhar K.

see Mishra, Ramesh C., EM Apr. 96, p385-387

Chakrabarti, Subrata K.

Instability Analysis of an Inclined Tower in Waves, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p836-839

disc. (of Cross-Flow Vibrations of Cylinder in Irregular Os-cillatory Flow, by Andrzej Kozakiewicz, B. Mutlu Sumer and Jørgen Fredsøe, WW Nov./Dec. 94, p515-534), WW May/June 96, p155-156

disc. (of Equilibrium-Range Spectrum of Waves Propagat-ing on Currents, by Kyung Duck Suh, Yoo-Yin Kim and Dong Young Lee, W Sept./Oct. 94, p434-450), WW Nov./Dec. 96, p302-303

Chamberlain, Edwin J.

Material Properties, Specifications and Testing for Pave-ments in Cold Regions, (Roads and Airfields in Cold Re-gions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), with Vincent C. Janoo and Stephen A. Ketcham, p289-318

Chambers, Donald R.

A Surface Collection Design Approach on the Lower Co-lumbia River, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with John H. Plump, Jr., p667-672

Chameau, Jean-Lou A.

see Sutterer, Kevin G., GT Mar. 96, p209-215

Chamis, Christos C.

Reliability/Cost of Adaptive Intraply Hybrid Fiber Com-posite Structures, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p644-647

Champeon, Elizabeth A.

Seismic Risk Assessment for Environmentally Sensitive Facilities in Northern Maine, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1052-1067

Chan, Andy T.

Viscous Ship Waves on Water of Finite Depth, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Allen T. Chwang, p515-518

Chan, Chun-Man

Application of Structural Optimization to Practical Tall Steel Building Design, (Analysis and Computation, Franklin Y, Cheng, ed., 1996), with Joohyuk Park, p123-134

Chan, G. W.

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Chan, W. T.

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Chan, Weng-Tat

Civil Engineering Applications of Genetic Algorithms, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with David K. H. Chua,

Construction Resource Scheduling with Genetic Alog-rithms, with David K. H. Chua and Govindan Kannan, CO June 96, p125-132

Chander, Divya
Design of a Multi-Generational, Interstellar Ship, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p311-320
The Solar System Cruiser—Interstellar Precursor, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p302-310

Chandler, Adrian M.

Seismic Torsional Provisions: Influence on Element Energy
Dissipation, with Joseph C. Correnza and Graham L.
Hutchinson, ST May 96, p494-500

Chandler, Douglas Scott

Monte Carlo Simulation to Evaluate Slope Stability, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p474-493

Chandler, Mark R.

see O'Connor, Kevin M., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p710-726

Chandra, Dipankar

Rate-Sensitive Micromechanical Damage Model for Brittle Solid, with Theodor Krauthammer, EM May 96, p412-422

Chandrakanth, Mysore S.

Interactions Between Ozone, AOM, and Particles in Water Treatment, with Sadasivam Krishnan and Gary L. Amy, EE June 96, p459-468

Chandramouli, V.

see Raman, H., WR Sept./Oct. 96, p342-347

Chandrashekhara, K. Analysis of a Long Thick Orthotropic Circular Cylindrical Shell Panel, with K. S. Nanjunda Rao, EM June 96, p575-579

see Belarbi, A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p788-791

Chang, Cheng-Nan

Production of Nitrous Oxide Gas under Sequencing Batch Reactor System, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with Jih-Gaw Lin, Jin-Yuan Chen and Fong-Bing Hsu, p782-787

see Chen, Chin-Yuan, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1453-1458

see Lin, Jih-Gaw, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2468-2473

Chang, Chien-Kee

Studies on Wave, Current and Suspended Sediment Characteristics at the Surf Zone, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Ching-Her Hwang, p728-738

Chang, Ching S.

Effect of Internal Length on the Vibration of Granular Solids, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p873-876

Micromechanical Modelling for Granular Materials, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p551-554

Chang, Ching-Yuan

Pyrolysis Kinetics of Uncoated Printing and Writing Paper of MSW, with Chao-Hsiung Wu, Jiann-Yuan Hwang, Jyh-Ping Lin, Wan-Fa Yang, Shin-Min Shih, Leo-Wang Chen and Feng-Wen Chang, EE Apr. 96, p299-305

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see Li, Huaqiang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p326-329

Behavior of Marble under Compression, with P. Monteiro, K. Nemati and K. Shyu, MT Aug. 96, p157-170

Inference of Dynamic Shear Modulus from Lotung Downhole Data, with Chin Man Mok and H.-T. Tang, GT Aug. 96, p657-665

Chang, Edmond Chin-Ping GIS-T Design for its Applications, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p174-178

Chang, Feng-Wen

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Chang, Howard H.

Flushing and Recharge of Inlet Channel for an Ephemeral Coastal River, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Daniel Pearson, p659-668

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Scour Study for Bridge Design on Temecula Creek, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1162-1166

Simulation of Channel Changes Induced by a Reservoir, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2109-2113

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Inelastic Behavior of Steel Frames with Added Viscoelastic Dampers, with S. J. Chen and M. L. Lai, ST Oct. 96, p1178-1186

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Chang, Kwang Soo Autonomous Intelligent Cruise Control Using the Fuzzy Logic, (Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Jae Sung Choi, p644-

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Northern Climate Weathering Tests on Sealed Concrete,
(Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p141-152

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Drought Experiences of Ohio and Their Applications in the DAR-JAI River Basin of Taiwan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Wen C. Huang and Chian M. Wu, p628-636
Study of Hydraulic Jump Lengths on Inclined Channel Beds, (North American Water and Environment Congress & Destructive Water, Chenchayva Bathala, ed.

gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Cheng F. Li and Hong Y. Sun, p4064-4071

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disc. (of Weir Aeration: Models and Unit Energy Con-sumption, by Ning H. Tang, N. Nirmalakhandan and R. E. Speece, EE Feb. 95, p196-199), EE Apr. 96, p332-333

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see Sheu, Hwey-Lin, EE Dec. 96, p1101-1109

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Finite Element Analysis with Fuzzy Variables, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with

Gilosh, ed. and Jahasina Strandininan, ed. 1725, and Bilal M. Ayyub, p643-650
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see Taggart, William C., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p594-599

see Taggart, William C., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p600-605

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see Maser, Kenneth, (Building an International Com of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p734-741

see Maser, Kenneth, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p955-958

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A Summary of Research and Development Projects in Non-destructive Evaluation Technologies for Bridges, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p230-237

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see Saquib, Najmus, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3515-3520

Chen, Bang-Fuh

A Complete Three Dimensional Analysis of Pressures on a Vertical Cylinder by Earthquakes Including Fluid-Structure Interaction, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p519-522

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see Gomez, L. E., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p508-514

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Modeling the Fate of Copper Discharged to San Francisco Bay, with Daniel Leva and Adam Olivieri, EE Oct. 96, p924-934

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Granular-Flow Rheology: Role of Shear-Rate Number in Transition Regime, with Chi-Hai Ling, EM May 96, p469-480

Bounding Axial Profile Analysis for the Topical Report Database, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Theodore A. Parish, p336-339

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Turbulence in Open-Channel Flows by Iehisa Nezu and Hiroji Nakagawa, EM June 96, p590 see Tsai, Whey-Fone, EM Feb. 95, p230-243

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Specification of Cu, Pb and Cr in Contaminated Sediment Effected by pH, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with Jih-Gaw Lin and Cheng-Nan Chang,

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Dynamic Brittle Material Response Based on a Nonlocal Damage Model, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p580-583

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Further Application of Dynamic Poroelasticity to Geotechnical Engineering Via BEM, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p479-482

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Time Domain Fundamental Solution to Nonclassical Thermoelasticity with One Relaxation Time Part II: Two-Dimensional Solution, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Alexander H.-D. Cheng, p88-91

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Chen, Lun

Full-Scale Test Studies on Prevention of Frost Damage for Retaining Wall Reinforced with Geotextile, Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Guangxin Li and Wenfeng Huang, p724-735

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see Dimentberg, Mikhail F., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p588-591

see Chang, King-le, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p550-557

Comparing Three Techniques for Finding the Overall Lengths of Installed Timber Piles, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p780-783 Condition Assessment of Marine Timber Piles Using Stress

Wave Method, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Y. Richard Kim, p853-860

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Spotlight on Steel Moment Frames, with E. Yamaguchi, CE Mar. 96, p44-46 see Huang, Y. L., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p719-726

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Elmbedded Fiber Optic Displacement Sensor for Concrete Elements, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Farhad Ansari and Hong Ding, p359-365

Crees, Anguan Application of a Coupled 3-D Hydrodynamics-Sediment-Water Quality Model, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Y. Peter Sheng, p325-339

Habitat Preservation and Enhancement Associated with San Diego Creek Flood Control Channel Improvement, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Ruh-Ming Li, p530-535

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Drying of a Heated Porous Medium at Sub-Residual Saturations, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with A. K. Sathappan and R. Bochm, p119-121

Unsaturated Flows Around a Horizontal Hole with Constant Heat Input, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with R.

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Continuous and Discontinuous Failure Modes, EM Jan. 96, p80-82

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A Study on the Link between Damage Mechanics and Fracture Mechanics, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p739-742

Chen, ZhiQiang

Development of a Regional Atmospheric-Hydrologic Model for the Study of Climate Change in California, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with M. Levent Kavvas, Liqin Tan and Su-Tzai Soong, p1093-1098

Anisotropic Coefficients of Poroelasticity, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1094-1097

see Abousleiman, Y., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p935-938

see Badiey, M., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p800-803

see Cui, L., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p471-474

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see Kaliakin, V. N., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p289-292

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see Chen, Jianming, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p88-91

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Direct Measurement of Turbulence Structures in a Standard Jar Test Tank Using PIV System, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Joseph F. Atkinson and Marcus I. Bursik, 93746-3751

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Seismic Response Assessment of Active-Controlled Multi-Story Buildings with Soil-Foundation Influence, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with S. Suthiwong and P. Tian, p1155-1163

Theoretical and Experimental Studies on Hybrid Control of Seismic Structures, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with P. Tian, V. Rao, K. Martin, F. Liou and J. H. Yeh, p322-338

Cheng, Franklin Y.

Analysis and Computation, 1996, 0-7844-0163-2, 522pp.

Synthesized Images for Pavement Management System Design, with Mario Miyojim, CP Jan. 96, p60-66

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see Huang, Shehua, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p448-453

see Huang, Shehua, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3856-3862

Cheng, Luke

Seismic Design Issues of Water Pipelines at the Hayward Fault Crossing, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Lota D. Nuguid, p147-154

ArcSite: Enhanced GIS for Construction Site Layout, with J. T. O'Connor, CO Dec. 96, p329-336

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Source Apportionment Study of Nitrogen Species Meas-ured in Southern California in 1987, with Ning Gao and Philip K. Hopke, EE Mar. 96, p183-190

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Modeling the Periodic Stratification and Gravitational Circulation in San Francisco Bay, California, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Vincenzo Casulli, p240-254

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Rainfall-Runoff Modeling for Watershed Stormwater Management, (North American Water and Environment Conress & Destructive Water, Chenchayya Bathala, ed., 1996), p2066-2071

Stormwater Management Plan Updated for Climate System Changes, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1846-1851

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Reliability of Code Provisions for Wind-Induced Discom-Ort. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p494-497

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see Bonn, Betty, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p68-

Cherry, J. A.

Controlled Field Experiments for Assessment of Subsur-face NAPL Behaviour and Remediation, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: As-sessment and Remediation, Lakshmi N. Reddi, ed., 1996), with D. J. A. Smyth, p3-24

Chesher, Tim J.

Numerical Morphodynamic Modelling of Keta Lagoon, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p927-938

Chestnut, Michael J.

SQIG: A DOE Complex-Wide Approach to Savings through Sharing, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Robert R. Rinderman, p310-311

Chevalier, Lizette R.

2-D Experimental Investigation of Surfactant Mobilization of Light Nonaqueous Phase Liquid, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Roger B. Wallace, David C. Wiggert and Mohsen D. Shabana, p357-368

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Chhabildas, Lalit C.

Techniques to Obtain Orbital Debris Encounter Speeds in the Laboratory, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p8-12

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Space Debris, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1270-1273

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New Sunshine Program: Comprehensive Approach to the 21st Century, EY Dec. 96, p93-101

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Chieh, James

Water Resources Investigation Along Salt River in Phoenix and Tempe Area, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with Jody Fischer and Dennis Marfice, p1399-1405

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Local Scour: By A Deeply Submerged Horizontal Circular Jet, with Siow-Yong Lim, HY Sept. 96, p529-532

Temporal Development of Local Scour at Bridge Piers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Bruce W. Melville, p2556-2564

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see Pope, R. B., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p369-

Childs, Kenneth W.

see Forsberg, Charles W., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p366-368

Chilton, J. M.

Material Development for High-Performance Bridge Steels, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with S. J. Manganello, p100-107

Chin, C. O.

Lim, C. O.
Jet Scour around Vertical Pile, with Y. M. Chiew, S. Y.
Lim and F. H. Lim, WW Mar/Apr. 96, p59-67
Streambed Armoring, with B. W. Melville and A. J. Raudkivi, HY Aug. 94, p899-918
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Chin, David A.

Architectural Engineering Program at University of Miami, with Michael K. Phang, AE June 96, p78-79

see Wee, T. H., MT May 96, p70-76

see Liu, L. Y., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p15-20

Chin, Sangyoo

Object-Oriented Construction Information Framework for Construction Management, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Annette L. Stumpf and Liang Y. Liu, p786-792

see Stumpf, Annette L., CP July 96, p204-212

Chini, S. Abdol

Use of Recycled Aggregates for Pavement, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Timothy J. Sergenian and Jamshid M. Armaghani, p154-162

Chinowsky, Paul

see Vanegas, Jorge, ed., Computing in Civil Engineering

Chinowsky, Paul S.

ICeD: An Interdisciplinary Conceptual Design Environment, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p133-139

see Goodman, Robin E., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p452-458

Chinthakuntla, Srinivas see La Motta, Enrique J., EE July 96, p640-648

Chiou, Dar-Chang see Ou, Chang-Yu, GT May 96, p337-345

Chirra, Surendra R.

see Yerrapragada, Srinivas S., EE Sept. 96, p856-863

Chitale, Shrikrishna V.

Coordination of Empirical and Rational Alluvial Canal For-mulas, HY June 96, p357-359

Chiu, Gregory L. F.

Extreme Winds as a Component of Catastrophic Risk,

(Probabilistic Mechanics & Structural Reliability, Dan) M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

A Framework for Estimating Losses Due to Hurricane Ex-treme-Winds, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p287-288

Post-Hurricane Investigations: Quantifying Damage, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Sara Wadia-Fascetti and Mussaddeque Hossein, p74-75 see Reinhold, Timothy A., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p191-192

Chiu, Hui-Sheng Long-Term Deflection Control in Cantilever Prestressed Concrete Bridges. I: Control Method and Algorithm, with Jenn-Chuan Chern and Kuo-Chun Chang, EM June 96, p489-494

Long-Term Deflection Control in Cantilever Prestressed Concrete Bridges. II: Experimental Verification, with Jenn-Chuan Chern and Kuo-Chun Chang, EM June 96,

p495-501

Chiu, Lydia see Doughman, Pamela, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1425-1430

see Vance, R. E., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1183-1189

Cho, H. E.

see Yin, S. C. L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1911-1917

Cho, Jong Soo

Air Sparging Experiments on a Two Dimensional Sand Box with DNAPLs: Multiphase Investigation with Electrical with DNAFLS: Multiphase investigation with Electrical Impedance Tomography, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p369-380

see Low, B. K., GT Nov. 94, p1917-1938

Choate, Darrel L

see Lang, Derek E., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p419-425

Choi, Bongjin

Adaptation of a Layout Design System to a New Domain: Construction Site Layouts, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Ulrich Flemming, p711-717

Understanding Current Standards Usage and Its Implication for Computer-Based Support Tools, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with James H. Garrett, Jr., p1006-1012

Choi, Chang-Koon
Refined Three-Dimensional Finite Element Model for
End-Plate Connection, with Gi-Taek Chung, ST Nov. 96, p1307-1316

Versatile Variable-Node Flat-Shell Element, with Wan-Hoon Lee, EM May 96, p432-441

Choi, Christopher Y.
Numerical Modeling of Water Flow over Porous Media, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Peter M. Waller and Fukumura Kazunari, p2433-2438

Choi, Gye-Woon

Channel Junction Effects in Channel Network Flow Simu lation, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Keun-Heung Kim and Sang-Jin Ahn, p1899-1904

Choi, Heui-Joo

see Lee, Kun Jai, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p279-

Choi, Jae Sung

see Chang, Kwang Soo, (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Choi, Kiryun

Conceptual Design of Enertopia in Korea, EY Dec. 96, p102-113

Choi, Sokhwan

Computer Vision and Fracture Process in Cement-Based Materials, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Surendra P. Shah, p967-970

Chong, Ken P.

Engineering Research on Smart Materials and Structural Systems, with S. C. Liu and O. W. Dillon, IS June 96,

Materials for the New Millennium, 2 vols., 1996, 0-7844-0210-8, 1776pp.

Chopra, Anil K.

Modal Analysis of Linear Dynamic Systems: Physical Interpretation, ST May 96, p517-527
see De la Llera, Juan C., ST June 96, p597-606
see Tan, Hanchen, ST May 96, p528-538

Chopra, Manoj B. see Dargush, Gary F., EM July 96, p623-632 see Wang, Jie, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p339-342

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see Sharma, Vinaya, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p223-229

see Tobias, Daniel H., (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p215-222 see Tobias, Daniel H., BE Nov. 96, p127-134

Chotiros, Nicholas P. Model of Shear Wave Speed as a Function of Depth in Water-Saturated Sand, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Adrienne M. Mautner, p804-807

Chou, C.-R.

see Yim, John Z., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p45-

Chou, Karen C.

see Molina, Augusto V., (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p298-301

Chou, S. C.

see Surampalli, R. Y., P.E., CR Dec. 96, p163-177

see Lin, T. D., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p592-599

Chouinard, L. E.

Ranking Models Used for Condition Assessment of Civil Infrastructure Systems, with G. R. Andersen and V. H. Torrey, III, IS Mar. 96, p23-29

Chow, Chi Amy

A Decade of Experience in Developing Pavement Manage ment Systems for Local Agencies, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p992-998

Chowdhury, J. T. A

see Hoque, Bilquis A., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3916

Chowdhury, Jahir U.

A Multi-Objective Analysis for Cyclone Shelter Planning in Bangladesh, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Re-zaur Rahman, Fazlul Karim and David W. Watkins, p213-214

Chowdhury, Mostafiz R.
Flow-Induced Dynamic Response of Olmsted Physical Models, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Robert L. Hall, p840-843

Christensen, Bart

see Stubchaer, James M., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1807-1812

Christensen, Carissa Bryce

The Economics of Space Solar Power, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Douglas A. Comstock and John C. Mankins, p260-268

Christensen, Erik R.

see Frieseke, Richard W., EE June 96, p546-549

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see Christensen, Jimmy Roland, EE Mar. 95, p236-244

Christensen, J. Bradley

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Christensen, Jimmy Roland

Improved Characterization of Mixing for Sludge Conditioning, with George Lee Christensen and Jens Aage Hansen, EE Mar. 95, p236-244

disc: John T. Novak, EE Sept. 96, p880 clo: EE Sept. 96, p880-881

Christensen, Lars Chr. Process Models in Enterprise Engineering - Tools for Enhancing Process Description, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Tore R. Christiansen and Yan Jin, p634-641

Christensen, Rick

see Glickman, Arthur, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p887-892

Christian, Cindy L.

see Pollen, Michael R., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996, p494-505

Christian, John T.

Reliability Applied to Slope Stability Analysis, with Charles C. Ladd and Gregory B. Baecher, GT Dec. 94, p2180-2207

disc: Douglas Crum, GT May 96, p417 clo: GT May 96, p417-418

Reliability Methods for Stability of Existing Slopes, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), p409-418

Christiansen, N.

see Prinos, P., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582

see Jin, Yan, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p642-648

Christiansen, Tore R.

see Christensen, Lars Chr., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p634-641

see Levitt, Raymond E., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p268-274

Christiansson, Per

User Models in Search and Navigation Systems on the Internet, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Robert Lagerstedt and Uno Engborg, p21-27

Christie, M. C.

Field Measurements of Erosion across a Shallow Water Es-tuarine Mudflat, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with K. R. Dyer, M. J. Fennessy and D. A. Huntley, p759-770

Christopher, Bradley P.

see Cousins, Thomas E., CF May 96, p79-86

Christopherson, A. B.

West Dock Causeway Bridge Piers, (Cold Regions Engi-neering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), with T. Nottingham, J. W. Pickering and K. W. Braun, p315-326

Chroneer, Zenitha

Sediment and Contaminant Transport in Green Bay, (Estua-rine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Mary Cardenas, James Lick and Wilbert Lick, p313-324

see Wang, Kai-Ping, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p466-477

Chu, HsienShen S.

Mechanisms of Removal of Residual Dodecane Using Sur-factant Foam, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Amir Salehzadeh, Avery H. Demond and Richard D. Woods, p269-280

see Chen, Sheng-Jin, ST Nov. 96, p1292-1299

Chu, Paul C. K.

Mixing of a Bent-over Jet in Crossflow, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), with Joseph H. W. Lee, p910-913

Chu, V. H.

see Babarutsi, S., HY July 96, p367-372

see Dehghani, M., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p446-449

see Zhang, J.-B., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p438-441

Chu, Vincent H.

General Integral Formulation of Turbulent Buoyant Jets in Cross-Flow, with Joseph H. W. Lee, HY Jan. 96, p27-34 Stability of Shallow Shear Flows, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1074-1077

Vibration Isolation for Space Station Micro-Gravity Using High Temperature Superconductors, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with K. Ma, H. Xia and T. L. Wilson, p540-

see Wilson, T. L., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p355-359

Chu, Wen-Sen

Development of Islandwide Groundwater Pollution Poten-tial for Taiwan, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with Chin-Hwa Chiang, Mei-Hui Chang and Cheh-Ming Lee, p3164-3169

see DiGiano, Francis A., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1638-1644

Chua, David K. H.

Framework for PMS Using Mechanistic Distress Submod-els, TE Jan./Feb. 96, p29-40

see Chan, Weng-Tat, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1072-1078

see Chan, Weng-Tat, CO June 96, p125-132

Chua, Koon Meng

see Johnson, Stewart W., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p871-880

Chuang, Yu-Hao see Cassidy, Michael, TE May/June 96, p235-540

Statistical Aspects of Toughness in Brittle Fracture, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with M. Gorelic, p346-349

see Issa, Mohsen A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1038-1041

Buckling Behavior of Polyethylene Liner System, with Mi-chael E. Barber and Reda M. Bakeer, MT Nov. 96, p201-206

Chung, Christopher A.
Operation of Airport Security Checkpoints Under Increased
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Chung, Francis I. see Hutton, Paul H., (North American Water and Environment Congress & Destructive Water, Chenchayya
Bathala, ed., 1996), p3551-3556
Be Hutton, Paul H., (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3557-3562 see Rajbhandari, Haridarshan L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3545-3550

Chung, Gi-Tack

see Choi, Chang-Koon, ST Nov. 96, p1307-1316

see Finno, R. J., GT May 96, p355-364 see Yin, J., GT May 96, p346-354

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Chung, W.

Analytical Model for Shear Critical Reinforced-Concrete Members, with S. H. Ahmad, ST June 95, p1023-1029 disc: F. J. Vecchio and M. P. Collins, ST Sept. 96, p1123-1124

Chung, Y. Jae see Duke, L. Donald, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2619-2624

Chunnanoud, Vorathum
see Roddis, W. M. Kim, (Computing in Civil Engineering,
Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),
p91-96

Chwang, Allen T. see Chan, Andy T., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p515-518

Clandella, Donald R.
The Human Side of L.A. Metro, CE Dec. 96, p36-39

Cicero, C. A.

see Herman, D. T., (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Cieślikiewicz, Witold

see Graff, Jerzy, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1035-1046

Civil Engineering Research Foundation Action Plans: An Enhanced Building Technology Evalua-tion Process, CERF Report #96-5021-02, 1996, 0-7844tion Process, 242pp.

Construction Industry Research Prospectuses for the 21st Century, CERF Report # 96-5016.T, 1996, 0-7844-0186-1, 130pp.

Creating the 21st Century through Innovation, CERF Report #96-5016.E, 1996, 0-7844-0185-3, 60pp.

Engineering and Construction for Sustainable Development

in the 21st Century: Assessing Global Research Needs, CERF Report #96-5016A, 1995, 0-7844-0142-X, 145pp. Evaluation Findings: the Segmental Concrete Channel Bridge System, CERF Report: HITEC 96-01, 1996, 0-

Page System, CERF Report: HITEC 96-01, 1996, 0-7844-0157-8, 33pp.
Improving Development Characteristics of Reinforcing Bars, CERF Report #94-6002, 1994, 0-7844-0062-8,

International Sourcebook for Construction Industry Product Assessment, CERF Report #95-5021, July 1996, 1996, 0-7844-0173-X, 75pp. Materials for Tomorrow's Infrastructure: A Ten Year Plan

for Deploying High Performance Construction Materials and Systems, CERF Report #94-5011E, 1994, 0-7844-0066-0, 55pp.

A Nationwide Survey of Civil Engineering-Related R&D, CERF Report #93-5006, 1993, 0-87262-970-8, 80pp.

The Great Great Lakes, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2300-2305 Clar, Michael

see Ennis, David, (North American Water and Environ Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4202-4207

Clark, C.

see Lever, J. H., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p629-639

Clark, Matthew

see Frehs, Jim, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1331-1336

Clark, P. U.

see Ho, C. L., (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p122-136

Energy-Based Modeling of High Damping Rubber Seismic Isolators for Dynamic Analysis, (Analysis and Computa-tion, Franklin Y. Cheng, ed., 1996), with James M. Kelly, p200-211

Passive Control Systems for Mitigation of Near-Field Earthquake Ground Motions, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), with James M. Kelly, p217-218

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Clark, Robert M.

Mixing in Distribution System Storage Tanks: Its Effect on Water Quality, with Farzaneh Abdesaken, Paul F. Boulos and Russell E. Mau, EE Sept. 96, p814-821

Clarke, Roy

see Fox, Ken, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p520-524

Clarkson, William W.

Anaerobic Bacterial Quantitation of Yucca Mountain, Nevada Doe Site Samples, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Lee R. Krumholz and Joseph M. Suflita, p39-40

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see Onyemelukwe, Okey, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p141-142

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see de Vries, Marten J., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p64-67

Clause, Dorinda L.

Characterization and Remediation of a Fuel Oil Plume, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Stacey R. Leake, p762-775

Clausen, C. see Reinhart, D. R., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Reme-diation, Lakshmi N. Reddi, ed., 1996), p323-332

The Importance of Water Depth for Sparger Performance, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with John S. Gulliver and Steven C. Wilhelms, p1305-1310

Clayton, Terry

Argument Against Separate Writing Courses for Engineers, El July 96, p111-113

Clearfield, A.

agement, Technical Program Committee, 1996), p474-476 see Balck, Vladimír, (High Level Radioactive Waste Man-

Cleary, D. B.

Development of a Miter Gate Reliability Model, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with C. J. Hookham and J. W. Waller, p862-865 Clegg, R.

Equilibrium/Control Results and the Approach to Near-Equilibrium of a New Dynamic Micro-Simulation/ Assignment Model on a Network Model of York, (Applicasignment result on a Network Model of York, (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with M. O. Ghali and M. J. Smith, p568-572.

Clement, T. Prabhakar

Numerical Modeling of Biologically Reactive Transport Near Nutrient Injection Well, with Brian S. Hooker and Rodney S. Skeen, EE Sept. 96, p833-839

Clemente, Frank M.

see York, Donald L., GT Sept. 94, p1498-1513

Clemmens, A. J.

see Allen, Richard G., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p899-904

see Bautista, E., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1887-1892

see Strelkoff, T. S., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1711-1715

Cleveland, A. B., Jr.

Integrating Information with 3D Models for Facility Life-Cycle Support, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p253-261

Cleveland, Alton B., Jr.

see Dharwadkar, Parmanand V., (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p70-76

Cleveland, T. G.

See Wang, K. H., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3835-3840 see Wang, K.-H., EM Oct. 96, p994-1002

Cleveland, Theodore G.

Feasibility of Fullerene Waste as Carbonaceous Adsorbent, with Sanjay Garg and William G. Rixey, EE Mar. 96, p235-238

Clifford, John

A Simulator to Study the Effects of Earthquakes on Segmental Paving, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Rob Avenall and Don Brown, p1-2

Clift, Anne Eckert

In Situ Measurement of Rockfill Properties, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p37-48

see Ferraris, C. F., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1379-1387

Cluff, Lloyd S.

see Bray, Jonathan D., GT Mar. 94, p543-561

Coates, John T.

see Falta, Ronald W., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p257-268

see Wright, Charles, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remadiation, Lakshmi N. Reddi, ed., 1996), p151-162

Codner, Gary P.

see Perera, B. J. C., WR July/Aug. 96, p270-279

Coelho, Sérgio Teixeira

see Orr, Chun-Hou, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4214-4219

Coelli, Michelle

see Dudley, Norman J., (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p272-293

Cofer, William

see Alfoqaha, Arshad, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p914-917

Coffler, Mendi

see Navon, Ronie, CO June 96, p101-108

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see Levitt, Raymond E., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p268-274

Cohen, Julie Mark

Seismic Performance of Cladding: Responsibility Revisit-ed, CF Nov. 95, p254-270 disc: Robert W. Day, CF Nov. 96, p183

clo: CF Nov. 96, p183-184

The Distinction between an Interplanetary Vehicle and a Mars Surface Habitat, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p984-996

Cohen, S.

see Haj Salem, H., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p368-372

Cohen, Simon

Wavelet Transforms for Incident Detection on Motorways, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Bian-shun Jing, p222-226

Cohen, Wendy L.

Hazardous Soil Remediation: A Cooperative Effort Be-tween Industry and Government, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1203-1208

Cohn, M. Z.

Optimization of Composite Highway Bridge Systems, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with J. J. Werner, p135-146

Cohn, Timothy A.

see Lane, William L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2185-2190

see de sa e Benevides, V. F., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1719

Cokkinides, G. J.

see Rizos, D. C., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p480-486

Colarusso, Al

Nailing A Landslide (Available only in the Geo/ Environmental Special Issue), CE Nov. 96, p13A-15A

see Sivakumaran, K., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3806-3811

Cole, Lawrence W.

Fast-Track Concrete Paving—Overview of Key Components, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Gerald F. Voigt, p446-455

Corrosion and Hydrogen Permeation Inhibition by Thin Layer Zn-Ni Alloy Electrodeposition, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with B. N. Popov and R. E. White, p1281-1287

Coleman, Neil M.

Flooding of an Underground Facility at Yucca Mountain: A Summary of NRC Review Plans, (High Level Radioac-tive Waste Management, Technical Program Committee, 1996), with Rex G. Wescott and Terry L. Johnson, p205-207

Regulatory Assessment of Evapotranspiration at Yucca Mountain, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Michael P. Miklas, p199-200

Regulatory Perspective on Future Climates at Yucca Mountain, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Norman A. Eisenberg and David J. Brooks, p255-257

Coleman, Richard

see Ding, Xiaoli, SU Feb. 96, p3-13 see Ding, Xiaoli, SU Feb. 96, p14-25

Coleman, Stephen E.
Initiation of Bed Forms on a Flat Sand Bed, with Bruce W.
Melville, HY June 96, p301-310

Potential Flow Instability Theory and Bed Forms, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with John D. Fenton, p442-447

Coletta, Louis S.

Fish Passage Pool Bedding Analysis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3818-3823

see Sánchez-Arcilla, A., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p437-448

Collier, Eric

Visual-Based Scheduling: 4D Modeling on the San Mateo County Health Center, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Martin Fischer, p800-805

Collins, Anthony G.

Editorial, with Rafael Bras, EE May 96, p339

see Marsteiner, Edward L., (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2421-2426

see Parket, Philip J., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p757-768

Collins, Frank X.

The South Bay Ocean Outfall, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Gregory W. McBain, Jon Y. Kaneshiro, Luciano Meiorin and Larry Stout, p2044-2049

Collins, L. F.

see Yu, H. S., GT Aug. 96, p623-632

Collins, Kevin R.

Performance-Based Seismic Design of Building Structures, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p792-795

Collins, M. P.

see Vecchio, F. J., (disc), ST June 95, p1023-1029

Collins, Marshall D.

Suspicious Inspection Begs ASCE Intervention, CE Dec. 96, p28

Collins, Patrick

Design and Construction of Zero-Gravity Gymnasium, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Sunao Kuwahara, Tsuyoshi Nishimura and Takashi Fukuoka, p200-205

Japanese Rocket Society's Space Tourism Study Program, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p399-405

"SPS 2000" and its Internationalisation, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p269-279

see King, Brian, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p192-203

Collins, Patrick S.

Financing the Future of Storm Water, CE Mar. 96, p64-66

Collins, Walter

Design and Operation of the Sub-Orbital Lunar Explorer, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p949-955

Stiffness Reductions of Flexible Pavements due to Cumula-tive Fatigue Damage, with D. Cebon, TE Mar/Apr. 96, p131-139

Colomer, Jordi

Resuspension of Particle Bed by Round Vertical Jet, with Harindra J. S. Fernando, EE Sept. 96, p864-869

Colwell, Rita R.

see Orlob, Gerald T., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4101-4106

Comerio, Mary C.

Housing Losses, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p167

Telesleeve Crossing, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Paul F. Lucas, p139-146

Committee on Design of Steel Building Structures of the Committee on Metals, Structural Division Compendium of Design Office Problems-Volume II, ST

Feb. 96, pl 16-124

Committee on Ground Water of the Irrigation and Drainage Division, American Society of Civil Engineers, (Lloyd C. Fowler, chmn.)

Operation and Maintenance of Ground Water Facilities (M&R No. 86), 1996, 0-7844-0139-X, 180pp.

Committee on Ground Water Quality of the Environ-mental Engineering Division of the American Society of Civil Engineers, (Sayed M. Sayed, chmn.) Quality of Ground Water (M&R No. 85), 1996, 0-7844-0137-3, 200pp.

Committee on Ports and Harbors Lifelines of the Technical Council on Lifeline Earthquake Engineering of ASCE, (Stuart D. Werner, chmn.)
Hyogo-Ken Nanbu Earthquake of January 17, 1995: A Post-Earthquake Reconnaissance of Port Facilities, Stephen E. Dickenson, Vice-Chairman, 1996, 0-7844-0161-6, 111pp

Comstock, Douglas A.

see Christensen, Carissa Bryce, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p260-268

Cone, David

Cone, David Economic Incentives Encourage Improvements In Farm-Level Water Management Practices, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Laurie Houston and Dennis Wichelns, p406-411

Conesa, M.

see García, A., (disc), TE July/Aug. 94, p674-683

Coniglio, Angelo F.

Room for Engineers in Corps?, CE Apr. 96, p32,36

Connell, Norman L., Sr.

see McClure, Nathaniel D., IV, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3326-3331

Conner, Randall C.

see Carpenter, Ralph R., (Pipeline Crossings 1996, Law-rence F. Catalano, ed., 1996), p312-321

Conner, Steven E.

see DeStephen, Raymond A., (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p49-56

Connolly, James P. see Sutter, David A., CE Jan. 96, p36-39

Connolly, John F.

Pulling Propellants Out of Thin Air: Demonstration of an End-to-End Mars In-Situ Propellant Production Unit, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Robert M. Zubrin, p706-716

see Boles, Walter W., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996). p699-705

Connolly, John P.

The Fate of Pathogenic Organisms in Mamala Bay, (North American Water and Environment Congress & Destruc tive Water, Chenchayya Bathala, ed., 1996), with Alan F. Blumberg, p4090-4095

see Blumberg, Alan F., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4084-4089

Connor, Jerome J., Jr.

see Peetathawatchai, Chatmongkol, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), p68-71

Conolly, Rory B.

see Watkins, Paul S., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2366-2371

Conrad, Stephen H.

see Webb, Erik K., (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p249-264

Consolazio, Gary

A Domain Specific Equation Solver for Bridge Analysis, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p321-327

Consoli, Nilo C.

see Schnaid, Fernando, (disc), GT Aug. 95, p589-600

Constantine, Philip

see Gugino, Anthony, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p245-253

see Symans, M. D., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p350-360

Constantinou, Michael C.

see Mokha, Anoop S., ST Mar. 96, p298-308

Constantz, James E.

see Green, Timothy R., HE July 96, p123-130

disc. (of Seismic Bearing Capacity of Foundation on Cohesionless Soil, by L. Dormieux and A. Pecker, GT Mar. 95, p300-303), GT Sept. 96, p785-786

Conte, Joel P.

Statistical System Identification of Structures Using ARMA Models, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Satyendra Kumar, p142-145 see Peng, Bor-Feng, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p269-272

Conti, Giorgio

see Vagliasindi, Federico G. A., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1801-1806

Corps Public Works In Jeopardy, CE June 96, p35

Conway, Michael F.

Liability to Asset: Beneficial Reuse of Stabilized Contaminated Soils, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p47-56

Cook, Christopher B.

Two- and Three-Dimensional Hydrodynamic Modeling of the Salton Sea, California, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Gerald T. Orlob, p3752-3757

Cook, Daniel W.

Natural Disaster Reduction Structures Specialist of the Urban Search and Rescue Task Forces, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p.221-222

Cook, Dennis

see Walsh, Robin, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p640-651

see Mockros, L. F., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p33-34

Cook, Ronald A.

see McVay, Michael, ST Sept. 96, p1016-1024

Cook, Roy

see Schmidt, Birger, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p373-378 see Yu, Burt, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1789-1795

Cook, T. C. see Taft, E. P., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed. 1996), p171-176

Ia, ed. 1996), p171-176

[North American Water and Environ-

see Winchell, F. C., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p881-886

Cooley, Andrew G.

Risk Management Principles of Transportation Facility De-sign Engineering, TE May/June 96, p207-209

see Casey, Joann, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2685-2688

mbs, Marjorie C.

see LaVeck, Gerald D., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3629-3632

Cooper, A. Bryce see Williamson, R. Bruce, WR Jan/Feb. 96, p24-32

Cooper, Bonnie L.

see Schrunk, David G., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p935-941

Cooper, C. M.
see Shields, F. D., Jr., (North American Water and Environment Congress & Destructive Water, Chenchayya
Bathala, ed., 1996), p3363-3368

Cooper, Paula J. see Bradley, A. Allen, HE Apr. 96, p63-68

Coote, Peter J.

Liability of Engineers When Wetlands Laws Change, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p970-975

Copeland, Ronald R.

Overview of the US Army Corps of Engineers Flood Control Channels Research Program, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1501-1506

Coppersmith, Kevin J.
The Yucca Mountain Probabilistic Volcanic Hazard Analysis Project, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Roseanne C. Perman, Robert R. Youngs, Todd A. Crampton, Laurel A. DiSilvestro, Richard P. Smith, C. Allin Cornell, Peter A. Morris, Timothy Sullivan, Stephen T. Nelson and J. Carl Stepp, p53-55

see Youngs, Robert R., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p61-63

Coppock, Jim, P.E. see Hoffman, Norm, P.E., CE Aug. 96, p28-29

Coquet, G. see Danflous, D., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p542-546

Corapcioglu, M. Yavuz

Dimensional Analysis of Colloid-Facilitated Ground-Water Contaminant Transport, with Shiyan Jiang, HE Oct. 96, p139-143

see Darilek, Glenn T., EE June 96, p540-544

see Stallard, W. M., EE Aug. 96, p692-699 see Tuncay, Kagan, EM Nov. 96, p1077-1085

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see Titmarsh, G. W., HY Jan. 95, p61-70

Corfdir, A.

see de Buhan, P., EM Oct. 96, p921-929

Cornelius, Mike

see Saquib, Najmus, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3509-3514

see Saquib, Najmus, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3515-3520

Cornell, C. A.

Cornett, C. A. see Bazzurro, P., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p202-205

see Schmucker, D. G., (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p578-581

Cornell, C. Allin

see Coppersmith, Kevin J., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p53-55

see Winterstein, Steven R., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p592-595

Cornell, Joseph A.

see Newcomb, David E., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p510-514

Corotis, Ross B.

Corots, Ross B.
see Frangopol, Dan M., (Analysis and Computation, Frank-lin Y. Cheng, ed., 1996), p67-78
see Jiang, Mingxiang, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea
D. Grigoriu, ed., 1996), p368-371
see Makode, Prafulla V., (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed.
and Jamshid Mohammadi, ed., 1996), p606-612

Correnza, Joseph C. see Chandler, Adrian M., ST May 96, p494-500

Corser, Patrick G.

see Hardy, Andrew 1., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p712-723

Cortez, E. R.

see Korhonen, C. J., (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p128-140

Corti, S.

see Ambrosi, D., HY Dec. 96, p735-743

Cortínez, Víctor H.

disc. (of Analysis of Free Vibrations of Tall Buildings, by Qiusheng Li, Hong Cao and Guiqing Li, EM Sept. 94, p1861-1876) with Roberto H. Gutiérrez, EM May 96, p486-487

disc. (of EBEF Method for Distortional Analysis of Steel disc. (of EBEF Method for Distortional Analysis of Steel Box Girder Bridges, by Yao T. Hsu, C. C. Fu and David R. Schelling, ST Mar. 95, p557-566) with Marcelo T. Piován, ST Aug. 96, p982-983 disc. (of Incipient Instability Criterion of Two Confined Su-perposed Fluids, by Chin-Hwa Kong and I-Chung Liu, EM Feb. 95, p198-202), EM June 96, p586-587

Costa, Béatrice

see Tournu, Erick. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p760-763

Costa, F. Vasco

History of Coastal Engineering in Portugal, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), with F. Veloso Gomes, F. Silveira Ramos and Claudino M. Vicente, p413-428

Costa, J.

see Roca, P., ST Dec. 96, p1427-1436

Costes, Nicholas C.

Issues on Geomechanics, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Stein Sture, p516-520

Costley, Andrew C.

Costley, Andrew C.
Response of Building Systems with Rocking Piers and Flexible Diaphragms, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Daniel P. Abrams, pl 35-140

Cosulich, G.

The Role of Petri Nets Modelling in the Safety Assessment ne Rote of Petri Nets Modelling in the Safety Assessment Process for Guided Transport Systems, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with P. Firpo, S. Savio and G. Sciutto, p558–562

see Aspnes, John, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996),

Cotton, Maureen K.

Civil Engineers Influencing Public Policy, 1996, 0-7844-

Cottrell, Catherine M.

see Ackerman, Josef Daniel, EE Feb. 96, p141-148 see Dormon, Jane M., EE Apr. 96, p276-283

Coudercy, Laurent

see Boursier, Patrice, (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p403-407

Coullahan, Robert J.

Mitigation, Preparedness & Sustainable Development: Linking Research & Resources in the Global Information Infrastructure, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p321-322

Cousens, Terrence W

see Marandi, Seved M., (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p23-34

Investigation of Bridge Floor-Truss Behavior in Tied-Arch Span, with J. Michael Stallings and Bradley P. Christopher, CF May 96, p79-86

Coussirat, M. G.

see Sánchez-Arcilla, A., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p437-448

Coussy, Olivier

see Ulm, Franz-Josef, EM Dec. 96, p1123-1132

coutc., Jaca.
see MacCay. Charlotte, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996., p804-815

Covino, B. S., Jr.

Thermal-Sprayed Zinc Anodes for Cathodic Protection of Reinforced Concrete Structures, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with S. D. Cra-mer, G. R. Holcomb, S. J. Bullard, G. E. McGill and C. B. Cryer, p1512-1521

Cowan, R. M.

see Adams, C. D., EE June 96, p477-483

Cowell, Peter J.

see Stive, Marcel J. F., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p998-1005

Cowgill, James T., P.E. see Aguiar, Luis, CE Aug. 96, p54-57

Cox, Dave O.

Analysis of Air Permeability Tests at Yucca Mountain, Nevada, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Nick Stellavato, p160-162

Cox, James V.

Elastic Moduli of a Bond Model for Reinforced Concrete, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p84-87

Cox, Nigel

see Hoose, Neil, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p233-237

Cox, Robert F

Mobile Field Data Acquisition for Construction Quality Control and ISO 9000 Certification, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Raja R. A. Issa, p1041-1046

see Issa, Raja R. A., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1013-1019

Cox, Rory H. T.

see Aoki, Tomoyuki, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1086-1089

Cox, William E.

Legal Principles Applicable to Sharing Transboundary Wa-ters. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Cozzetto, Karen Graphical Methods for Assessing Changes in Water Quali-ty, with P. M. Berthouex, EE July 96, p667-668

Craddock, E.

see Davidoff, B., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p189-194

Craft, Andrew P.

see Rebeiz, Karim S., EY Apr. 96, p10-20

Craig, Shala L.

Craig, Statu L.

PCE in Dewatering Flows - A Case Study Risk-Based Clean-Up Action Levels, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Sri Krishnamachari, p2242-2247

Cramer, S. D.

see Covino, B. S., Jr., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1512-1521

see Wolfe, Ron, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p804-811

Crampton, Todd A.

see Coppersmith, Kevin J., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p53-55

Crampton, Walter F., P.E. A Landslide of Litigation, CE Oct. 96, p61-63

Crasnich, Marco see Ukovich, Walter, (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p166-170

Craster, R. V.

see Atkinson, C., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p212-215

A Model of Meteoroid Atmospheric Entry with Implica-tions for the NEO Hazard and the Impact of Comet Shoetions for the NEO Hazard and the Impact of Comet Shoe-maker-Levy 9 on Jupiter, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with M. B. Boslough, p81-87 see Boslough, M. B., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p88-94

Creager, M.

see Moore, N. R., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p886-889

Creed, Christopher G. see Bodge, Kevin R., WW Sept./Oct. 96, p259-263

Creegan, Patrick J.

Asphalt-Concrete Water Barriers for Embankment Dams, with Carl L. Monismith, 1996, 0-7844-0141-1, 185pp.

Cregger, William L.

Cregger, William L. see Loulakis, Michael C., CE Jan. 96, p35 see Loulakis, Michael C., CE May 96, p32 see Loulakis, Michael C., CE May 96, p32 see Loulakis, Michael C., CE July 96, p35 see Loulakis, Michael C., CE Sept. 96, p40 see Loulakis, Michael C., CE Nov. 96, p29

Cremer, Michael

Trip Mode Recommendation Using Travel Time Predic-tion, (Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Carsten Holtmann and Stefan Schrieber, p330-334

Crenais, Jean-Michel
The EURATN Project. (Applications of Advanced Technologies in Transportation Engineering. Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p159-165

Crespellani, Teresa

Crespennii, Terepennii, Terepennii, Terepennii, Terepennii, Terepennii, Terepennii Displacements of Gravity Retaining Walls, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), with Claudia Madiai and Giovanni Vannucchi, p124-133

Crespo, Á.
see Dobson, S., (Engineering Mechanics, Y. K. Lin and T.
C. Su, 1996), p673-676

see Dobson, S., (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p838-841

Crespo-Minguillon, Cesar
Probabilistic Model for the Simulation of Traffic Flows
over Highway Bridges, (Probabilistic Mechanics &
Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Juan R. Casas, p26-29

Crim, W. Keith

see Froehlich, David C., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1918-1923

Crippen, Robert see Blom, Ronald, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p305-306

Crispino, M.

see Giannattasio, P., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p500-504

Criswell, David R.

World and Lunar Solar Power Systems Costs, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p293-301

Criswell, Marvin E.

Design and Performance Criteria for Inflatable Structures in Space, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Willy Z. Sadeh and Jenine Abarbanel, p1045-1051

see Abarbanel, Jenine E., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1069-1075

see Grigg, Neil S., El Oct. 96, p151-155
see Sadeh, Willy Z., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996). p912-919

Crittenden, John C.

see Liu, Junbiao, EE Aug. 96, p707-713

Crockford, W. W.

see Button, Joe W., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p603-611

Crohn, David M.

Planning Biosolids Land Application Rates for Agricultural Systems, EE Dec. 96, p1058-1066

Croley, Thomas E., II

Using NOAA's New Climate Outlooks in Operational Hy-drology, HE July 96, p93-102

Cromer, Marc V.

see McKenna, Sean A., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p297-311

Crompton, S. P.

see Humm, J. P., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p114-

see Takase, H., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p258-260

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Sensitivity Studies of the Interfacial Shear Strength in Composite Materials Using the Microbond Test, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with L. Kjerengtroen, R. M. Winter, W. Jiang, W. Fan and J. J. Kellar, p356-365

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Environmental Permitting for the Canal Electric Project, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p237-244

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Approach, Methods and Results of an Individual Elicitation for the Volcanism Expert Judgment Panel, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p56-58

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Engineering Sales: Process of Understanding, ME Mar./ Apr. 96, p40-43

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A Knowledge Based System for the Design of Open Channels, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Michael E. Mulvihill, p4125-4130

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Non-Federal Flood Control Works Inspection Program, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Ruh-Ming Li and Henry M. Fehlman, p1796-1800

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Millimetre Radar System for the On-Board Lateral Distance Acquisition: Performances Evaluation and Infrastructure Constraints, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Luígi Giubbolini, p656-660

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Drift Apex Temperature Distributions due to Cylindrical Heat Sources, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), with J. J. Ventresca, p435-437

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Potential Microbial Impacts on Groundwater Quality, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p40-45

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Dynamic Optimal Groundwater Remediation by Granular Activated Carbon, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Gary W. Shenk, p123-128

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Mechanical Behavior of Confined Reactive Powder Concretes, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Olivier Bonneau, Mohamed Lachemi and Pierre-Claude Aîtcin, p555-563

Ten Year Performance of a High Performance Concrete Used to Build Two Experimental Columns, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Michel Lessard and Pierre-Claude Aitcin, p375-384

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Coastal Dynamics '95, with Ryszard B. Zeidler, ed., 1996, 0-7844-0154-3, 1065pp.

Dalrymple, Robert

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Seismic Analysis of Concrete Towers of the San Diego-Coronado Bridge and Evaluation of a High Performance Concrete Retrofit, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Daniel R. Parker, p530-541

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Practical Methods for Managing Uncertainties for Geosynthetic Clay Liners, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Robert B. Gilbert, p1331-1346

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How Did a California Dam Get a Section 404 Permit?, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Joel B. Butterworth, p976-981

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Air Force Planetary Defense Technology, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with S. Worden and G. H. Stokes, p32-45

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Corrosion-Resistant Steel Reinforcing Bars, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Carl E. Locke, Jr., Matthew R. Senecal, Shawn M. Schwensen and Jeffrey L. Smith, p482-491

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Coal Pipelines Crossing Railroads: Legal Issues, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Henry Liu, p254-264

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Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p906-909

Design Alternatives for Protection of the Santa Ana River Interceptor Sewer, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha la, ed., 1996), with Chenchayya T. Bathala and Carl Nelson, p2378-2383

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see Burgess, Edward H., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1230-1235

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de Bejar, Luis A.

Monitoring Stable Crack Propagation in Metals, (Probabi-listic Mechanics & Structural Reliability, Dan M. Fran-gopol, ed. and Mircea D. Grigoriu, ed., 1996), p890-893

de Blanc, Phillip C.

A 3-D NAPL Flow and Biodegradation Model, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Daene C. McKinney, Gerald E. Speitel, Jr., Kamy Sepehrnoori and Mojdeh Delshad, p478-489

de Boer, Reint

The Thermodynamic Structure of a Fluid-Saturated Com-pressible and Incompressible Elastic Porous Solid, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), p56-

de Buhan, P.

Limit Design of Axisymmetric Shells with Application to Cellular Cofferdams, with A. Corfdir, EM Oct. 96, p921-929

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Two Classical Elasticity Problems Revisited by a Quasi-static Poroclastic BEM Implementation, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Euclides de Mesquita Neto, pl078-1081

De Civita, Paul

see Frehs, Jim, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1331-1336

de Dalmau, Juan
The CSG 2000 Programme: Modernising Europe's Spaceport for the Next 20 Years, (Engineering, Construction,
and Operations in Space, Stewart W. Johnson, ed., 1996), p413-418

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see Bakker, K. J., HY Sept. 94, p1082-1088

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Inelastic Behavior of Asymmetric Multistory Buildings, with Anil K. Chopra, ST June 96, p597-606

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see Santás, José C., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p128-139

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see Hume, Terry M., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p975-986

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see Cusson, Daniel, ST Sept. 96, p1055-1061

de León-M., B.

see Ruiz-C., V. M., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p818-823

de Mesquita Neto, Euclides

see Betti, Raimondo, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p314-317

see de Campos, João C. B., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1078-1081

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see Prinos, P., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582

de sa e Benevides, V. F.

Quantitative Monitoring of Plata River Basin Waters, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with R. M. Coimbra, p1719

De Santiago, Eduardo

An Implementation of Finite Element Method on Distributed Workstations, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with Kincho H. Law, p188-199

De Vriend, Huib I.

see Stive, Marcel J. F., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p998-1005

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Optical Fiber Sensors for Advanced Civil Structures, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Stephen H. Poland, Jennifer L. Grace, Vivek Arya, Kent A. Murphy and Richard O. Claus, p64-67

disc. (of Prestress Force Effect on Vibration Frequency of Concrete Bridges, by M. Saiidi, B. Douglas and S. Feng, ST July 94, p2233-2241), ST Apr. 96, p458-459

Dean, David W.

Advanced Seawater Desalination Plant, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Earl B. Lindquist, Jr., p685-690

Dean, Robert G.

Beach Nourishment: Planform Considerations, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p533-546

DeBarry, Paul A

DeBarry, Paul A.
Results of a GIS/HEC-1 Interface Module, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3194-3199
see Quimpo, Rafael G., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2915-2920

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Flushing Criteria in Estuarine and Laboratory Experiments, with Jorg Imberger, HY Dec. 96, p728-734

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Becator, Dennis B. see Bulleit, William M., (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p326-329

Decker, Dale S.

HMA Overlays to Rehabilitate PCC Pavements, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Matthew W. Witczak, p1418-1428

Dedrick, A. R.

The Management Improvement Program: A Model to Improve the Performance of Irrigated Agriculture, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with E. Bautista and S. A. Rish, p3470-3475

Dee, David D., Jr.

see Davis, Stanley R., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p469-478

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see Sheng, Grant, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p510-

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see King, Ian P., (Estuarine and Coastal Modeling, Mal-colm L. Spaulding and Ralph T. Cheng, 1996), p340-354

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Analyzing Spatial Variability of In Situ Soil Properties, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-

son, ed. and Mary J. S. Roth, ed., 1996), p210-238 Undrained Multidirectional Direct Simple Shear Behavior of Cohesive Soil, with Charles C. Ladd and John T. Germaine, GT Feb. 96, p91-98

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see Taggart, William C., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p594-599

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see Pope, R. B., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p369-

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Dome-Shaped Space Trusses Formed by Means of Postten-sioning, with L. C. Schmidt, ST Oct. 96, p1240-1245

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Bifurcation of Line Thermals, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with V. H. Chu, p446-449

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see VanAuker, Michael D., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p470

Delaplace, A.

Analytical Modelling of Damage Based on an Improved Percolation Model, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with S. Roux and G. Pijaudier-Cabot, p1171-1174

see Pijaudier-Cabot, Gilles, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1034-1037

Delgadillo, Albert

see Welch, Richard, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p129-135

Energy Dissipation Devices in Bridges using Hydraulic Dampers, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with R. B. Malla, M. Madani and K. J. Thompson, p1188-1196

DeLise, Pasquale

see Hairston, David E., (Pipeline Crossings 1996, Law-rence F. Catalano, ed., 1996), p387-394

Dellapenna, Joseph W.

The Case Against Markets, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2933-2938

Delle Site, P.

High-Capacity Bus Systems Based on Transit Centres and gn-capacity but systems based on Transit Centres and Convoying, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with F. Filippi, p1-5

DeLony, Eric

27 Years Documenting Engineering Heritage, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p162-173

Delnof, Pascal

Signal Processing Study for an FM/CW Collision Avoidgnai Processing study for an Process Collision Avoidance System, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Atika Menhaj, Jamal Assaad, Nathalie Haese and Christian Bruneel, p661-665

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see de Blanc, Phillip C., (Non-Aqueous Phase Liquids see (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p478-489

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see Borah, Deva, (North American Water and Environ. Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1681-1686

see Xia, Renjie, (North American Water and Environment Congress & Destructive Water, Chenchayva Bathala, ed., 1996), p1442-1446

Demond, Avery H.

see Chu, HsienShen S., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996),

deMonsabert, Sharon

Editorial, EY Apr. 96, p1

Dempsey, John P.

see Parker, Philip J., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996),

see Slepyan, Leonid I., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p989-992

Demsetz, Laura A.

Robotics for Challenging Environments, 1996, 0-7844-0178-0, 248pp.

Demsky, Edward C.

see Wolff, Thomas F., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p636-650

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see Man, Malcolm K., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1209-1214

DenBleyker, J.

Mitigation of Predation at a Juvenile Bypass Outfall Site, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with L. J. Weber, p893-898

Deneff, Christopher I.

see Gould, Nathan C., (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p381-388

Dynamics of Highly Deformable Sandwich Frame Structures, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with L. Vu-Quoc, p1147-1150

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Designing a PC Network to Meet the Specific Needs of Engineers, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), with Daniel P. Davis and Thomas Gdula, p937-943

Deo, Milind D.

Surfactant Enhanced Gravity Drainage (SEGD) of Dense Nonaqueous Phase Liquids: A New Concept in the In-situ DNAPL Remediation, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Ju-Woung Yoon, p393-404

Deodatis, George

Analysis of Eigenvalue Variability for 2D Stochastic Struc-tural Systems Using Variability Response Functions, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Lori Graham 2007. 603 with Lori Graham, p600-603

Generation of Ground Motion Time Histories as Non-Stationary Vector Processes: Response Spectrum Compatible Seismograms, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p616-619

Simulation of Ergodic Multivariate Stochastic Processes, EM Aug. 96, p778-787

Variability Response Functions for Random Eigenvalue Problems, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Lori Graham, p681-684

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see Popescu, Radu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p808-811

see Popescu, Radu, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1098-1112

Effect of Uncertainty on an Active Mass Damper System, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with R. V. Tappeta and B. F. Spencer, Jr., p426-429

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Conceptual Design of Soil Venting Systems, with James H. Wilson and Carl O. Thomas, EE May 96, p399-406

Intrusion Detection by Linear Active Cameras, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with L. Duvieubourg and J.-G. Postaire, p114-118

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A New Approach to Airport Security, (Meeting the Chal-lenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p53-62

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The Effects of Water Surface Profiles on Manning's Roughness Coefficient, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Ta Wei Soong, p3639-3644

Der Kiureghian, A.

Random Field of Cumulative Damage by Space Debris Impact, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with P. V. Geyskens and M. R. Khalessi, p668-

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Statistics of Fractional Occupation Time for Nonlinear Stochastic Response, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Chun-Ching Li, p116-119

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see Pinchuk, L., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p192-195

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Constitutive Modeling and Analysis of Creeping Slopes, with Naresh C. Samtani and Laurent Vulliet, GT Jan. 95, p43-56

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clo:

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disc. (of Continuum Model for Analysis of Multiply Connected Perforated Cores, by Domenico Capuani, Marco Savoia and Ferdinando Laudiero, EM Aug. 94, p1641-

1660), EM Feb. 96, p179-180

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see Einstein, Herbert H., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p239-253

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see Benedetti, A., EM Apr. 96, p291-299

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Automated Optimal Structural Design Synthesis using Ma-chine Generated Rule Base and Artificial Neural Networks, (Computing in Civil Engineering, Jorge Vanegas, ed., 1996), with M. J. Skibniewski and K. Lueprasert, p867-873

see Mukherjee, A., ST Nov. 96, p1385-1387

DeSimone, Joseph M.

see DiGiano, Francis A., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1638-1644

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see Péchon, Philippe, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p513-520

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DeStefano, Paul D.

Bridge Deck Performance and Rehabilitation: A Reliability-Based Analysis, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Dimitri A. Grivas, p1072-1081

DeStephen, Raymond A.

Rethinking Foundation Design in Karst Residuum, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), with Steven E. Conner, p49-56

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Modelling of a Heater Experiment in a Saturated Granite with Thermoporoelastic Source Singularities, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), with Ilya Berchenko, p44-47

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Dette, Hans-H. Interdependence of Beach Fill Volumes and Repetition Intervals, with Alfred Fuehrboeter and Arved J. Raudkivi, WW Nov./Dec. 94, p580-593 disc: Per Bruun, WW Mar./Apr. 96, p103-104 clo: WW Mar./Apr. 96, p104 Spingat, Frank, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Karsten Peters. 477-488

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Dettman, Matthew A.

Professional Registration of Engineering Technologists, El Apr. 96, p51-52

Deutsch, Kenneth A.
"Elevating the Importance & Visibility of Mitigation—
Promoting Public Awareness", (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed.,
1997), p165-166

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see Mohan, S., (North American Water and Environ Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1968-1975

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Desilting Basin System of the Dul Hasti Hydroelectric Project, with Jean Binquet, E. Divatia and C. R. Venkatesha, HY Oct. 96, p565-572

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see Webster, Todd S., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p571-576

see Yoon, Heesong, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1626-1631

County-Wide Drainage Study Using GIS, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with T. V. Hromadka, p3623-3628

Debris Basin Design Procedures, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with T. V. Hromadka, p1657-1662

see Hromadka, T. V., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2078-2083

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see Kotra, Janet P., (High Level Radioactive Waste Man-Technical Program Committee, 1996), agement, p247-249

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see Fisher, John W., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p23-37

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Time-Dependent Reliability Analysis of Redundant Brittle Systems, (Probabilistic Mechanics & Structural Reliabiliry, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Sankaran Mahadevan, p700-703

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Algebraic Methods For Creep Analysis of Continuous Composite Beams, with Graziano Leoni and Angelo Marcello Tarantino, ST Apr. 96, p423-430

Stochastic Finite Element Analysis for Multiphase Flow in Random Porous Media, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with R. Ghanem, p661-669

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see Si, Chao, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p293-296

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see Nazarian, S., (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p56-72

Application of Mathematical Models for Flood Forecasting in Sri Lanka, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1549

Dharwadkar, Parmanand V.

Knowledge-Based Parametric Design using JSpace, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Alton B. Cleveland, Jr.,

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Dhont, Jeffrey A.

Addressing Non-Aqueous Phase Liquids and Dissolved Plumes at Two Adjacent Superfund Sites with Commingled Groundwater Contamination, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Udai P. Singh, p812-823

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see Alessandri, A., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p429-433

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Application of Discrete Event Methodologies to Urban

Multimodal Transportation Systems, (Applications of Advanced Technologies in Transportation Engineering,

Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Simona Sacone, p154-158

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Environmental Linkages between Urban Form and Munici-pal Solid Waste Management Infrastructure, with Brian pal Solid Waste Management W. Baetz, UP Sept. 96, p83-100

Di Paola, M.

Approximated Correlations Response of Nonlinear Systems Under Normal White Noise Inputs, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with G. Falsone, p926-929

Di Paola, Mario

Stochastic Dynamics of Non-Linear Systems Excited by Parametric Delta Correlated Processes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Antonina Pirrotta, p930-933

LIM Sectators, R. Advanced Control Systems for Integrated Transportation by LIM Devices, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with G. Gentile, S. Meo, N. Rotondale and M. Scarano, p49-53

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The French Experience in Bursting Rehabilitation for Pipeline Crossings, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with P. Perrotin, p306-311

Company and Project Evaluation Model for Privately Pro-moted Infrastructure Projects, with Photios G. Ioannou, CO Mar. 96, p71-82

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Multidisciplinary Product Modeling of Buildings, CP Jan. 96, p78-86

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see Sun, Yung-Hsin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4359-4364

see Yuan, Weibo, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1099-1104

DiBuono, Richard J.

DiBianno, Richard J. The 1993 Flood: A Vindication of Federal Levees and Reservoirs or A Call for "Back to Nature"?, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Gary R. Dyhouse, p163-164

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see Bruinsma, Dan, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1614-1619

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see Lin, Chaun-Ping, GT Oct. 94, p1684-1703

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disc. (of Landform Grading and Slope Evolution, by Horst J. Schor and Donald H. Gray, GT Oct. 95, p729-734), GT Nov. 96, p961

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see Petrenko, A. A., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3886-3891

Dickin, Edward A.

disc. (of Vertical Uplift Capacity of Horizontal Anchors, by Kanakapura S. Subba Rao and Jyant Kumar, GT July 94, p1134-1147), GT Feb. 96, p164

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see Saxena, D. S., (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p73-85

Dickinson, W. T.

see Abedini, M. J., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3381-3386

see Frankel, A., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p173-174

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New Block Copolymers for Membrane Materials, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Ying Chu, Joseph M. DeSimone, Benny D. Freeman, Camille Kassis and Doug Betz, p1638-1644

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Learning and Shaping in Emergent Hierarchical Control Systems, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p114-121

Flood Management Strategies for the Rhine and Maas Riv-ers in the Netherlands, (North American Water and Envi-ronment, Congress & Destructive Water, Chenchaya Bathala, ed., 1996), with Rob Klomp, p3021-3022

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Selecting Design Conditions as Part of a Watershed Ap-proach to Water Quality Control, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Kathryn A. Sweet, p1543-1548

Dillaha, Theo A.

see Bouraoui, Faycal, EE June 96, p493-502

Dillard, Alice C.
Whose Fault Was It?, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1274-1277

Dillon, Clifford D.

see McBean, Robert P., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1783-1788

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see Chong, Ken P., IS June 96, p41-44

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see Worthington, Will, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p1-13

see Dobson, S., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p502-505

see Wang, Y., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p954-957

entberg, Mikhail

Random Vibrations of an Isochronous SDOF Bilinear System with Secondary Structure, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Philip Muller, p958-961

Dimentberg, Mikhail F. Vibration Absorber for Offshore Structures: Frequency Domain Analysis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with Shiyu Chen, Zhikun Hou and Mohammad Noori, p588-591 see Hou, Zhikun, EM Nov. 96, p1101-1108

see Zhou, Yunshen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p982-985

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Ding, Mingzhou

Controlling Chaos to Prevent Ship Capsizing, (Probabilis-tic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p434-437

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Surface Profiling System for Measurement of Engineering Structures, with Richard Coleman and J. Michael Rotter, SU Feb. 96, p3-13

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Reliability Evaluation of Slender HSC Columns, (Probabilistic Mechanics & Structural Reliability, Dan M. Francisco gopol, ed. and Mircea D. Grigoriu, ed., 1996), with Dan M. Frangopol, p242-245

M. Frangopoi, p242-243
Reliability of High-Strength Concrete Columns, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Dan M. Frangopol, p213-222

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Dion, I nomas n. Alternative Wastewater Pumping Station Design Consider-ations, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p328-334

Diplas, P.

see Papanicolaou, A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p657-660

Diplas, Panos

see Balakrishnan, Mahesh. (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p665-668

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Dirnberger, Morris M.

A Geostatistically-Based Method to Assess Potential Haz-Geostatistically-Based Method to Assess Folential Had-ardious Waste Sites Using Hard and Soft Data, (Uncer-tainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), with Richard W. Stephenson, p826-847

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Choice of Input Fields in Stochastic Finite Elements, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Niels Jacob Tarp-Johansen, p820-837

New Materials for the 21st Century, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p14-22

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Reasoning about Cases with Diagrams, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Mark D. Gross, p314-320

A Boolean Material Property Database, (Engineering Me-chanics, Y. K. Lin and T. C. Su. 1996), with M. Noori

and Á. Crespo, p673-676

Boolean Modeling and Analysis of Smart Material Proper-ties, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed., and Mircea D. Grigoriu, ed., 1996), with M. Noori and A. Crespo, p838-841

Stochastic Linearization of a Boolean Hysteresis Model, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with M. Noori, Z. Hou and M. Dimentberg, p502-505

see Rickertsen, Larry D., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p303-304

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Computation of Structural Flexibility for Bridge Health Monitoring Using Ambient Modal Data. (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Charles R. Farrar, p1114-1117

Restoration of Abandoned Meanders on the Middle Fork Forked Deer River, Tennessee, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with R. A. Gaines and W. A. Thomas, p3375-3380

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Site Selection for Pipeline Waterway Crossings, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with David T. Williams, p365-372

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Evaluation of a Bi-Directional Aluminum Honeycomb Impact Limiter Design, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p357-359

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Earthquake Response of Gravity Dams Including Effects of Porous Sediments, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Rafael Gallego, p649-652

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Use of Fuzzy Logic and Similarity Measures in the Risk Management of Hazardous Waste Sites, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-

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Earth-Crossing Asteroids and Comets, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1278-1280

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Record Breaking Bundled Pipeline Crossings, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Mark W. Struss, p37-47

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Better Management in the Water Supply Sector Through Indigenous Institutions, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2970-2975

Dore, G.

see Konrad, J.-M., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p652-663

Dormieux, L.

Seismic Bearing Capacity of Foundation on Cohesionless Soil, with A. Pecker, GT Mar. 95, p300-303 disc: E. Conte, GT Sept. 96, p785-786

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White River Fish Screen Project - Hydraulic Modeling, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Wayne Porter and Larry Swenson, p310-315

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Development of Remediation Technologies Simulators, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Christian J. McGrath, p2583-2588

see Hall, Ross W., (Estuarine and Coastal Modeling, Mal-colm L. Spaulding and Ralph T. Cheng, 1996), p608-617

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Numerical Simulation of Bridge Abutment Scour Development, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Yafei Jia and Sam S. Y. Wang, p3716-3721

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see Rizzo, Donna M., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p167-179

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Doughman, Pamela

Costs of Treatment for Wastewater Reclamation and Disposal: A Preliminary Assessment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Stephen Lyon, Lydia Chiu and Charles Gunnerson, p1425-1430

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Douglas, B. M.
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System Factors for Design of Wood Structural Assemblies, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Philip Line, p798-803

Douglas, William J. Accessible Information, with Izak Maitin, CE June 96, p59-61

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Culvert Composite Sampler: A Cost-Effective Storm-Water Monitoring Device, with Brian W. Mar, WR July/Aug. 96, p280-286

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The Modelling of Plunging Breakers by the Introduction of a K-1 Turbulence Closure Model, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Luigi Iovenitti, p317-328

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Canal Control and Automation for the Central District System, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Eric R. Hixson, p2384-2389

Developing a Rating Table for the Central Diversion Dam Radial Gates, (North American Water and Environment Radial Gates, (North American Water and Environment Radial Gates, (North American Water, Chenchayya Bathala,

ed., 1996), p3598-3603

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Managing Transboundary Water Sharing, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3230-3235

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Fast and Robust Algorithm for General Inequality/Equality Constrained Minimum Time Problems, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with N. Sadegh, p1215-1224

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System Design for Safe Robotic Handling of Nuclear Materials, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Walter Wapman, Jill Fahrenholtz, Howard Kimberly and Joel Kuhlmann, p241-247

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Lifeline Failure and Disaster Preparedness of Businesses, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p105-106

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Flash Floods and Their Warning in Vietnam, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1717

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Depth-Averaged Equations for Free Surface Flows, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Guixian Wang, p213-218

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Policy and Engineering Decision-making under Global Change: Case of the Upper Rio Grande River Basin, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with Bijaya P. Shrestha and Marvin Waterstone, p38-60

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Transferable Discharge Permits as a Function of Fluctuating Stream Conditions, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with Michelle Coelli and John J. Pigram, p272-293

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A New Technique for Measuring Vegetation Density, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Steven R. Abt, Charles D. Bonham and J. Craig Fischen-ich, p3656-3661

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Toward a Generic Kernel for Air Traffic Management System, (Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with G. Joly, D. Hollinger and O. Palmade, p87-91

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Storm Water General Industrial Permit Non-Filers Identification and Outreach, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Y. Jae Chung, p2619-2624

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Vegetation-Induced Drag: An Experimental Study, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Fabián López and Marcelo García, p3824-3828

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Geotechnical Instrumentation for Boston's Central Artery/ Tunnel Project: An Overview, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Charles Daugherty and Thom Neff, p727-733

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see Karakouzian, Moses, MT May 96, p101-107

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Neural Network Control for Accurate Rebar Bending, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with S. (Ranji) Ranjithan and Leonhard E. Bernold, p492-501

Duoos, Philip H.

Geophysical Investigation of Karst Collapse Features for a Proposed Waste Rock Stockpile Irian Jaya, Indonesia, (Case Histories of Geophysics Applied to Civil Engineer-ing and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), with Rowland B. Cromwell, p86-100

Duran, C.

Control Systems Governing Gravity-Dependent Plant Growth, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with D. Flores, J. D. Smith and G. W. Morgenthaler, p1095-1101

Duran, J. M.

Site Characterisation of a Complex DNAPL Site—An Australian Experience, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with J. A. Grounds, p800-811

Dureković, A.

see Balabanić, G., EM Dec. 96, p1113-1122

see Miller, Calvin D., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996),

Duro, Lara

see Bruno, Jordi, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p64-66

Dusenberry, Donald O.

Handrail Graspability, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Howard Simpson, p466-469

Dushnisky, Kelvin

Evaluating Risk to the Environment from Mining Using Failure Modes and Effects Analysis, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Steven G. Vick, p848-865

Dusseau, Ralph Alan

Design Parameters of Pipeline Suspension Bridges, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Irfan Ahmed, p112-119

Dutta, Shivaji

see Ghafoori, Nader, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1637-1646

Dutta, Subijoy

etland Designs for Environmental Protection— Application in India, (North American Water and Envi-Wetland Designs ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Dennis A. Haag and Jon B. Kraft, p3722-3727

Dutton, Jeff

Overview of International Space Station Extravehicular Activity System, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p473-

Duvel, Charles S.

see Issa, Raja R. A., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p781-785

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see DeParis, J.-P., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p114-118

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Niche for Steam Stripping in Treating Dilute SOC-Contaminated Waters, with Desmond F. Lawler and Gerald E. Speitel, Jr., EE Sept. 96, p871-874

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Cement Among Grains, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p869-872 Seismic Signatures of Patchy Saturation, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), with Amos Nur. p645-648

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Interference by Natural Organics in Diesel Analyses, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p71-81

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see Halden, Rolf U., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2396-2401

see Halden, Rolf U., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2402

Dyer, K. R.

see Christie, M. C., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p759-770

Dyhouse, Gary R.
Looking Back At The Great Flood of 1993, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p375-376

see DiBuono, Richard J., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p163-164

Dyke, S. J.

Acceleration Feedback Control of MDOF Structures, with B. F. Spencer, Jr., P. Quast, M. K. Sain, D. C. Kaspari, Jr. and T. T. Soong, EM Sept. 96, p907-918

A New Semi-Active Control Device for Seismic Response Reduction, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with B. F. Spencer, Jr., M. K. Sain and J. D. Carlson, p886-889

see Spencer, B. F., Jr., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p164-167

see Spencer, B. F., Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p361-370

Dymond, Randy

GIS and CAD-based Design Software in CE Education, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p501-507

WWW and Multimedia in Undergraduate Civil Engineering, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p341-347

Dzombak, David A.

see Adeel, Zafar, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remedia-tion, Lakshmi N. Reddi, ed., 1996), p649-660

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Reliability-Based Model for Predicting Pavement Thermal Cracking, with Ahmed Shalaby and A. O. Abd El Halim, TE Sept./Oct. 96, p374-380

Uncertainty Analysis of Dredge Production with Correla-tion, WW Sept./Oct. 94, p499-507 disc: C. Zoppou and K. S. Li, WW Mar./Apr. 96, p104-105 clo: WW Mar./Apr. 96, p105-106

East, E. William

Abstracting Lessons Learned from Design Reviews, with Michael C. Fu, CP Oct. 96, p267-275

see Fu, Michael C., (Computing in Civil Engineering, Jorge Vanegas, ed., and Paul Chinowsky, ed., 1996).

see Hicks, Donald K., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p112-117

Eastman, Charles

see Khedro, Taha, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p579-585

Eaton, Roger R.

Modeling of Flow Through Fractured Tuff at Fran Ridge, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Clifford K. Ho, Robert J. Glass, Michael J. Nicholl and Bill W. Arnold, p76-78

Probabilistic Modeling of Radiation Damage in Charge-Coupled Devices, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with L. E. Newlin and N. R. Moore,

see Moore, N. R., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p640-643

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Red River U-Frame Lock No. 1 Backfill-Structure-Foundation Interaction, with Reed L. Mosher, GT Mar. 96, p216-225

Eberhard, Douglas D.
Quicktime VR and Interactive CD-ROM Applications for Communicating Project Alternatives, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p806-811

Eberhardt, Anthony J.

Managing Great Lakes Water Levels: An International Partnership, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1317-1322

Eberhardt, Wayne L. see Ramert, Paul C., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p94-105

Ebert, W. L.

Long-Term Corrosion Behavior of Environmental Assessment Glass, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), with J. K. Bates, p399-401

Ebrahimpour, A.
Design Live Loads for Crowds in Motion, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with R. L. Sack, p420-427

easuring and Modeling Dynamic Loads Imposed by Moving Crowds, with A. Hamam, R. L. Sack and W. N.

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Eby, David L.

see Johnston, John D., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1134-1140

Echeverry, Dlego
Adaptation of Barcode Technology for Construction Project
Control, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1034-1040
Multimedia-Based Instruction of Building Construction,
(Computing in Civil Engineering, Jorge Vanegas, ed. and
Paul Chinowsky, ed., 1996), p972-977

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Eckmann, Donald E.
Technological Advances in the Design and Construction of
Water Mains for Crossing Under Rivers and Other Barriers, (Pipeline Crossings 1996, Lawrence F. Catalano,
ed., 1996), with William F. Nabak, p403-408

Economides, B.
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Economopoulos, Alexander P.
Computerized & M Programs for Oil-Fired Space Heating Boilers, EY Aug. 96, p61-74

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Biodegradation Modeling of a Closed Landfill Site, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Law-rence H. Woodbury and G. Padmanabhan, p2510-2515

Rehabilitation of Steel Beams Using Composite Materials, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Dennis Mertz and John Gillespie, Jr., p502-

Eddy, Gary L.

Wastewater Treatment Facility Aeration Project, (Cold Re-gions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p506-517

Edelman, Inna

Modulated Waves in Porous Media Saturated by Liquid and Gas, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p653-656

Edge, B. L.

see Richardson, J. R., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1980-1989

Edge, Billy L.

Determination of Bridge Scour Velocity in an Estuary, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Stephan N. Vignet and John S. Fisher, p1720-1729 see Lee, Cheol-Eung, WW Mar./Apr. 96, p84-92

On the Process and Products of Project Space Vision, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p155-161

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Computational Tools for Subsurface Conceptualization, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Eileen Poeter, p2577-2582

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see Auchard, B., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4004-4009

Edwards, Kenneth B.

Venting Test Analysis Using Jacob's Approximation, EE Mar. 96, p232-234

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see Gelda, Rakesh K., EE Apr. 96, p269-275

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see Yee, H., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4239-4244

Egri, Robert

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see Maser, Kenneth, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p955-958

Eheart, J. Wayland

Economic Efficiency of Regulations for Allocation and Control of Surface Water Withdrawals in Humid Regions, (North American Water and Environment Con-

gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Kenneth W. Harrison, p2713-2718
Groundwater Remediation Design When Pretty Good is Good Enough, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p848-853

cu., 1990), p848-835
Vulnerability of Water Resources to Global Climate Change in the Agricultural Midwest- Ecological, Economic, and Regulatory Aspects, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Edwin E. Herricks, p2145-2150

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Design Recommendations for Bond of GFRP Rebars to Concrete, with H. Saadatmanesh and S. Tao, ST Mar. 96, p247-254

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Eichold, Alice

Conceptual Design of a Crater Lunar Base, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p920-927

Eick, Chris D.

see Mignolet, Marc P., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1001-1004

see Roseboom, D. P., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2879-2884

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Pore-Water Pressures in Freezing and Thawing Fine-Grained Soils, with Sven Knutsson and Daichao Sheng, CR June 96, p77-92

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Earthquake Resistance Assessment of Some Selected Existing Buildings, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Taleb Omran, p145-146

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High Performance Concrete for Giles Road Bridge, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Xiaoming Huo, Mohsen Saleh and Maher K. Ta-dros, p133-140

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Geologic Uncertainties in Tunneling, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Vijaya B. Halabe, Jean-Paul Dudt and François Descoeudres, p239-253

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S. Roth, ed., 1996), p104-118

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Methodology to Group DOE Fuels for the Purpose of Re-pository Technical Acceptance, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Ray Stout, Henry Loo and Scott Gladson, p432-434

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Two Recent Russian Far East Destructive Earthquakes. Case Studies and Post-Disaster Analysis, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with A. M. Melentyev, p235-236 Eisenberg, N. A.

Potential Changes to Technical Issues in HLW Performance Assessment, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with R. G. Wescott, p288-290

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see Campbell, C. Warren, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3910-3914

see Campbell, C. Warren, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4269-4274

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Influence of Foundation Nonlinearity on Offshore Towers Response, with Milos Novak, GT Sept. 96, p717-724

El Zahaby, Khalid M.

Non-Statistical Uncertainties in Liquefaction Risk Assessment, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with M. S. Rahman, p1068-1082

see Mohan, S., (North American Water and Environ Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1968-1975

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Design Methodology for Strengthening of Continuous-Span Composite Bridges, with F. W. Klaiber, F. S. Fanous and T. J. Wipf, BE Aug. 96, p104-111

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Granular Flow Based on Non-Newtonian Fluid Mechanics, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Luis A. Godoy and Alejandro T. Brewer, p394-397

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Defining the Potential Repository Siting Block Yucca Mountain, Nevada, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Richard M. Nolting, III, p157-159

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El-Bibany, Hossam Domain Modeling in Generic Parametric Architectures: Issues in Concurrent Representation and Inference, (Com puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p522-528

Multimedia Development Software: Object-Oriented Inter-face-Based Simulation, CP Oct. 96, p295-299

Project Management Functions in Facility Owners' Environment: Organizational Diagnostics, with Douglas Ault, Ben Branch and John Bechtel, AE Dec. 96, p138-144

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Parameterisation of Triad Interactions in Wave Energy Models, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with J. A. Battjes,

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System Identification Using Earthquake Acceleration Records, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with M. Zeghal, H. T. Tang and J. C. Stepp, p335-338

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El-Kady, Mona

Challenges and Opportunities in Egypt's Integrated Water Resources Strategy. (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1051-1056

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Discussion of Some Grid-Independence Issues in the Context of K—€ and K—ω Models of Turbulence, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Simone Sebben and B. Rabi Baliga, p297-300

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eu., 1996), p430-443
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C. Su, 1996), p722

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On Housing Administration and Legislation of Egypt, (Nat-ural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with M. M. Soliman, p280-

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Elpiner, L. I.

The Caspian Sea Transgression (Environmental Medical Aspect), (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3498

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disc. (of Seismic Stability Procedures for Solid-Waste Landfills, by Jonathan D. Bray, Anthony J. Augello, Gerald A. Leonards, Pedro C. Repetto and R. John Byrne, GT Feb. 95, p139-151), GT Nov. 96, p951-952

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see Leung, Christopher K. Y., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p236-239

Elwany, M. Hany S.

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Elwood, K. J.

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Probabilistic Modeling of Metal Plate Connections, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Kenneth J. Fridley, p330-333

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Engebretson, Dan

Strengthening Concrete Block Walls Using Carbon Fiber, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Rajan Sen, Gray Mullins and Alfred Hartley, p1592-1600

Engedahl, Harald

Hindcast Simulations of Ocean Currents in the Norwegian naciast Simulations of Ocean Currents in the Norwegian Coastal Waters. Part 1: Model Set Up and Sensitivity Tests, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p379-390

The Rhine Flood Events in December 1993/January 1994 and in January 1995, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p243-244

Acquisition and Restoration of a Drainage District in the Snohomish River Valley, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3950-3955

The Costs and Benefits of Dam Removal on the Elwha River, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p4288-4293

disc. (of Estimation of Mean Flow Velocity in Ice-Covered Channels, by Martin J. Teal, Robert Etterna and John F. Walker, HY Dec. 94, p1385-1400) with Y. Lam Lau, HY Aug. 96, p474-475

disc. (of Methods for Measuring Discharge under Ice Cover, by John F. Walker, HY Nov. 94, p1327-1336) with Y. Lam Lau, HY Jan. 96, p52-54

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Engelund, Svend

Stochastic Models for Chloride-Initiated Corrosion in Reinforced Concrete, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with John D. Sørensen, p664-667

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Retrofitting an Urban Watershed for Improved Water Quality, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Michael Clar, Candace Szabad and Chien Lin, p4202-4207

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Simulation of Pesticide Transport for Verification of the DWRDSM, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Paul Hutton, p3563-3568

Enright, Michael P.

Degradation of Reinforced Concrete Structures Under Aggressive Conditions, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Dan M. Frangopol and George Hearn, p978-987

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System Risk for Multi-Storey Reinforced Concrete Building Construction, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Mark G. Stewart and David V. Rosowsky, p230-233

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"Seepage Assessments and Control Associated with Florida's Phosphate Industry", (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p866-880

Eriksson, Leif G

see McFadden, Michael H., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p220-223

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Dynamic Service Actions for Floor Systems - Human Activity, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p413-419

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Road and Airfield Design for Permafrost Conditions, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p121-150

see Becker, John C., (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wil-bur H. Haas, ed., 1996), p249-270

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Comparison of General vs. Multi Sector NPDES Storm Water Permits, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with John Whitescarver and Michael Ports, p2810-2814

Espinoza, R. D.

Unified Formulation for Analysis of Slopes with General Slip Surface, with P. L. Bourdeau and B. Muhunthan, GT July 94, pl 185-1204

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Controlling Brazil's Pollution: Federal versus State Taxes and Fines, with Kangbin Zheng, IS June 96, p83-93

Reliability-Based Optimum Bridge Repair Strategy, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Dan M. Frangopol and George Hearn, p372-375

Getting No Respect? Whose Fault Is It Anyway?, NE May 96, p14

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Water Vapor Effects on the Corrosion of Steel, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Gregory E. Gdowski, p457-458

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Laboratory Experiments on Density Current Over a Sloping Bottom in Rotating Fluid, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Gabriel Chabert d'Hieres, p923-926

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Pier Width and Local-Scour Depth, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Bruce W. Melville and Brian Barkdoll, p251-256

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Blast Resistant Design of Commercial Buildings, with Robert Smilowitz and Tod Rittenhouse, SC Feb. 96, p31-39

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see Moller, James, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p310-316

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De Santos, James D. Sol-Inch Gas Pipeline Crossing of the San Juan River: Open Cut Excavation in Quality Water Area, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), with Neil P. Stockholm, p186-193

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Liquefaction Behavior of Sand-Gravel Composites, with

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disc: Robert W. Day, GT July 96, p606 GT July 96, p606 clo:

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The Electronic Highway System for the Building Industry, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p262-272

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Developing Parameters for a Quasi-Distributed Runoff Model Using GIS, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with John C. Peters, p2707-2712

Evbuomwan, Nosa F. O.
A Software Architecture for Concurrent Lifecycle Design and Construction, (Computing in Civil Éngineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with

See Anumba, Chimay J., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

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Ewing, Ronald I.

Design of an Advanced Fork System for Assembly Burnup Measurement, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), with Kevin D. Seager, p340-341

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clo: GT Mar. 96, p252-254

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see Meegoda, Jay N., (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996),

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How Crane Safety on Construction Sites Has Changed in 25 Years, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p84-92

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see Hodges, Rex A., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remdiation, Lakshmi N. Reddi, ed., 1996), p619-627

see Morton, Lee D., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p127-138

Falta, Ronald W.

A Field Test of NAPL Removal by High Molecular Weight Alcohol Injection, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remedia-tion, Lakshmi N. Reddi, ed., 1996), with Scott E. Brame, Cindy M. Lee, John T. Coates, Charles Wright, Sarah Price, Patrick Haskell and Eberhard Roeder, p257-268

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Falta, Ronald William, Scoutt, ed., 1990), p151-162

Fee Roeder, Eberhard, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p333-344

Faltejsek, Jiří

Uncertainty as a Parameter for Decision Making, (High Level Radioactive Waste Management, Technical Pro-gram Committee, 1996), p320-321

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Energy Dissipators edited by D.L. Vischer and Willi Hager, HY Aug. 96, p478

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Computational Aspects of Dynamic Concrete Viscoplasticity, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p282-285

Fan, Jlahua Impacts due to Density Current Deposition in Reservoirs, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2097-2102

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A Look at Technological Risk and Uncertainties in Flood Disaster Reduction, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Nicholas C. Matalas, p253-255

Managing Sediments in Reservoirs at FERC, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2084-2090

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Constitutive Modeling of Composites in Opto-Mechatronics, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p632-636

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Reversibility Measures for Sustainable Decisions, (North American Water and Environment Congress & Destruc tive Water, Chenchayya Bathala, ed., 1996), with Donald H. Burn, p1525-1530

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Biaxial Low-Cycle Fatigue Behavior of Steel Fiber-Reinforced Concrete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Christian Meyer, p436-

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Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p306-309

Aerodynamic Considerations for Rooftop Helideck Design, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with M. Mohamed Sitheeq, p1245-1251

International Collaboration in the Design of Three Boundary Layer Wind Tunnels, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1061-1068

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Probabilistic Framework to Detect and to Identify Anomalies in Structures, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with Roula Maloof, p910-913

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Buckling of Composite Panels with Central Holes, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Walter J. Horn, p374-377

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see Johnson, Ron, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p82-93

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Finite Actuator VGT Manipulator Shape Control Paradigm. (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p86-92

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see Johnson, Thomas L., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Fatemi, M. J.

Dynamic Analysis of Resilient Crosstie Track for Transit System, with M. F. Green, T. I. Campbell and A. Moucessian, TE Mar./Apr. 96, p173-180

Soil Water Chemistry of Irrigation with Drainwater, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with J. C. Guitjens, p1483-1488

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Lunar Base Scenario for Middle School with RC Rover, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Ruth M. Fruland and Carolyn Evans McDonald, p317-322

The Next Generation in Composite Rebars for Concrete Reinforcement, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p905-913

Finite Element Modelling of Deep Rolled Wide Flange Beam Subject to Localized Edge Loading - A Case Study, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Celal N. Kostem, p874-880

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NRC's Refocused Prelicensing High-Level Waste Regula-tory Program, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), with R. L. Johnson and J. T. Greeves, p196-198

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Estimation of Bed Material Transport Capacity, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Ruh-Ming Li, p1033-1038

see Crum, Jim, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1796-1800

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see Peters, John, (North American Water and Environ Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3776-3781

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Remote Pipeline Routing with Application to Space Operations, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Ramona E. Pelletier, Wm. Edward Walser, James C. Smoot and Douglas Ahl, p231-236

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see Fenske, T. E., (Analysis and Computation, Franklin Y.
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High Performance Computing: Application to Highway Bridges, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with Z. Yu, D. Liu and S. M. Fenske, p444-452

Investigation of Nonlinear Fluid-Structure Interaction, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with D. Liu and S. M. Fenske, p407-415

Steel Girder Bridge Cost Optimization Using AASHTO Specifications, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with M. Yener, D. Liu and S. M. Fenske, p472-481

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Probabilistic Analysis of Foundation Settlement, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with G. M. Paice and D. V. Griffiths, p651-665 Statistics of Free Surface Flow through Stochastic Earth Dam, with D. V. Griffiths, GT June 96, p427-436

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see Coleman, Stephen E., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p442-447

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Seismic Design Criteria for Navy Wharves, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with C. S. Putcha, p353-354

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Designs for Blast Protection (Available only in Structures special issue), CE Sept. 96, p3A-5A

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Sacramento Valley Conjunctive Use - Future Water Supply for the State Water Project?, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3062-3067

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Wind-Induced Failures of Steel Roof Decks, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Ali Saffar, Samuel I. Díaz Santiago and Bernardo Deschapelles, p894-897

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Yorgos, I. in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p1-5

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Filippou, Filip C.

Nonlinear Static and Dynamic Analysis from Research to Practice, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p31-42

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Reducing Model Study Time and Improving Reliability, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4341-4346

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see Sandhu, Nicky, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4335-4340

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see Vaynman, Semyon, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1551-1560

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Radionuclide Release for Unsaturated Spent Fuel Tests-First 1.6 Years, (High Level Radioactive Waste Manage ment, Technical Program Committee, 1996), with S. F. Wolf and J. K. Bates, p390-392

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Design Guidance - Instream and Bank Restoration Structures, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p3079-3084

see Dudley, Syndi J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3656-3661

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Potential-Scour Assessments at 130 Bridges in Iowa, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1149-1155

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see Zhang, Dachang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1754-1759

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Scheduling with Computer-Interpretable Construction
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High-Performance Metals for Civil and Marine Structures, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Richard Sause and Robert J. Dexter, p23-37

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Benjamin Wright—The Father of American Civil Engineer-ing, (Civil Engineering History: Engineers Make Histo-ry, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p98-107

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seismic Behavior of Precast Parking Structure Diaphragms, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with R. Sause, A. B. Rhodes and S. Pessiki, p1139-1146

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Simulating Evapotranspiration on Semi-Arid Rangelands, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with C. L. Hanson, W. P. Kustas and M. A. Weltz, p424-429

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Stress-Strain Behavior of High-Performance 70W Bridge Steel, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with S. J. Manganello, p1540-1550

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Development of High Performance Steels for Commercial and Military Applications, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Thomas W. Montemarano, p91-99

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Fofana, M. S.

On the Almost-Surely Lyapunov Exponent of a Duffing-van der Pol Delay Oscillator, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p550-553

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Overview of Drought Response Strategies, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Donald K. Frevert, p857-862

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Ford, Keith B.

The Caribbean Disaster Mitigation Project: Introducing Disaster Mitigation in Highly Vulnerable Small Islands, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Jan C. Vermeiren, p29-30

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Simulating the Transport of an Algae Bloom off the West Coast of Vancouver Island, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with J. F. R. Gower, R. E. Thomson and J. Y. Cherniawsky, p180-191

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Forsberg, Charles W. Depleted-Uranium-Silicate Backfill of Spent-Fuel Waste Packages for Repository Containment and Criticality Control, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Ron B. Pope, Ron C. Ashline, Mark D. DeHart, Kenneth W. Childs kon C. Ashline, Mark D. DeHart, Kenneth W. Childs and Jabo S. Tang, p366-368 see Ashline, Ron C., (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), p342-344

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CPT in Cold Regions Engineering: A Logging and Design Tool, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Branko Ladanyi and Michel Allard, p459-470

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Hysteretic Response and Structural Reliability, (Probabilis-tic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Hong Li, p882-885

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Fosness, Eugene R.

Fosters, Eugene R. Launch Vibration Isolation System, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Rory R. Ninneman, Paul S. Wilke and Conor D. Johnson, p228-231

Passive Isolation Systems for Launch Vehicles, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Paul S. Wilke and Conor D. Johnson, p1176-1182

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Probabilistic Creep Analysis of Underground Structure in Salt, with D. E. Munson, EM Mar. 96, p209-217

Foster, David

Poster, Davia Behavior of DNAPLs in Fractured Bedrock, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: As-sessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Salvatore Priore and Kevin Brewer, p583-

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see Bhattacharya, Sujan K.. (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p311-322

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see Johnston, John D., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1134-1140

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Riprap and Concrete Armor to Prevent Pier Scour, (North
American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with James F. Ruff, p4178-4187

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Glacier-Generated Floods and Debris Flows, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Joseph S. Walder, p2449

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see Montgomery, F. O., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p685-689

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Using Artificial Intelligence to Reduce High Fuel Consumption in Congested Cities, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Roy Clarke and Howard Kirby, p520-524

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Application of Chaotic Dynamics to Stochastic Resonance, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Emil Simiu, p86-89

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see Ho, Clifford K., (High Level Radioactive Waste Management, Technical Program Committee, 1996),

History of Coastal Engineering in Italy, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p275-335

Frangopol, D. M. S., (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p338-341

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Effects of Load Path and Load Correlation on the Reliability of Concrete Columns, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Yutaka Ide and Ichiro Iwaki, p206-209

Incorporating Damage Control in Structural Design, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Marek Klisinski and Kai-Yung Lin, p598-605

Loading and Material Behavior Effects on System Redundancy, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Keito Yoshida, p674-681

Nonlinear Finite Element Reliability Analysis of Concrete, with Yong-Hak Lee and Kaspar J. Willam, EM Dec. 96, p1174-1182

Probabilistic Mechanics & Structural Reliability, with Mir-cea D. Grigoriu, ed., 1996, 0-7844-0184-5, 1025pp. Random Vibration of Mechanical and Structural Systems

by T. T. Soong and Mircea Grigoriu, EM Feb. 96, p184
Reliability-Based Structural System Optimization: State-of-the-Art versus State-of-the-Practice, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with Ross

Computation, Franklin Y. Cheng, ed., 1990), with Ross B. Corotis, p67-78

See Diniz, Sofia M. C., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p213-222

See Diniz, Sofia M. C., (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p242-245

See Enright, Michael P., (Materials for the New Millenni-Can D. Chong, ed. 1996), p378-987

see Enright, Michael P., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p978-987
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see Hearn, George, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p245-252

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New USGS Seismic Hazard Maps for the United States,
(Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with C. Mueller, D. Perkins, T. Barnhard, E. Leyendecker, E. Safak, S. Hanson, N. Dickman and M. Hopper, p173-174

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disc. (of Analysis of Structural Members Under Elevated Temperature Conditions, by K. W. Poh and I. D. Ben-netts, ST Apr. 95, p664-675), ST Oct. 96, p1253-1254

see Zellars, Jon A., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3369-3374

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An LPI Numerical Implicit Solution for Unsteady Mixed-Flow Simulation, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with Ming Jin and Janice M. Lewis, p3222-327

see Lewis, J. M., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p195-200

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see Tarhini, K. M., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p677-682

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Freeman, Delma C.

The NASA Reusable Launch Vehicle Technology Program, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Theodore A. Talay and Robert E. Austin, p385-391

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Vegetative Roughness in Flood Control Channels, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with David R. Derrick and William J. Rahmeyer, p1513-1518

Freeman, Reed B.

Geotextile-Reinforced Surface for Rapid Construction of Low-Volume Pavements, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), with Randy C. Ahlrich,

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The Environmental Valuation Reference Inventory (EVRI) for Water Related Benefits Transfers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Matthew Clark, Paul De Civita, Fernand Filion, Virginia Kibler and Mahesh Podar, p1331-1336

Freitag, Arden W.
Artificial Recharge in the Oakes Test Area, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Dale R. Esser, p2335-2340

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Threshold Precipitation Events and Potential Ground-Water Recharge, with Roger L. Jacobson and Brad F. Lyles, HY Oct. 96, p573-578

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see Ignatiev, A., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p287-292

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see Salas, J. D., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala. ed., 1996), p3387-3392

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see Burke, John, (North American Water and Environment
Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p806-811

Frevert, Donald K.

see Fontane, Darrell G., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p857-862

Frey, Michael R.

A Melnikov Theoretic Bound on Probability of Escape from a Potential Well, (Probabilistic Mechanics & Stra tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p510-513

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Fridley, K.

see Rosowsky, D., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p452-459

Fridley, K. J.

Serviceability System Factor for Design of Wood Floors, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with D. V. Rosowsky and P. Hong, p792-797

see Brantley, Laura, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p771-777

Stochastic Snow Load Process Model from Daily Climatological Data, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p210-213

see Emerson, Robert N., (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p330-333

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Major Changes to the AAA's Construction Arbitration Rules, (Civil Engineers Influencing Public Policy, Mau-reen K. Cotton, ed., 1996), p10-20

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BALANCE - A Method for Traffic Adaptive Signal Control Field Trial and Simulation Studies, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Hartmut Keller, p615-619

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Ground-Water Remediation with Granular Collection Sys-tem, with Erik R. Christensen, EE June 96, p546-549

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Inundation Scenarios and Inundation Risk, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with B. P. van den Bunt, p62-63

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Engineering Features of the Red Bluff Research Pumping Plant, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Charles R. Liston and Stephen Atkinson, p316-321

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Manning's Roughness Coefficient for Coarse-Bed Chan-nels With High In-Bank Flows, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Craig A. Benson, p436-

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Bridge Hydraulic and Scour Analysis Using FESWMS-2DH, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p155-1564

Catastrophic Riverine Flooding: Rapid Evaluation with a Robust Numerical Model, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Michael A. Ports, p225-226

Contraction Scour at Bridges: Analytic Model for Coarse-Bed Channels, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3706-3715

Direct Sizing of Small Stormwater Pump Stations, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2072-2077

Guist Creek Dam Spillway Upgrade: A Maze (Labyrinth) of Difficulties, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Michael A. Woolum and W. Keith Crim, p1918-1923

Optimal Sizing of Width- and Depth-Constrained Trapezoi-dal Channels, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4294-4299

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ak Outflow from Breesen.
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Searching for Optimal Combinations of Stormwater Deten-tion Basins, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2264-2269

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Project Modeling in Construction Applications, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), with Kevin Yu and Syed Shahid,

STEP and the Building Construction Core Model, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p445-451

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Predicting the Service Lives of Materials of Construction, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p38-53

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see Tsai, Yi-Chang, Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996, p.1019-1033
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Localized Load Effects in High-Order Bending of Sandwich Panels with Flexible Core, with M. Baruch, EM Nov. 96, p1069-1076

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Model-Centered World Wide Web Coach, (Computing in

Model-Centered world what web Coach, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinow-sky, ed., 1996), with Kurt Reiner, p1-7 Multi-Site Cross-Disciplinary A/E/C Project Based Learn-ing, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p126-132

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Alternate Load Factor (Autostress) Design for Short to Medium Span Continuous Steel Bridges, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p298-306

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Lateral Distribution Factor from Bridge Field Testing, with Maged Elhelbawey, M. A. Sahin and David R. Schelling, ST Sept. 96, p1106-1109

Fu, Gongkang

Fu, Gongkang A Bridge Live Load Model Including Overloads, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Osman Hag-Elsafi, p34-37
Effects of Pier and Foundation Stiffness for Bridges Subjected to Nonstationary Seismic Input, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p708-711
Influence of Support Stiffness for Contileur Beams Sub-

Influence of Support Stiffness for Cantilever Beams Subjected to Modulated Filtered White Noise, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p689-692

An Automated Design and Review Assistant: SEDAR, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p118-125

Collecting, Abstracting, and Compiling Review Comments: the Reviewer's Assistant and the Lessons-Learned Gen-erator, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with E. William East, p104-111

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Comparative Simulation of Oil Weathering, (North Amerion Wester and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Rudolf Jaffé, Vassilios A. Tsihrintzis and Rahul V. Shrotriya, p559-564

p339-304 Wellhead Protection Area Predictions and Implications for the Biscayne Aquifer in Miami, Florida, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Vassilios A. Tsihrintzis and Jose H. Olivo, p960-965

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Embedded Sensors for Improved Early-Warning Emergency Response to Damaged Structures, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Dryver R. Huston and Edward Von Turkovich, p39-40

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Structural Control: Basic Concepts and Applications, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with T. T. Soong and B. F. Spencer, Jr., p1277-1287

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Three-Dimensional Tidal Currents and Water Quality in Stratified Omura Bay, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Akihide Tada, Takehiro Nakamura and Hiroyoshi Togashi, p707-721

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Use of Geomorphic Data for Assessing Stream Stability at Bridge Structures, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with Steven R. Walker, p3294-3299

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River Restoration Considerations Beyond Channel Design, (North American Water and Environment Congress Destructive Water, Chenchayya Bathala, ed., 1996), p3091-3096

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New Sacrificial Anode for Cathodic Protection of Reinforced Concrete Structures, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Steven F. Daily, p1256-1265

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New Trends in Biomechanics, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1-15

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Remote Sensing of the Polish Coasts Morphology, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Stanisłław Musielak, p1018-

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On Reliability Assessment of Infrastructure Systems under Strong Earthquake, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with Naruhito Shiraishi, p632-635

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Intraparticle Mass Transport Mechanism in Activated Car-bon Adsorption of Phenols, with H. T. Chang, Y. Miura, H. Yokomura, S. Tajima, S. Yamashita and K. E. Noll, EE Oct. 96, p909-916

Fusco, Gaetan

The Use of Artificial Neural Networks in Advanced Traveler Information and Traffic Management Systems, (Applications of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Stefano Gori, p341-345

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Dynamic Mechanical Properties of SBR Modified Asphalt, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Imad L. Al-Qadi, p133-143

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Orthotropic Steel Deck for the Williamsburg Bridge Reconstruction, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with J. Patel and D. Khazem, p491-498

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Modelling of Hydro- and Lithodynamic Processes in Kollobrzeg Region, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Elżbieta Zawadzka, Juliusz Gajewski and Andrzej Lewandowski, p891-902

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Geological and Geophysical Studies of Sites in the Ukraini-an Shield Rock Series Suitable for Construction of Underground Laboratories, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with D. P. Khrushchov and A. P. Volik, p81-82

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Plumbing the Quality of a Sewer System, with Samuel A.
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REGIT Project: An Advanced Transportation Management System for the City of Terni, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with A. Mattucci and G. Righetti, p676-679

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Galloway, Duncan
Modelling Eddy Formation in Coastal Waters: A Comparison between Model Capabilities, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Eric Wolanski and Brian King, p13-25 see King, Brian, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p192-203

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So Mrs. Roebling—What's Your Side of the Story—About the Brooklyn Bridge?, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p23-24

Galloway, Rodney G.
see Warnaar, Dirk B., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1162-1168

Galson, D. A.

Galson, D. A.
Screening, Combining and Tracking Features, Events and Processes in WIPP Performance Assessments, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with D. G. Bennett, R. D. Wilmot, D. R. Anderson and Peter N. Swift, p231-233

Galson, Daniel A.

Issues in Risk Perception and Communication of Impor-tance to a Regulator: Results of an International Seminar Sponsored by HMIP, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Roger D. Wilmot and Ray V. Kemp, p502-504

Integrating Drainage, Water Quality, Wetlands, and Habitat in a Planned Community Development, with John M. Pflaum, UP Sept. 96, p101-108

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A Finite Element Damage Model for the Evaluation and Rehabilitation of Brick Masonry Shear Walls, (World-wide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Sergio Lagomarsino, p72-81

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Seismic Retrofitting of Bridge Pier Columns, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Neil M. Hawkins, p16-23

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Coupled and Uncoupled Poroelastic Solutions to Land Sub-sidence due to Groundwater Withdrawal, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Mario Putti and Pietro Teatini, p483-486

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Adapting Water Resources of the Canadian Prairies under the impact of Climatic Warming, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2163-2168

International Postgraduate Program of Water Resources Engineering in Asia, El Jan. 96, p6-11

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Controlling Overhead Costs, ME July/Aug. 96, p18-22

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GangaRao, Hota V. S.

Development of Tension Grips for GFRP Rebars, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Derek Altizer, p394-399

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see Lopez-Anido, Roberto, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p914-923

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see Gucunski, Nenad, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1083-1097

Ganoulis, Jacques

Fuzzy Arithmetic for Ecological Risk Management, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with Iraklis Bimbas, Lucien Duckstein and Istvan Bogardi, p401-415

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VSL's Experience with Post-Tensioned Masonry, (World-wide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p25-36

Probabilistic Assessment on Variability of Mechanical Properties of Rock Masses, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Origoriu, ed., 1996), p934-937

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see Haldar, Achintya, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p166-169

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see Cheng, Meng-Dawn, EE Mar. 96, p183-190

Spray Freezing to Treat Oil Sands Tailings Pond Water, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with D. C. Sego and D. W. Smith, p60-70

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see Perez, Antonio J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p702-707

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Localization of Inelastic Deformation in Elasto-Plastic Pore Solids Saturated by Liquid, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p931-934

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The Effect of the Interfacial Transition Zone on Concrete Properties: The Dilute Limit, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with D. P. Bentz, p1228-1237

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Garbrecht, Jurgen

Subcatchment Parameterization for Runoff Modeling Using Digital Elevation Models, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Lawrence W. Martz and David C. Goodrich, p2689-2694

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A Quasi-3D Model of Longshore Currents, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with E. Thornton and T. Stanton, p389-400

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Acquisition and Use of Coastal-Storm Related Data for Zoning Purposes, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p393-

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Application of the Newton Method in Valve Discharge Coefficient Relationships, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Antonia M. Romero,

Field Determination of Flow through a Pressure Regulating Valve, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Antonia M. Romero, p3610-3616

see Mejía-Navarro, Mario, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p189-190

see Mejía-Navarro, Mario, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p386-387

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see López, Fabián, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3651-3655

see Niño, Yarko, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p812-815

García, Marcelo H.

Role of Vegetation in Hydraulics of Channel Restoration, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2607-2612

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see Naaman, Antoine E., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p782-791

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see Richter, Lutz, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p283-289

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see Wood, Craig A., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p982-987

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see Kiliccote, Han, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p999-1005

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Stochastic Parallel-Brittle Networks for Modeling Materials, with P. Bonacuse, L. Powers and A. Romeo, EM Feb. 96, p130-137

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Reliability-Based STructural Optimization-Software Development, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with G. I. Schweller, p531-534
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Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p800-803

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International Space Station (ISS) Assembly Sequence Plan-ning, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p435-442

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Spatiotemporal Stochastic Open-Channel Flow. I: Model and Its Parameter Data, with Muhammad A. Al-Zahrani,

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Constraint Logic Programming Contribution for Fleet Management System in Freight Transport, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Gérard Scémama, p470-474

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A Refined Numerical Approach for the Limit-Load Analysis of 3-D Steel Rod Structures, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p92-95

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Georgakakos, K. P.

Estimation of Flash Flood Potential for Large Areas, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with A. K. Guetter and J. A. Sperfslage, p1147

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Systems for Forecasting Flows and Their Uncertainty, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Alexandre K. Guetter and Jason A. Sperfslage, p2360-

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The Importance of Maintaining Smooth Airport Pavements, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p295-305

ASTM A913/A913M: The Perfect Steel for Seismic Design, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p558-565

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Biological Serendipity from an Ocean Outfall Maintenance Inspection, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with George Robertson and Don Maurer, p2050-2055

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Evolving Design Genes as well as Design Solutions, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Vladimir A. Kazakov and Thorsten Schnier, p84-90

Gerretsen, J. H.
How to Manage Floodwaves in the Dutch Meuse: Future
Measures to Reduce the Inconvenience of incudations, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3271-3272

Gerstle, Walter H.
Fracture Mechanics of Concrete: Applications of Fracture
Mechanics to Concrete, Rock and Other Quasi-Brittle
Materials by Surendra P. Shah, Stuart E. Swartz, and
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Some Phenomenological Aspects of High Performance Concretes, and their Consequences for Numerical Analysis, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Ignacio Carol and Pere C. Prat, p506-517

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Bayesian Assessment and Selection of Models for Structur-al Reliability Analysis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Origoriu, ed., 1996), with Armen Der Kiureghian, p566-569

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Neural Network Constitutive Models Determined from
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A Comparative Analysis of FORM/SORM and Polynomial Chaos Expansions for Highly Nonlinear Systems, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with D. Ghiocel, p535-538

Comparative Assessment of Prediction Strategies for Adaptive Control, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu,

ed., 1996), p134-137

Hybrid Stochastic Finite Elements and Generalized Monte Carlo Simulation, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p182-185

Statistical Model for Sand Compaction Under Cyclic Shear Strain, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with M. El-Mestkawy, p722

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Stochastic Prediction and Control of Uncertain Nonlinear Dynamical Systems, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with M. Grigoriu, p277-280

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Ghiocel, Dan M.

Ornocet, Jan. 94.
Probabilistic Seismic Analysis Including Soil-Structure Interaction, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Paul R. Wilson and Gary G. Thomas, p620-623

Seismic Motion Incoherency Effects on Dynamic Re-sponse, (Probabilistic Mechanics & Structural Reliabili-ty, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p624-627

1979), po.24-027
Structural Fragility Analysis Using Finite Element Computational Models, (*Probabilistic Mechanics & Structural Reliability*), Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Paul R. Wilson, Gary G. Thomas and John D. Stevenson, p18-21

Ghlamallah, N.

see Chaallal, O., ST Oct. 96, p1187-1197

Ghoneam, Essam H.
see Haroun, Medhat A., (Engineering Mechanics, Y. K. Lin
and T. C. Su, 1996), p1022-1025

Ghorbanpoor, A. Simplified Analysis of Thin-Walled Composite Members, with B. Omidvar, ST Nov. 96, p1379-1383 see Omidvar, B., ST Nov. 96, p1369-1378

Ghosh, Gautam

see Vaynman, Semyon, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1551-1560

Ghosh, S. K.

Applications of High-Performance Concrete in Columns and Piers, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p385-395

Building an International Community of Structural Engineers, 2 vols., with Jamshid Mohammadi, ed., 1996, 0-7844-0158-6, 1320pp.

Ghosn, Ahmad A.

Load Capacity of Nested, Laterally Braced, Cold-Formed Steel Z-Section Beams, with Ralph R. Sinno, ST Aug. 96, p968-971

Ghosn, Michel

Chosn, Michel
Development of Design Factors for Redundant Concrete
Bridges, (Probabilistic Mechanics & Structural Reliabiiry, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed.,
1996), with Youhong Hang and Fred Moses, p716-719
Redundancy of Prestressed Concrete I-Beam Bridges,
[Bridling on International Community of Structural For-

(Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed.,

gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Fred Moses, p688-695 Site-Specific Live Load Models for Bridge Evaluation, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Dan M. Frangopol, p30-33

Ghumman, A. R.

A Comparison of Sediment Routing Models, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with P. R. Wormleaton, H. N. Hashmi and G. H. Akbari, p3794-

see Hashmi, H. N., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3812-3817

Giannattasio, P.

An Expert System as Support in Maintenance of Road Pavement Surface, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with M. Crispino, V. Nicolosi, G. Ambrosino and M. Boero, p500-504

Gibbs, Tony

Effects of Hurricane Luis on Structures in Antigua, (Natu-ral Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p295-296

Local Urban Transit Bus Impact on Pavements, with Re-becca Dawson and Peter Sebaaly, TE May/June 96, p215-217

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Gibson, G. E., Jr.

Constructability in Public Sector, with C. I. McGinnis, W. S. Flanigan and J. E. Wood, CO Sept. 96, p274-280 see Hamilton, M. R., ME Mar/Apr. 96, p25-33

Gibson, M. A.

see Brueneman, D. J., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996),

Gibson, Michael A.

see Sorge, Les L., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p776-782

Gibson, Nancy

Rules of Thumb, with John Whittaker, ME Nov/Dec. 96, p34-39

Gies, John V.

The Effect of the Lunar Surface Environment upon Machinery, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p639-645

Lunar Regolith, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p630-638

see Rooney, Frank J., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p653-662

Giese, Rossman

see Budhu, Muniram, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p17-30

Gieseke, Mark

see Ivarson, W. Robert, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3500-3508

Gifford, Jonathan L.

Technology Standards and Deployment of Advanced Transportation Technologies: A Comparative Case Study of Electronic Toll and Traffic Management (ETTM) in the United States and France, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Jean-Luc Ygnace, p535-541

Gifford, Kevin K.

Incorporating Terrain Uncertainties in Autonomous Vehicle Path Planning, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Robin R. Murphy, p15-21

Gilard, O.

Glard, G. Flood Risk Management: New Concepts for an Objective Negotiation, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with P. Givone and G. Oberlin, p3918-3919

Gilbert, Paul A.

see Leshchinsky, Dov, GT Aug. 96, p682-690

Gilbert, Robert B.

Seven Guidelines for Managing Uncertainty in Geoenvironmental Design, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Travis C. McGrath, p774-796

Shear Strength of Reinforced Geosynthetic Clay Liner, with Federico Fernandez and David W. Horsfield, GT Apr.

96, p259-266

Uncertainty in Back Analysis of Slopes, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J.

D. Shackellord, ed., Prischia P. Netson, ed. and Mary J. S. Roth, ed., 1996), with Stephen G. Wright and Eric Liedtke, p494-517

see Acquash, Charles G., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p162-165

see Daniel, David E., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1331-1346

see McGrath, Travis C., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996). p187-198

Gildner, Joseph P.

see Rice, Philip M., CE Dec. 96, p32-35

Giles, Brian P. see Peattie, Robert A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p318-321

see Warner, J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2522-2527

Gillespie, John, Jr. see Edberg, William, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p502-508

Gillette, David Rees

Dempster-Shafer Approach to Soil Properties, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1254-1268

Gillette, Gregory see Al-Ansari, Mohammed S., ST Oct. 96, p1198-1207

Gilley, James R.

see Pereira, Luis S., IR May/June 96, p172-177

Gillilan, Scott

Utilizing Geomorphic Analogs for Design of Natural Stream Channels, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2799-2804

Gilliland, Scott K.

Sentiam, Scott and Sentiam, Scott and Sentiam, Scott and Sentiam, Sentiam of Prestressed Concrete Bridge Girders, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p125-132

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see Ricles, James, WW May/June 96, p110-117

Gilsanz, Ramon

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see Shields, F. Douglas, Jr., HY Apr. 95, p341-354

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Reader Dismayed, CE Dec. 96, p30-31

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see Cugiani, Corrado, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p656-660

Givone, P.

see Gilard, O., (North American Water and Environ Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3918-3919

Glachet, Roland

see Bouzar, Salah, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p124-128

Gladden, Scott C.

Marketing and Selling A/E and Other Engineering Services, with Arnold Olitt, 1996, 0-7844-0100-4, 120pp.

see Einziger, Robert, (High Level Radioactive Waste Management, p432-434 Technical Program Committee, 1996),

Glanzman, Richard K.

see McDonald. Blair I., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p287-296

Glascock, Jay D.

see Shapira, Aviad, CO Dec. 96, p298-307

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System Identification and Its Application to Estimating Soil Properties, GT July 95, p553-560 disc: F. Amini, GT Oct. 96, p868

clor GT Oct. 96, p868

Glass, Robert J.

see Eaton, Roger R., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p76-78

Gleason, Phillip J. see Khanbilvardi, Reza M., EE Jan. 95, p45-57

Glenn, Jeffrey S.

see Kent, Edward J., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p489-498

Glenn, Scott M.

see Keen, Timothy R., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p26-40

Glicker, Joe

ASR Case Study - City of Salem, Oregon, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Paul Eckley, p2679-2684

Glickman, Arthur Chandler Canal Fish Screen Facilities, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Rick Christensen, p887-892

see Klumpp, Cassie, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1027-1032

nn, C. Cornelius

Platelet Activation in Time Varying Shear Flow Field, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Ned H. C. Hwang, p39-42

Glover, Terry F.

see Bowles, David S., (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p346-366

see Bowles, David S., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p451-473

see Gluck, N., ST Dec. 96, p1394-1399

see Warszawski, A., ST Dec. 96, p1400-1408

Gluck, N.

Design of Supplemental Dampers for Control of Structures, with A. M. Reinhorn, J. Gluck and R. Levy, ST Dec. 96, p1394-1399

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Gobin, Roger

see Budhu, Muniram, HY July 96, p415-417

see Certes, Catherine, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p170-171

Goda, Yoshimi

Spatial and Temporal Fluctuations of Nearshore Currents nduced by Directional Random Waves, (Coastal Dy-namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Tetsuya Mizusawa, p269-280

Godfrey, Ned

The Best Partnering Books for Your Design Firm, ME Sept./Oct. 96, p7-9

Godiwalla, Adil

Rehabilitation of Taxiway "NB" at IAH with Concrete Overlay, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), with Keith E. Chapman, Charles Juhasz, William Stamper and Wayne Overman, p170-186

Godov, Luis A.

Timproving Design in Composite Thin-Walled Columns, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Leonel I. Almánzar, p1155-1158 Structural Consequences of Imperfection in Thin-Walled

Components, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with John Carrasquillo, p997-1000

Structural Damage due to Hurricane Marilyn in St. Thomas Structural Damage due to Hurricane Marilyn in St. Thomas and Culebra, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Roberto Huyke, Ricardo R. Lopez, J. A. Martinez-Cruzado and Raul Zapata, p135-136 disc. (of Cause of Deformed Shapes in Cooling Towers, by Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST

May 94, p1471-1488), ST Feb. 96, p220-221

see Elaskar, Sergio A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p394-397

Goel, Rakesh K.

Capacity and Stiffness of Bridge Abutments During Earth-quakes, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p239-240

Goel, Subhash C.

see Kim, Hac In, ST May 96, p470-475

see Jain, Sudhir K., (disc), ST July 94, p2233-2241

Goering, Douglas J.

Air Convection Embankments for Roadway Construction in Permafrost Zones, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p1-12

Goettel, Bruce C.

Implementing the Knowledge Worker System (KWS) in an Engineering Environment, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p288-293

Goh, Anthony T. C.

Neural-Network Modeling of CPT Seismic Liquefaction Data, GT Jan. 96, p70-73

Pile Driving Records Reanalyzed Using Neural Networks, GT June 96, p492-495

Seismic Liquefaction Potential Assessed by Neural Net-works, GT Sept. 94, p1467-1480 disc: D. Penumadu, GT Apr. 96, p323-325 clo: GT Apr. 96, p325-326

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Gold, Vladimir M.

Concrete Penetration by Eroding Projectiles: Experiments and Analysis, with George C. Vradis and James C. Pear-son, EM Feb. 96, p145-152

Constitutive Models for Concrete Penetration Analysis, with George C. Vradis and James C. Pearson, EM Mar. 96, p230-238

Goldbach, J. D.

see Andres, R. J., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p792-803

Golding, Bernard L.

disc. (of Normal-Depth Equations for Irrigation Canals, by Prabhata K. Swamee, IR Sept./Oct. 94, p942-948), IR Jan./Feb. 96, p66-67

Goldstein, Harry

Catching Up on Composites, CE Mar. 96, p47-49

Tappan Zee Set for Inverset (Available only in Structures special issue), CE Sept. 96, p12A-13A

Goldstein, Stanley H., P.E.

Engineering Ethics, with Robert A. Rubin, CE Oct. 96, p40-44

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Gómez de Silva Garza, Andrés

see Maher, Mary Lou, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p294-300

Gomez, J.

see Rodriguez, A., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p305-316

Gomez, José

see Miller, John, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p492-501

see Ozyildirim, Celik, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p153-163

see Ozyildirim, Celik, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1357-1366

Gómez, Juan see Moroni, María O., ST Oct. 96, p1208-1215

Integrated GIS Based Watershed Management Modeling System, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), with C. L. Chen and J. Herr, p508-514

Gong, Gavin
The Role of Circulation Patterns on the Simulation of Con-The Kore of Circulation Faucines on the simulation of sensitivent Transport in San Juan Bay, Puerto Rico, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with James D. Bowen, p518-529 see Wolf, Lisa J., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p505-517

González, Juan A.

Hydraulic Performance of Open Channel Breaching, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Ben Chie Yen, p334-339

Gonzalez, Mark A

see Jarrett, Robert D., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1553-1554

Gonzalez-Galvan, Emilio

Control of Construction Robots using Camera-Space Ma-nipulation. (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Michael Seelinger, John-David Yoder, Eric Baumgartner and Steven B. Skaar, p57-63

Gooch, G.

see Lever, J. H., (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p617-628

see Lever, J. H., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p629-639

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Goodings, D. J.

see Porbaha, A., GT Oct. 96, p840-848

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Goodman, Alvin S.

Goodman, Avina Emphasized Objectives and Risk Analysis for Project Planning in Developing Countries, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with Lampros E. Bourodimos, p154-168

Goodman, Richard E.

see Mauldon, Matthew, GT Dec. 96, p976-987

Goodman, Robin E.

Managing Interdisciplinary Project Teams through the Web, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Paul S. Chinowsky, p452-458

Goodowens, James B.

A User's Guide to Federal Architect - Engineer Contracts, 2nd edition, 1996, 0-7844-0145-4, 500pp.

Goodrich, David C.

see Garbrecht, Jurgen, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2689-2694

Gopalakrishnan, Ganesh

see Pandit, Ashok, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2439-2444

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see Quanrud, David M., EE Apr. 96, p314-321

Gordus, Andrew G.

Bird Use of an Evaporation Basin and a Mitigation Wetland, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Jeff Seay and Scott B. Terrill, p518-523

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see Carrese, Stefano, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p144-148

see Fusco, Gaetano, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p341-345

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see Borodani, P., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p552-557

Gosavi, V. P.

Comparison of Static and Dynamic Performance of Polycarbonate Filled and Unfilled Gears, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with P. P. Chikate, p338-347

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Analysis of Changes in Airport Ground Access Mode Use, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p63-77

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Probabilistic Evaluation of Postclosure Criticality Events Internal to the Waste Package, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with John R. Massari, p345-347

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Redesign of Vendor-Data Processes for Industrial Projects, with J. T. O'Connor, ME Sept./Oct. 96, p53-61

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Gould, Nathan C.

Seismic Analysis and Retrofit Design of the Anheuser-Busch Bevo Building in St. Louis, Missouri, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with

Oriosit, ed. and Jamshid with a monathinatal, ed., 1990, with Christopher I. Deneff, p381-388 see Miller, John P., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p389-396

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A Pilot-Scale Study of In Situ Hydrocarbon Remediation of Contamination in Soil and Groundwater at Fort Wainwright, Alaska, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Mark Wallace, p106-115

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History of Coastal Engineering in Australia, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p1-88

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Gouriey, Brett C.
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Y. Cheng, ed., 1996), p43-54
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Gove, A. F.

see Hines, W. G., (North American Water and Environment Congress & Destructive Water, Chenchayva Bathala, ed., 1996), p1178-1183

Goverdhan, Arvind V.

Nonlinear Analysis and Design Issues for PR Frames, (Analysis and Computation, Franklin Y. Cheng, ed.,

Govindan, P.

see Krishnamoorthi, S., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2372-2377

Govindaraju, R. S.

Comparison of Spatial Variability of Infiltration Properties at Two Sites in Konza Prairie of East-Central Kansas, with J. K. Koelliker, M. K. Banks and A. P. Schwab, HE July 96, p131-138

Infiltration Properties at Two Sites in the Konza Prairie, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

p1267-1272

On Conductivity of Soils with Preferential Flow Paths, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with J. Lin, p1730-1735

see Nedunuri, K. V., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1221-1226

see Ramireddygari, S. R., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3241-3246

Govindaraju, Rao S. Cumulants-Based Analysis of Concentration Data from Soil-Column Studies for System Identification, with Bha-bani S. Das and Gerard J. Kluitenberg, HE Jan. 96, p41-

48
Stochastic Analysis for Movement of Fine Particles in Porous Media, HE Oct. 96, p161-168
Upscaling of Pore-Scale Concepts to Develop Models of NAPL Ganglion Dynamics, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Lakshmi N. Reddi, p454-465

Govorushko, S. M.

Environmental Assessment of a Site for Civil Construction, UP Mar. 96, p18-31

Cowing, Gary Evaluation of Crumb Rubber (CRM) as a Smart Additive in Asphalt Concrete Mixes, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), with Kevin Hall and Robert Elliott, p612-621

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see Foreman, M. G. G., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p180-191

Goyal, Brij B.

disc. (of Construction Claims and Disputes: Causes and Cost/Time Overruns, by Cheryl Semple, Francis T. Hart-man and George Jergeas, CO Dec. 94, p785-795), CO June 96, p197

Goyette, Chantal

see Sylvestre, Pierre, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p93-98

Grace, Jennifer L.

see de Vries, Marten J., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p64-67

Grace, Nabil F.

Dynamic Characteristics of Post-Tensioned Girders with Web Openings, with Brian Ross, ST June 96, p643-650

Grace, Robert A.

disc. (of Pigging Submarine Outfalls, by Jonathan A. French, EE May 95, p396-401), EE Aug. 96, p774-775

Gracie, James W.

Quail Creek: A Case Study of Restoration Using Native Materials, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2891-2896

Tributary No. 9 Restoration, Maryland State Highway Administration, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Robert Shreeve and Linda Kelbaugh, p3539-3544

Grady, C. P. L., Jr. see Ockeloen, Hanneke F., EE Mar. 96, p191-197

Optimization of Graphical Models, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p97-103

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see Song, T., HY Mar. 96, p141-154

Graff, Jerzy

Neptune--An Integrated Approach to Determining NW European Coastal Extremes, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Witold Cieślikiewicz, p1035-1046

Graham, Daniel C.

see Hardy, Andrew J., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996, p712-723

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see Quanrud, David M., EE Apr. 96, p314-321

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Variability Response Functions for Plane Elasticity Prob-lems with Multiple Stochastic Material/Geometric Propterns with Multiple Suchastic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with George Deodatis, p174-177

1996), with George Decodats, p174-177 see Deodatis, George, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p600-603

see Deodatis, George, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p681-684

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Grattan, S. R.

Long-term Consequences of Recycling Drainage Water for Irrigation, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with J. D. Rhoades, p1942-1947

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Mixer Viscometer Characterization of AFBC Ash Grout, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Scott J. Putnam, p816-819

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Gray, William W. S.

see Hulley, Michael E., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1242-1248

Grayson, Lawrence P. Civil Engineering Education: An Historical Perspective, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p44-52

Greated, C.

see Lewis A. W., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p686-697

Greated, Clive A.

see Quinn, Paul A., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), Dally, ed p293-304

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Dally, ed. and Ryszard B. Zeidler, ed., 1996),
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A Review (and Comparison) of DSHA and PSHA, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with William J. Hall, p125-126

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Green-Heffern, Joseph
The Standley Lake Protection Project, (North American
Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with David J. Kaunisto, p2820-2825

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One-Dimensional Finite-Element Model for High Flow Velocities in Porous Media, with Douglas M. Joy, GT Oct.

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Greenwood, David J.

Assessing Opal's Impact, with Darryl J. Hatheway, CE Jan. 96, p40-43

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A Corotational Total Lagrangian Finite Element Analysis with Application to the Aircraft Tire, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Anthony N. Palazotto, pl 108-1114

see Federline, M. V., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p196-198

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see Amatya, D. M., IR Nov./Dec. 95, p427-435

Legal Weight Truck Cask Response to Regulatory Format Thermal Events, Part 1: Fuel Cladding, (High Level Ra-dioactive Waste Management, Technical Program Committee, 1996), with R. J. Faulkner and Y. Jin, p351-353

Legal Weight Truck Cask Response to Regulatory Format Thermal Events, Part 2: Containment Seal, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Y. Jin and R. J. Faulkner, p354-356

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The Influence of Turbulence Closure Strategy on Numeri-cal Modeling of Shallow Water Tides, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Richard A. Luettich, Jr., p143-155

disc. (of Survey Distance Units: A Better Way, by Larry E. Stanfel, SU Aug. 94, p130-132), SU Feb. 96, p41-42

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see Swanson, J. Craig, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1537-1542

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Conceptual Design Optimization of Structural Systems, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p99-110

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Evaluation of a 47-Story Building Subjected to Hurricane Alicia, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p960-965

Griffis, Lawrence G., P.E.

All-Around Arenas (Available only in Structures special issue), CE Sept. 96, p6A-11A

Griffith, Bartley see Borovetz, Harvey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p35

Griffith, Reginald W.
Extending the Legacy: Planning America's Capital for the
21st Century, (Civil Engineering History: Engineers
Make History, Jerry R. Rogers, ed., Donald Kennon, ed.,
Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed.,
1996), p25-33

Griffiths, D. V.

Reliability-Based Exit Gradient Design of Water Retaining Structures, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Gordon A. Fenton and G. M. Paice, p518-534

win Gordon A., Felhon and G. M. Paice, p.18-534
see Fenton, Gordon A., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p651-665
see Fenton, Gordon A., GT June 96, p427-436
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Grigg, Nett S.
Integrated Civil Engineering Curriculum: Implementation and Management Issues, with Marvin E. Criswell and Thomas J. Siller, El Oct. 96, p151-155

Management Framework for Large-Scale Water Problems, WR July/Aug. 96, p296-300

Partnerships for Diversity in Water Resources Education, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), (1906-1906). p4016-4020

Talk Needed for Research Application, CE Oct. 96, p38 see Dubler, James R., EI Oct. 96, p163-169

Griggs, Francis E., Jr.

How to Make Our Heroes-Their Heroes, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Fran-cis E. Griggs, Jr., ed., 1996), p144-154 On the Shoulders of Giants—Part II, El Jan. 96, p17-25 On the Shoulders of Giants—Part Three, El Apr. 96, p55-

see Rogers, Jerry R., ed., Civil Engineering History: Engineers Make History

Grigoriadis, K. M.

see Hassiotis, S., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1107-1114

Grigoriu, M.

Grigoriu, M.
Calibration and Simulation of Non-Gaussian Translation Processes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p804-807
Moment Equations for Linear Systems Subjected to Polynomials of Filtered Poisson Processes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with F. Waisman, p262-265

Time-Delay Linear Systems with Gaussian White Noise Input, (Probabilistic Mechanics & Structural Reliability, input, (**Probabilistic Mechanics & structural neutability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with T. T. Soong and A. Reinhorn, p422-425 see Ghanem, R., (*Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p277-280

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Nonlinear Systems with Poisson White Noise, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p120-123

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see Frangopol, Dan M., ed., Probabilistic Mechanics & Structural Reliability

Grijalva, Louis

see Avalos, Benito, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3236-3240

Grimm, Clayford T. Clay Brick Masonry Weight Variation, AE Dec. 96, p135-

Grindrod, P.

Key Risk Attributes in the Perception of Engineering Design Options, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with D. J. Waters, H. Takase and F. A. Yousaf, p499-501

see Humm, J. P., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p114-

see Takase, H., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p258-260

Grismer, M. E.

Grismer, M. E. Emerging Concepts for Management of Salinity and Drainage in Irrigated Regions, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2126-2129
see Tod, I. C., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2136-2144

Grivas, Dimitri A.

Grivas, Dimitri A.

Achieving Reiiable Designs for Pipelines Traversing Unstable Slopes, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Chakravarthy Bhagvati, B. Cameron Schultz, Verne C. McGuffey, Gregg O'Neil and Gordon Simmonds, p426-433

see DeStefano, Paul D., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1072-1081

see Shen, Yung-Ching, CP Jan. 96, p40-49

Grober, Leslie F.

Sources and Circulation of Salt in the San Joaquin River Basin, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., gress a 1996), p649-654

Grobler, Francois

see Sucur, Milorad, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p240-246

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Grogan, William P.

Performance of Stabilized Base Course at DFW, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p308-317

see Magee, A. B., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1561-1570

Gross, Mark D.

see Do, Ellen Yi-Luen, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p314-320

Grossi, Rodolfo

see Capaldo, Francesco Saverio, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p193-197

Grosskopf, William G.

see Nook, Karen M., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p58-63

Grosso, S.

see Volta, E., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephared. and Francesco Filippi, ed., 1996), p243-247

005

see Duran, J. M., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p800-811

Fast Track Basics, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Kevin B. Jones, p466-474

Growney, L.
see Michaels, P., (Case Histories of Geophysics Applied to
Civil Engineering and Public Policy, Paul Michaels,
ed. and Richard Woods, ed., 1996), p14-26

Gruener, John E.

Flant Growth Experiments in Johnson Space Center's Advanced Life Support System Program, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Douglas W. Ming, Daniel J. Barta and Donald L. Henninger, p1090-1094

Grüne, Joachim

Prototype Monitoring Study of Wave Climate and Beach Profile in the Surfzone, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p559-

Grygier, Mike

see Carrasco, Cesar J., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1141-1147

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see Wang, Xinwei, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p382-385

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Hydrodynamic Simulations in Sediment-Carried Contami-nant Modeling for the Buffalo River, New York, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1039-1044 Modeling Two-Dimensional Turbulent Offset Jets, HY Nov. 96, p617-624

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Load Space Formulation for Reliability Estimation of Complex Structures, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with R. E. Melchers, p688-691

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Effects of Soil Nonhomogeneity on SASW Testing, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), with Vahid Ganji and M. H. Maher, p1083-1097

Gudmestad, O. T.

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The Part of Precipitation in Some Ecological Problems of the Dnister Basin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2447-2448

Guensler, Randall

(Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p459-465

Guentchev, G.

Site Selection and Evaluation of Geological Disposal of Radioactive Waste: Regulatory Aspects, (High Level Radio-active Waste Management, Technical Program Commit-tee, 1996), with L. Katzarska, p86-88

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Gugino, Anthony Development of Caltrans Guidelines for Natural Gas Pipelines on Highway Bridges, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Chih-Hung Lee, Richard Gailing, Philip Constantine and David Reistetter, p245-253

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see Humm, J. P., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p114-

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see Faulkner, B. R., (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p1483-1488
see O'Brien, E. K., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1489-1494

see Smith, D. L., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1495-1500

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Ethics, Uncertainty and Postaudits, CE Dec. 96, p27 A Framework for Sanitation and Health Risk Assessment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2390-2395

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see Bouzina, Khalid L. (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p19-20

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A Knowledge-Based System For International Hurricane Risk Management, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Chris Austin, Aida RiveraMarzan, Ping Zhang, John Lieberman, Paul VanderMarck, Mark Broido and Auguste C. Boissonnade, p15-16

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Maximized Detention Volume Determined by Runoff Cap-ture Ratio, with Ben Urbonas, WR Jan./Feb. 96, p33-39

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Free Vibration of Stiffened Composite Laminates, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Issam E. Harik, p1163-1166

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cler

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Flood Forecasting Model for an Alpine Drainage Basin -River Drau in Austria, (North American Water and Enviment Congress & Destructive Water, Chench Bathala, ed., 1996), with W. Kugi and F. Nobilis, p718

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Cost-Performance Criteria for Seismic Retrofitting, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Ali Saffar and Leandro Rodríguez Agrait, p902-905

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see Nguyen, Tang Hung, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1020-1026

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see Vinson, Ted S., ed., Roads and Airfields in Cold Regions

Habel, W. R.

Fiber Sensors for Damage Detection on Large Structures and for Assessment of Deformation Behavior of Cementitious Materials, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with D. Hofmann, B. Hillemeier and F. Basedau, p355-358

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see Taft, E. P., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p171-176

Haberman, Keith S. see Bennett, Joel G., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1014-1017

Benchmarking of a Total-System Performance Assessment Model for WIPP, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Dawn A. Shuttle, p322-324

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see Rossi, Pierre, EM Nov. 96, p1038-1043

see Willoughby, Alan J., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p840-846

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Huckett, K. M.
Characterization of a Nonlinear Polymer-Based Composite Material System, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with P. I. Rodriguez, p771-780 see Plaxico, C. A., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p761-770
see Uddin, W., (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p284-294

Hackett, William R.

An Assessment of Future Volcanic Hazard at Yucca Mountain. (High Level Radioactive Waste Management, Technical Program Committee, 1996), p59-60

Hackman, B. Katarina

see McLain, David L., (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p169-179

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see Marcuson, W. F., III, GT Jan. 96, p7-20

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see Atalah, Alan, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p332-339

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see Krizek, Raymond J., CO Mar. 96, p44-54

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Measuring Dielectric Properties of Concrete over Low RF, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Imad L. Al-Qadi, p1139-1149

Hadipriono, F. C.

see Halfawy, M. R., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p200-206

see Halfawy, M. R., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p920-926

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see Barsoum, Ashraf S., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p906-912

see Soedarmono, Diah R., (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p899-905

see Tsay, Tsung-chieh, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p63-69

Hadjerioua, Boualem

Modeling of Surface Water Pumps in TVA Reservoirs, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Mark H. Mobley, Gary E. Hauser and W. Gary Brock, p3188-3193

Hadjitheodorou, Christos

see Demetracopoulos, Alexander C., IR Jan./Feb. 96, p40-

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see McKeown, Denis, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p711-715

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see Thompson, Edward F., WW Sept./Oct. 96, p245-257

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see Deloof, Pascal, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p661-665

Haff, P. K.

see Raghuraman, J., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p262-264

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see Fu, Gongkang, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p34-37

Hagemeister, Michael E.

Hazard Ranking of Landfills Using Fuzzy Composite Programming, with David D. Jones and Wayne E. Woldt, EE Apr. 96, p248-258

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see Naess, Arvid, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p90-93

Hagen, Vernon K.

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disc. (of Peak Outflow from Breached Embankment Dam, by David C. Froehlich, WR Jan./Feb. 95, p90-97), WR July/Aug. 96, p314-316

see Jones, Christopher P., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p339-340

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disc. (of Alluvial Channel Geometry: Theory and Applica-tions, by Pierre Y. Julien and Jayamurni Wargadalam, HY Apr. 95, p312-325), HY Dec. 96, p750

Haghayeghi, Abdol

Retail Renovations (Available only in Structures Special Issue), CE May 96, p10A-12A

Hagloch, Charles A.

Decatur Airport Off-Peak Construction Allows Airport to Continue Operations, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p115-127

Hague, Steven T.

Cape Girardeau Bridge Over the Mississippi River, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p952-959

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Power of Prayer, CE Aug. 96, p31

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Assessments of Lateral and Torsional Structural Responses Induced by Incoherent Ground Motions, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with X. Liu, p188-191

Haik, Yousef

Magnetic Fluid Dynamics of Blood Flow, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Ching Jen Chen and Vinny Pai, p458-461

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Haimann, Richard

Designing SVE to Remove Volatile LNAPLs, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Kathleen Schoen, Mark Underwood, Jeff Munic and Jim Hartley, p431-441

An Observational Approach to Removing LNAPL., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Kathleen Schoen, Hooshang Nezafati and Jim Hartley, p719-730

Haimes, Yacov Y.

Risk-Based Decision Making in Water Resources VII, with David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996, 0-7844-0168-3, 450pp.

Summary of Responses to Participant Questionnaire, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with David A. Moser and Eugene Z. Stakhiv, p422-434
see Lambert, James H., (Risk-Based Decision Making in

Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996),

p80-105
see Tulsiani, Vijay, (Risk-Based Decision Making in Water
Resources VII, Yacov Y. Haimes, ed., David A.
Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p142-

Hair, Charles W., III

To Know or Not to Know: The Site Characterization Process and Its' Role in Horizontal Directionally Drilled Pipeline River Crossings, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p56-68

Hairston, David E.

Design of a 610-mm Water Pipeline Across Providence Harbor, (*Pipeline Crossings 1996*, Lawrence F. Ca-talano, ed., 1996), with Pasquale DeLise and William Skerpan, Jr., p387-394

Factors Affecting the Selection of a Crossing Method, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p214-221

Haj Salem, H.

Field Trial Results of VMS Travel Time Display on the Corridor Peripherique of Paris, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with S. Cohen, E. Sididki and M. Papageorgiou, p368-372

HajAli, Rami M.

see Ghaboussi, Jamshid, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p701-704

Analysis Tools of Transitioning and Turbulent Flows, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p434-437

aracterization of Turbulent Scales in Atmospheric Wind by Orthonormal Wavelets, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with H. W. Tieleman and M. Bikdash, p971-974

Energy Transfer Rates in Unsteady Plane Mixing Layers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with I. M. Janajreh, p1066-1069

see Al-Akhras, N. M., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p897-904

see Tieleman, H. W., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997),

see Tieleman, H. W., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p975-978

Hajjar, Jerome F.

Cyclic Analysis of Concrete-Filled Tubes and Design of Composite Frames, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with Brett C. Gourley and Kathe-rine A. Stillwell, p43-54

Representation of Concrete-Filled Steel Tube Cross-Section Strength, with Brett C. Gourley, ST Nov. 96, p1327-1336

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see Jensen, Peder, (Applications of Advanced Technologies Transportation Engineering, Yorgos J. phanedes, ed. and Francesco Filippi, ed., 1996), p373-377

Hajtasova, K.

Impact of Anthropogenic Activities in Rivers Upon Accuracy of Hydrological Forecasts and on Development of Forecasting Methodologies— Experiences From the Stowak-Hungarian Reach of Danube, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with A. Svoboda, p1718

Hakansson, B.

Mixing Processes in the Dangava River Estuary, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with E. Zaharchenko and H. B. Wittgren, p3276-3277

Managing Multiple Views of Design Product Models, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p273-277

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Probability-Weighted Moments without Plotting Position Formula, HE Apr. 96, p89-91

Halabe, Udaya B.

Ground Penetrating Radar for Infrastructure Condition As-sessment and Geophysical Applications: A Review, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p812-819

see Petro, Samer H., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p876-883

Halabe, Vijaya B.

see Einstein, Herbert H., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p239-253

Haldar, Achintya

Reliability Evaluation Using SFEM, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Liwei Gao, p166-169

Reliability-Based Maintenance Strategy Using NDI, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Zhengwei Zhao, p364-367

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Distribution and Nutrient Limitations of Heterotrophic Bacteria from Yucca Mountain, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with L. Ragatz and P. S. Amy, p30-32

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Halden, Rolf U.

Degradation of Carboxydiphenyl Ether via Bioaugmenta-tion, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Barbara G. Fischer and Daryl F. Dwyer, p2396-2401

Small Inocula Can Effect In Situ Biodegradation, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Daryl F. Dwyer, p2402

Halfawy, M. R.

A Multi-Agent Architecture for Foundation Design Environments, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), with N. A. B. Yehia, A. S. Bazaraa, A. Dessouki, F. C. Hadipriono and J. W. Duane, p200-206

Visualization of Spatial and Geometric Databases for Construction Projects, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with F. C. Hadipriono, J. W. Duane and R. E. Larew, p920-926

Halka, Jeffrey P.

see Maa, Jerome P.-Y., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4383-4388

Hall, Brad R.

Use of Channel Forming Discharge Concepts for Flood Control Channel Design, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Richard D. Hey, p1507-1512

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Toxicity of Organic Chemicals and Their Mixtures to Acti-vated Sludge Microorganisms, with B. Sun, J. Prakash and N. Nirmalakhandan, EE May 96, p424-429

see Gowda, Gary, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p612-621

Hall, Michael J.

Wisconsin Fast-Track Paving Experiences, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p456-465

Hall, Millard W.

see Panchakarla, Venkata S., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p509-518

Hall. Pete

see Lindquist, Michael, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2939-2944

Denitrification of Ground Water/Waste Water using the Aquacel System, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with Jerry Shapiro, p577-581

Hall, Robert L.

see Chowdhury, Mostafiz R., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p840-843

Hall, Ross W.

New Jersey Nearshore Hypoxia During the Summer 1976, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Mark S. Dortch, p608-

Hall, Will

see Nagle, Deborah G., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3580-3585

Hall, William J.

see Green, Russell A., (Natural Disaster Reduction, Geor W. Housner, ed. and Riley M. Chung, ed., 1997),

Hallaji, Khosrow

Optimal Management of a Coastal Aquifer in Southern Tur-key, with Hasan Yazicigil, WR July/Aug. 96, p233-244

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Exterior Accessibility for Structural Repair, Retrofit and Enhancement, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Dudley McFarquhar, p772-775

Haller, Merrick C.

Looking for Wave Groups in the Surf Zone, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Robert A. Dalrymple, p81-92

Hallie, Frank P.

Protection Against Flooding: A New Delta Plan in the Netherlands, (North American Water and Environment Congress & Destructive Water, Chenchayya ed., 1996), with Richard E. Jorissen, p3019-3020

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see Kashiwagi, Dean T., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996). p551-558

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Scour Protection in Bottomless Culverts, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with F. J. Laumann, p3932-3941

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Hamed, K. H.

Looking for Evidence of Climatic Change in Streamflow Time Series, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with A. R. Rao, p1459-1464

Hamerson, Clarence A. P. Elvis, Marilyn Monroe, John Roebling, CE June 96, p28

see Hashmi, H. N., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3812-3817

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see Rosati, Julie D., (Coastal Dynamics '95, William R.
Dally, ed. and Ryszard B. Zeidler, ed., 1996),
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Hamilton, M. R.

Benchmarking Preproject-Planning Effort, with G. E. Gib-son, Jr., ME Mar/Apr. 96, p25-33

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Observations of Tidal Circulation in Mamala Bay, Hawaii, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3880-3885

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see Hayes, Scott, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p734-740

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History of Coastal Engineering in France, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p142-168

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disc. (of Surficial Stability of Compacted Clay: Case Study, by Robert W. Day, GT Nov. 94, p1980-1990) with J. David Frost, GT Mar. 96, p247-248

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Hanagan, Linus morrey Control of Floor Vibrations, (Building on International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Cheryl Rottmann and Thomas M. Murray, p428-435

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see Luo, H., AS Oct. 96, p106-113

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Mobile Bay Scour Analysis for Mobile and Baldwin Coun-ties, Alabama, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Charles D. Powell and Conor Shea, p719-728

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LAN Based Tools for a Project Environment, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), with Ludi Billings and Kate Oertel, p944-950

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(NAPLs) in Subsurface Environment: Assessment
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Shear Dispersion in the Benthic Boundary Layer, (Estua-rine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with J. W. Loder and Y. Shen, p454-465

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see James, George, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1127-1133

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Solid Waste Management in Rural Alaska, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Howard P. Thomas, p769-779

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How Strategies Happen: A Decision-Making Framework, with C. B. Tatum, ME Jan./Feb. 96, p40-48

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Disposal of Drilling Wastes in Permafrost Prudhoe Bay, Alaska, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Michael Snyder and Per Wangstrom, p327-338

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Cost Effectiveness and Incremental Cost Analyses for Environmental Planning, (North American Water and Environmenta Planning, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Kenneth Orth and Ridgley Robinson, p4220-4225

Hansmire, William H.

Tunneling Progress on the Yucca Mountain Project, (High Level Radioactive Waste Management, Technical Pro-gram Committee, 1996), with Richard J. Munzer, p385-387

Performance of Electric Irrigation Pumping Plants Using Variable Frequency Drives, with C. Weigand and S. Orloff, IR May/June 96, p179-182

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see Jones, Christopher P., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p339-340

Hanson, G. J. Studies on the Erosion of a Compacted Soil, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with K. M. Robinson, p2427-2432

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Composite Beam Analogy Fracture Model for Concrete, with Farhad Ansari, EM Oct. 96, p957-965

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Studies on Galvanized Carbon Steel in Ca(OH)2 Solutions, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Branko N. Popov and Ralph E. White, p997-1006

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Geotechnical Study and Remediation Design for Coal Mine Spoil Instability in Discontinuous Permafrost-A Case Study, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Patrick G. Corser and Daniel C. Graham, p712-723

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in Random Vibration Analysis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Mu-Tsang Chen, p962-965

Harik, I. E.

Harik, I. E. Accelerations and Time Histories for Earthquakes Affecting Kentucky's Bridges, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with R. Street, Z. Wang and D. L. Allen, p464-471
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see Lindbergh, Charles, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p317-318

Harleman, Donald R. F. An Integrated Coastal Management Plan for Mamala Bay, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Susan E. Murcott, p4096-4100

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European Progress on river Renaturalisation, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2595-2600 see Hall, Brad R., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1507-1512

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see Vaith, Kartik, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p64-74

Hibbs, Barry J.

Simulation of Regional Ground-Water Flow on a Trans-boundary Flowline; Trans-Pecos, Texas and Chihuahua, Mexico, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Bruce K. Darling, John M. Sharp, Jr. and John B. Ashworth, p1323-1330

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Towards Lessons-Learned Systems in the US Army, Corps of Engineers, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Jeffrey G. Kirby and E. William East, p112-117

Hicks, F. E.

disc. (of Estimation of Mean Flow Velocity in Ice-Covered Channels, by Martin J. Teal, Robert Ettema and John F. Walker, HY Dec. 94, p1385-1400) with P. M. Steffler, HY Aug. 96, p475-476

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Hicks, Randall T.

Do-Nothing Cleanups, with Rais Rizvi, CE Sept. 96, p54-

Hides, Stephen P. Treatment of Wet Weather Discharges in Columbus, Georgia, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p582-587

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Behavior of Beam-Column Connections Under Axial Column Tension, with Amr S. Elnashai and Mihran S. Agbabian, ST May 96, p501-511

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Fiscal '97 Budget Likes Infrastructure, CE Nov. 96, pl 16 Water Resources Legislation, CE Sept. 96, pl 16

Highway Innovative Technology Evaluation Center, Civil Engineering Research Foundation Evaluation of the Troxler Model 4430 Water-Cement Gauge, CERF Report: HITEC 96-03-F, 1996, 0-7844-0167-5, 51pp.

Hikita, Shirou

see Iwata, Masafumi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p203-207

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Volume and Stress Heterogeneity Effects in Fiber-Reinforced Composites, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Pascal Feillard, p1026-

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of Structural Engineers. S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1197-1204 see Makris, Nicos, EM Oct. 96, p1003-1011

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Hines, W. G.

Salinity and Hydraulic Issues at a Constructed Wetlands, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with J. E. Burkstaller and A. F. Gove, p1178-1183

Hingerty, Arthur M.

Human Space Exploration: Justifications and U.S. Space Policy, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p126-132

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The Construction Safety Record Since 1971, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p113-120

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see Lewis A. W., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p686-697

Hite, John E., Jr.

McAlpine Intake Model Study for Innovative Lock Design, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Larry Dalton, p3135-3140

Hixson, Eric R.

see Drain, Michael A., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2384-2389

Hjelmfelt, A. T., Jr.

Hydraulics of Subsurface Flow Constructed Wetlands, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with A. L. Thompson, p52-57

Hjelmfelt, Allen

see Wang, Menghua, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2695-2700

Mathematical Model for Durability of Cladding, with D. A. Lange, I. D. Parsons and F. V. Lawrence, MT Aug. 96,

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see Yin, S. C. L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1911-1917

Ho, C. K.

see Barnard, R. W., (High Level Radioactive Wasie Management, Technical Program Committee, 1996), p193-195

Ho, C. L.

Evaluation of Long-Term Time-Rate Parameters of Subglacial Till, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kalia-kin, ed., 1996), with J. C. Vela, P. U. Clark and J. W. Jenson, p122-136

Ho, Clifford K.

Near-Drift Thermal Analysis Including Combined Modes of Conduction, Convection, and Radiation, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Nicholas D. Francis, p448-450 Unsaturated Zone Flow Modeling for GWTT-95, (High

Level Radioactive Waste Management, Technical Program Committee, 1996), with Susan J. Altman, Sean A. McKenna and Bill W. Arnold, p184-186

see Altman, Susan J., (High Level Radioactive Waste Management, Technical Program Committee, 1996). agement, p190-192

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Ho, Robert K. H.

see Ping, W. Virgil, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p721-730

Ho, T. C. Eric

Low Building Wind Load Variability for Code Applica-tions, (Building an International Community of Structur-al Engineers, S. K. Ghosh, ed. and Jamshid Mohamma-di, ed., 1996), p1053-1060

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Geographic Data Exchange Format in Taiwan, with Ge-wen Lee, SU Aug. 96, p114-131

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National Reserach Council Symposium on Major Issues in Engineering Education, El Apr. 96, p51

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see Kelley, John G. W., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Hodges, Rex A.

Numerical Simulation of DNAPL Emplacement and Redis-tribution in Heterogeneous Porous Media at the M Area of the Savannah River Site, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Ron W. Falta, p619-627

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Cooperative Efforts for Earthquake Risk Management in Developing Countries, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Brian Tucker, Jeannette Fernández, Hugo Yepes, Jean-Luc Chatelain, Fumio Kaneko and Stephanie A. King, p283-284

Hoffman, David A.

see Bitter, Paul R., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p776-787

Hoffman, Norm, P.E.

Readers Respond to Thomey Letter, with James S. Pol, Jim Coppock, P.E., J. Frank Brennan, P.E., John A. Mundell, P.E. and F. Weston Starratt, P.E., CE Aug. 96, p28-29

Hoffman, Paul C.

Probabilistic Durability Analysis of Reinforced Concrete Bridge Decks, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with Richard E. Weyers, p290-293

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see Gessler, Dan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1255-1260

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Proposed Limit States Design Provisions for Masonry, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996),

Hogedal, M.

see Prinos, P., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582

Nonlinear Pile Foundation Analysis Using Florida-Pier, with M. McVay, C. Hays and P. W. Andrade, BE Nov. 96, p135-142

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Simulations of the Maine Coastal Current, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Daniel R. Lynch, p156-167

Holcomb, G. R.

see Covino, B. S., Jr., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1512-1521

Overview of DoD Research in Groundwater Modeling. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2565-2570

Hollander, David J.

see Seagren, Eric A., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p381-392

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Vulnerability Curves for Buildings in Tropical-Cyclone Re-gions, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p78-81

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see Rojahn, Christopher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p276-277

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see Cremer, Michael, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p330-334

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Holz, K.-P.

see Mewis, P., (North American Water and Environi Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3446-3451

Dependence of Water Quality and Fish Habitat on Lake Morphometry and Meteorology, with Heinz G. Stefan, WR Sept./Oct. 96, p364-373

Lake Number: A Long-Term Lake Water Quality Predictor, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3176-318

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Modeling Kinetics of Illuminated and Dark Advanced Oxidation Processes, with Mark E. Zappi, Chiang Hai Kuo and Donald Hill, EE Jan. 96, p58-62

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see Lee, Young-Kyun, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p167-173

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Optimum Smoothing Filter for Geophysical Tomography by the Extended Bayesian Method, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996, with Toshiaki Yamaue and Nobuaki Kudo, p942-945

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Results from the PLEIADES Automatic Traffic Surveil-lance System in the Kent Sector of the Paris-London Corridor, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Nigel Cox, p233-

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Seismic Education Needs of the Building Trades and Code Enforcement Personnel, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Marjoric Greene and James Russell, p101-102

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Three-Dimensional Simulation of River Ice Jams, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Steven F. Daly and James H. Lever, p582-593

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Plans for Testing and Evaluating the New Autoventing Tur-bines at TVA's Norris Hydro Project, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Patrick March, Thomas Brice and Joseph Cybularz, p1299-1304

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Determining Bridge Inspection Requirements for Fatigue Damage Using Reliability, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p454-457

Water and Sanitation Intervention in Flood Mitigation Programs. (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Bradley R. Sack, Nahid A. Ali and J. T. A. Chowdhury, p3916

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Elasto-Plasticity of Sand Deformation, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Fumio Tatsuoka, p547-550

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Storm-Surge Flooding in Chittagong City and Associated Risk, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3701

Horiguchi, T.

Study on Lunar Cement Production Using Hokkaido Anorthite and Hokkaido Space Development Activities, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with N. Saeki, T. Yoneda, T. Hoshi and T. D. Lin, p621-629

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P. Chong, ed., 1996), p409-418 see Nanakorn, Pruettha, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p819-828

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History of Coastal Engineering in Japan, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p336-374

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Initial Studies to Assess Microbial Impacts on Nuclear Waste Disposal, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Annemarie Meike, R. D. McCright and B. Economides, p7-8

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A Program to Assess Microbial Impacts on Nuclear Waste Containment, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Annemarie Meike, p1-3

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Design of Pressure Class Ductile Iron Pipe on Supports, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996, 2222 239 1996), p222-229

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Volunteer Organizations Use of Appropriate Technology in Developing Countries, (North American Water and Envionment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Tsegaye Hailu, p2754-2759

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Reliability of a Cast Duplex Stainless Steel Elbow by Using Probabilistic Fracture Mechanics, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with P. Le Delliou, p756-759

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Observation and Conditional Stochastic FEM, (Probabilis-tic Mechanics & Structural Reliability, Dan M. Frango-pol, ed. and Mircea D. Grigoriu, ed., 1996), with I. Yoshida, p178-181

Updating of SFEM by Observation, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), with I. Yoshida, p828-831

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Low Temperature Solidification of CaCO, Using Hydro-thermal Hot-Pressing, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), with Toshiyuki Hashida, Hideaki Takahashi, Nakamichi Yamasaki and Takashi Korenaga, p694-700

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Environmental Considerations for Water Resources Development in Haor Areas of Northeastern Bangladesh, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Ainun Nishat, p1063-1068

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Robust Stabilization of Systems with Time Delays, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Firdaus Udwadia, p438-441

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Impacts of Climate Change in the Missouri River Basin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Steven F. Jorgensen, Ranjan S. Muttiah, Jeffrey G. Arnold, Thomas A. Fontaine, Scott J. Kenner and John M. Antle, p3399-3404

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Hou, Z.
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see Shakeri, C., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p863-876
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see Zhou, Yunshen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p982-985

Hounsell, N. B.

Paulic Transport Priority in Real-Time Traffic Control Sys-tems, (Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with J. P. Wu, p71-75

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Preliminary Features of a Decision Support System for Incident Detection, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Athanassios P. Chassiakos, p227-232

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Natural Disaster Reduction, with Riley M. Chung, ed., 1997, 0-7844-0153-5, 432pp.

Houston, James R.

Simplified Dean's Method for Beach-Fill Design, WW May/June 96, p143-146

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see Wichelns, Dennis, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p661-666

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HPS: A Space Fission Power System Suitable for Near-Term, Low-Cost Lunar and Planetary Bases, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with David I. Poston and William A. Ranken, p973-983

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see Roelvink, J. A., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

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Pipeline Crossing Accidents and Leak Detection Opportunities, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Edward J. Farmer, p22-36

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Seawater Intrusion Solutions for the Salinas Valley, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4312-4316

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Low Cycle Fatigue of Structural Materials, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Kathryn Carlson, p83-92

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Discussions of a 3D Numerical Simulation of Transient Re-gional Groundwater Flow and Transport, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Mansour Zakikhani and William D. Martin, p2218-2223

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Comparison of Worst-Case and Probabilistic Approaches to Ocean Outfall Mixing Zone Analysis, (North American Water and Environment Congress & Destructive Water, Chenchayay Bathala, ed., 1996), with Robert E. Fergen, p3674-3679

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Aging Effects on Temperature Susceptibility of Polymer
Modified Asphalts, (Materials for the New Millennium,
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Development and Application of a Dual Drainage Model for the Wethersfield Area of the City of Hartford, Connecticut, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with C. Neil Geldof, William W. S. Gray and A. Charles Rowney, p1242-1248

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Estimation of Frequency-Dependent Reflection Coefficients Using Current and Elevation Sensors, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with David J. Simmonds and Mark A. Davidson, p57-68

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Land-Use Policy Decisions Based on a Probabilistic Assessment of Landslide and Debris Flow Risks after the 1991 Oakland Hills Firestorm, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Ram B. Kulkarni, p535-549

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Field and Laboratory Measurements of Shoring Loads,
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Simulating DBP Precursor Transport in Sacramento Delta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Nirmala Mahadevan and Francis I. Chung, p3557-3562

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The Production of Photovoltaic Devices in Space, (Engineering, Construction, and Operations in Space, Stew W. Johnson, ed., 1996), with A. Freundlich, p287-292

Dynamics of Structures: Theory and Applications to Earth-quake Engineering by Anil K. Chopra, EM Feb. 96, p183 Structural Load Modeling and Combination for Performance and Safety Evaluation by Y.-K. Wen, EM Feb. 96, p183-184

lida, Yasunori

An Analysis of Effect of Dynamic Traffic Information Conidering Driver's En-Route Route Switches, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed. 1996), with Nobuhiro Uno and Tetsuro Hasegawa, p604-608

see Nakagawa, Shinji, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p594-598

Ikeda, Syunsuke Three-Dimensional Organized Vortices Above Flexible Water Plants, with Minoru Kanazawa, HY Nov. 96,

Ilić, Suzana

Evaluation and Validation of the Mild Slope Evolution Equation Model Using Field Data, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Andrew Chadwick, pl 49-160

Illangasekare, Tissa see Willson, Clinton S., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p407-418

Illangasekare, Tissa H.

Illiangusekare, Itska H. Process Upscaling of Nonaqueous Phase Liquid Behavior in Heterogenous Aquifers, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with John E. Ewing and Kris O. Pytte, p25-45

Imaizumi, Takayuki see Takabatake. Hideo, ST Jan. 95, p28-38

Imam, Ibrahim F.

Learning Flexible Concepts for the Wind Bracing Problem, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p859-866

Imardjoko, Yudi U.

Performance Assessment Modeling of the Proposed Genting Island Repository Facility, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Daniel B. Bullen and Sofyan Yatim, p172-

Imberger, J.

see Hürzeler, B. E., HY May 96, p230-236

Imberger, Jorg see Debler, Walter, HY Dec. 96, p728-734

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see Sahoo, Dipak, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1215-1220

Inaba, C. M.

see Malvar, L. J., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1179-1188

Inaba, Taiichi

see Nakamura, Yuji, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p173-184

Inada, Michael

see Yuan, Weibo, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1099-1104

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see Shang, J. Q., GT Mar. 95, p243-248

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Ingraffea, Anthony R.

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Ingram, John J.

Advanced Hydrologic Forecasting for Flood and Drought Mitigation, (North American Water and Environment Congress & Destructive Water, Chenchavva Bathala, ed., 1996), p455

Advanced Hydrologic Forecasting Products for Flood and Drought Mitigation, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Edwin Welles and Dean T. Braatz, p227-228

Inverso, George A.
Retrofit of Black Butte Hydroelectric Project Penstock,
(Pipeline Crossings 1996, Lawrence F. Catalano, ed.,
1996), with John A. Schwartz, Stephen M. Hart, Erik Bodholt and Billy Ferguson, p469-476

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Ioannou, Photios G.

Nationation of Complex Construction Simulation Models, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Julio Martinez, p620-626

Comparison of Construction Alternatives Using Matched Simulation Experiments, with Julio C. Martinez, CO Sept. 96, p231-241

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Iordache, M.-M.
see Willam, K., (Materials for the New Millennium, Ken P.
Chong, ed., 1996), p751-760

Iovenitti, Luigi

see Drago, Michele, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p317-328

Ireton, M. Frank Watt

Seismic Sleuths: A Grades 7-12 Materials Development and Teacher Enhancement Project, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p33-34

Irles, F.

see Irles, R., GT Feb. 94, p444-450

Explicit Stresses under Rectangular Footings, with F. Irles, GT Feb. 94, p444-450

Treb. 9, p. 1466 disc: Renán D. Zapata López and Juan C. Molano Toro, GT Mar. 96, p.244-245 clo: GT Mar. 96, p.245-246

Irshad, Mohammad, P.E. Soft-Ground Subway Construction, with John R. V. Dick-son, P.E., CE Nov. 96, p54-57

Irvine, Robert L.

IFVINE, KODERT L. see White, Daniel M., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p339-350

Irwin, P. A.

see Sinclair, J. R., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p997-1004

Oblique Reflection Characteristics of Rubble-Mound Structures, with David Papps and Etienne Mansard, WW Jan./Feb. 96, p1-7

'Since When is 5% Slight?', CE Feb. 96, p31-32

Isenberg, Jeremy see Wong, Felix S., CE Jan. 96, p52-54

Isenhower, William M.
Evaluation of Reliability of Pile-Supported Structures, (Un-certainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Reed L. Mosher, p666-684

Reliability Analysis for Deep-Seated Stability of Pile-Supported Structures, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D.

Grigoriu, ed., 1996), p870-873

Ishak, S. S.

see Al-Deek, H. M., TE Nov./Dec. 96, p440-446

Ishikawa, Nobutaka

see Katsuki, Satoshi, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p91-98

Islam, M. Rashidul

A Comparative Study of the Transformed Methods for Solving Richards' Equation, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1748-1753

Ismael, Nabil F.

Loading Tests on Circular and Ring Plates in Very Dense Cemented Sands, GT Apr. 96, p281-287 see Al-Sanad, Hasan A., GT May 95, p407-412

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Isone, Notation Shinji, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p140-144

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Crack Growth in Uniaxially Aligned Fiber Reinforced Mortar, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with A. B. Shafiq, p624-627

Effect of Inclusion Strength and Geometry on Mortar Fracture, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with A. B. Shafiq and A. Chudnovsky, p1038-

Issa, Raja R. A.
Application of Expert Systems to Workflow in Construction Management, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Charles S. Duvel, p781-785

Using Process Modeling to Gain ISO 9000 Certification in Construction, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Robert F. Cox, p1013-1019

see Cox, Robert F., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Vanegas, e-p1041-1046

Itagaki, Sachiko

A Practical Approach to Watershed Sanitary Surveys, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Elizabeth Teien, p2964-2969

see Takaichi, Lynn M., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p412-417

3-D Graphical Simulation for Temporary Facility Planning using Object-Oriented Building Product Model, (Com-puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Yuji Kano, Jun Ueda and Shinichi Setoguchi, p49-55

Ito, Masahiro

Reproducibility of Beach Profiles and Sand Ripples Generated by Huge Waves, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Hiroshi Murakami and Takeshi Ito, p698-708

see Ito, Masahiro, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p698-708

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Ivarson, W. R.

Contraction Scour at Bridges Founded on Clay Soils, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with F. Qadir and M. Phelps, p1358-1366

Ivarson, W. Robert
The Cost of Highway Bridge Scour in the State of Minnesota, (North American Water and Environment Congress
& Destructive Water, Chenchayya Bathala, ed., 1996),
with Mark Gieseke and Dave Halvorson, p3500-3508

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see Hürzeler, B. E., HY May 96, p230-236

Ivich, Karina T. Lopez
Feasibility of Modeling Phosphorus Dynamics in Stormwater Wetlands, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with William James, Isobel W. Heathcote and John Fitzgibbon, p524-529

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Iwan, Wilfred D.

Implications of Measured Near-Field Ground Motion on Structural Response, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1213-1220

Iwasaki, Yoshinori

Strong Ground Motion Characteristics and Damage Distributton of Housings by an Epicentral Region Earthquake of Mag.7.2 in KOBE, Japan of 1995, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p147-148

Iwata, Masafumi

A Study of Traffic Estimation Using Neural Networks, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Shirou Hikita and Kiyotoshi Komaya, p203-207

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Panel on Composites for Infrastructure, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Charles McClasky, Mark P. Henderson, Hota GangaRao and Peter Head, p781

Concrete and Sand Confined with Composite Tubes, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with A. Kortikere and A. Khubchnadani, p1308-1319

Field Testing & Evaluating Carbon Cable Prestressed Pile, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Sivakumar Ramabhadran and Brian S. Vulcan, p386-393

First Post Tensioned Deck Bridge with Composite Cables, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Gopi Sripathy, p375-385

Modeling Transport of Bromide in Furrow-Irrigated Field, with Bradley King, Dale Westermann and Ian McCann, IR Mar./Apr. 96, p90-96

Izbicki, John A.

Use of 8th and 8D to Define Seawater Intrusion, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4306-4311

Large-Displacement Analysis of Elastoplastic Thin-Walled Frames. I: Formulation and Implementation, with D. Lloyd Smith, ST Aug. 96, p905-914

Large-Displacement Analysis of Elastoplastic Thin-Walled Frames. II: Verification and Application, with D. Lloyd Smith, ST Aug. 96, p915-925

Quartic Formulation for Elastic Beam-Columns Subject to Thermal Effects, EM Sept. 96, p861-871

Jaafari, A.

Twinning Time and Cost in Incentive-Based Contracts, ME July/Aug. 96, p62-72

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Real Time Planning & Total Risk Management, (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p193-199

Jaafari, Maher

An Assessment of Wind Damage to Wood-Frame Houses, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Henry Liu, p347-

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Jackson, K. Scott
Field Measurements of Streambed Scour at Bridge Piers in
Ohio, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,
1996), p3033-3042

Jackson, L. E. see Gallardo, M., IR Nov/Dec. 96, p354-359

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see Thevanayagam, S., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1417-1431

see Ceplecha, Z., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p95-101

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Jacobs, Mark K.

see Willoughby, Alan J., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p840-846

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see Watkins, Paul S., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2366-2371

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Jaffé, Rudolf

Adhesion Kinetics of Fuel Oil #6 and Oil-in-Water Emulsions on Marine Sediments under Turbulent Mixing Conditions, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Hector R. Fuentes, Vassilios A. Tsihrintzis and Liduo Shen, p4389-4394

see Fuentes, Hector R., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p559-564

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see Regan, Amelia C., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p690-694

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Jain, Subhash C.
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Risk-Cost Decision Framework for Aquifer Remediation Design, with Jin-Ping Gwo and Laura Toran, WR Nov./ Dec. 96, p414-420

James, David E.

Interference of Avian Guano in Analyses of Fuel-Contaminated Soils, with Tod E. Johnson and David K. Kreamer, EE Jan. 96, p74-76

Health Monitoring Studies on Composite Structures for Acrospace Applications, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Dennis Roach, Bruce Hansche, Raul Meza and Nikki Robinson, pl127-1133

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Jan, Song Fong The Next Generation of Structural Engineering Automation Systems, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p494-500

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see Hajj, M. R., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1066-1069

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Occupational Hazards Scheme of Social Insurance in Saudi Arabia: Overview, ME Mar./Apr. 96, p55-57

Claims Analysis from Risk-Retention Professional Liability Group, with C. Roy Vince and Jack D. Madsen, CF Aug. 96, p115-122

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Cheng, ed., 1996), p428-434

disc. (of Permanent Deformation on Preexisting Sliding Surfaces in Dams, by George Gazetas and Nasim Uddin, GT Nov. 94, p2041-2061), GT June 96, p504-505

Jansons, Karlis J.

Dealing with Uncertain and Highly Variable Geotechnical Conditions Beneath the Inco Smelter in Copper Cliff, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1383-1401

Jaradat, Omar A.

Probabilistic Evaluation of Wood-Joist Floor Vibrations, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Arshad A. Al-Foqaha'a and Kenneth J. Fridley, p342-345

Jarrett, Robert D.

1995: Where the Past (Paleoflood Hydrology) Meets the Present, Understanding Maximum Flooding, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), pl 148

Interdisciplinary Research of Mountainous Areas: Past, Present, and Future, (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p2445

Paradox at the rocky Mountai Arsenal, Colorado: Benefits of Applied Research, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Joseph P. Capesius and Mark A. Gonzalez, p1553-1554

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Strategies for Achieving Excellence in Construction Safety Performance, with Stuart D. Anderson and Jeffrey S. Russell, CO Mar. 96, p61-70

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see Ostoja-Starzewski, M., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p362-363

Jaske, Robert T.

see Rogers, Jerry R., ed., Civil Engineering History: Engi-neers Make History

Shrinkage Control in Acrylamide Grouts and Grouted Sands, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with C. Vipulanandan, David Magill and Don Mack, p840-850

see Vipulanandan, C., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p829-839

Assessment of Damage Identification Algorithms on Experimental and Numerical Bridge Data, (Building an Inter-national Community of Structural Engineers. S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Charles R. Farrar, p892-899

Javid, Mass

see Bergener, John, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996),

Jayachandran, P.

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Jayakody, K. G. K.

see Jayawickrama, P. W., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p897-911

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see Beck, James L., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1083-1090

Jayawardena, A. W

Comparison of Multi-Layer Perceptron and Radial Basis Function Network as Tools for Flood Forecasting, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with D. A. K. Fernando, p457-458

Runoff Forecasting Using a Local Approximation Method, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

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Javawickrama, P. W.

Use of SID Method for Site Characterization, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with K. G. K. Jayakody and K. A. Rainwater, p897-911

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see Kondisetty, Sudhakar R., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p927-943

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Jeffery, D. J.

Advanced Traveller Information Systems: Experience from the PLEIADES and ROMANSE Projects, (Applications of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with R. J. Meckums, p296-304

Using Spaceborne Imaging Radar to Identify Lake Water Resources on the Alaskan North Slope, (Cold Regions Engineering: The Cold Regions Infrastructure—An In-ternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with K. Morris and G. E. Liston, p855-865

Jehng, J-Y.

Pore Structure Evolution and State of Pore Water in Hydrating Cement Paste at Cryogenic Temperatures, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with D. T. Sprague, S. Bhattacharja and W. P. Halperin, p600-607

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Spectral Relative Motion of Two Structures due to Seismic Travel Waves, with Kazuhiko Kasai, ST Oct. 96, p1128-

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Jenkins, Lvie M.

Space Shuttle Program-Defining a Needed Paradigm for Efficient Access to Space, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p426-434

Jenkins, Stephen D.

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see Sujata, K., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1669-1676

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Flexural Characteristics of Two-Dimensional Advanced Composite Grid Reinforced Concrete, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), with Craig W. Smart, p398-401

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Jensen, Peder VMS Control in Aalborg, (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Lone Jensen, Markos Papageorgiou, Albert Messmer, Habib Haj-Salem and Said Mammar, p373-377

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Refined Finite Element Analysis of Geomaterials, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Stein Sture, p555-558

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Channel Restoration Project Along Toby Creek, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Daniel Billman and William R. Tingle, p3521-3526

Water Pipeline Crossings of the Pitt and Fraser Rivers, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Jim V. Young, p202-213

Jewell, William J. see Heathcote, Isobel W., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1419-1424

Jewett, David G. see Martin, Michael J., EE May 96, p407-415

Jeyapalan, Jey K.

Design and Construction of Large Diameter High Pressure
Gas Transmission River Crossing for San Diego Gas and
Electric Using Directional Boring, (Pipeline Crossings
1996, Lawrence F. Catalano, ed., 1996), with Robert Daiby, p379-386

Jeyaseelan, S.

see Tay, Joo-Hwa, EE June 96, p469-476

Jha, Mithilesh

A Framework for Dynamic Network Traffic Simulation on Distributed Systems, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Anupam Joshi and Kumares Sinha, p388-393

An Integrated Model for Network Traffic Management for Long Term Disruptions, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Srinivas Peeta and Samer Madanat, p335-340

see Wittek, Udo, (Worldwide Advances in Structural Con-crete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p287-297

Ji, Changming see Wang, Liping, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3874-3879 Bathala, ed., 1996, p3874-3879

see Yu., Xinhua, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3863-3868

96 Extraordinary Flood in the Middle Reach of the Yang-tze River, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p377-378

Ji, Zhen-Gang

see Blumberg, Alan F., HY Nov. 96, p610-616

Verification of a 3D Flow Model Using Laboratory Data. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Sam S. Y. Wang, p3458-3463

see Dou, Xibing, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p3716-3721

Jiang, Hongjun

see Misra, Anil, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p568-571

Jiang, Mingxiang

Management Policies, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Ross B. Corotis and J. Hugh Ellis, p368-371

Jiang, Shiyan

see Corapcioglu, M. Yavuz, HE Oct. 96, p139-143

see Cross, W. M., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p356-365

Jiao, Guoyang

Effects of Testing, Inspection and Repair on the Reliability of Offshore Structures, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), with Oddvar I. Eide, p154-

Jimenez, Steven A. see Walsh, Kenneth D., CE June 96, p64-67

Field Estimation of Standard Deviations for 3D Gaussian Model, with Shoou-Yuh Chang, EE July 96, p660-662

Channel Routing with Flow Losses, with Danny L. Fread, HY Oct. 96, p580-582

see Fread, D. L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3222-327

see Lewis, J. M., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p195-200

Jin, Peikang

Anaerobic Removal of Pentachlorophenol in Presence of Zinc, with Sanjoy K. Bhattacharya, EE July 96, p590-

Numerical Modeling of Deep Well Injection Near a Fault, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), with Michael E. Barber, p912-926

Jin, Shuang see Hu, Sau-Lon James, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p680-683

Jin, Weihua see Meyer, Christian, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p666-673 see Meyer, Christian, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1388-1397

Jin. Y.

see Greiner, M., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p351-

see Greiner, M., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p354-

Jin, Yan

An Agent-Supported Framework for Collaborative Design, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Hiroshi Ohira, p529-

Approaches to Simulating Organizational Behavior of Con-Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Raymond E. Levitt, p281-287

Raymond E. Levitt, p261-267 Process Modeling for Design-Build Project Management, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Tore Christiansen, Raymond E. Levitt and Paul Teicholz, p642-648

see Christensen, Lars Chr., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p634-641

see Levitt, Raymond E., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p268-274

Jing, Bian-shun

in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p222-226 see Cohen, Simon, (Applications of Advanced Technologies

Jirásek, Milan

see Bažant, Zdeněk P., EM Dec. 96, p1149-1158

Jirka, Gerhard

see Brunk, Brett, HY July 96, p373-380

Jirka, Gerhard H.

see Méndez-Díaz, María M., HY Aug. 96, p428-435

Shock Compression in Granular Media Using DFEM, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Jamshid Ghaboussi, p426-429

Drainage Recirculation Project for Water Quality, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Robert Stoddard, p1105-1110

on, Arne P.

see Kristie, Richard J., SC Feb. 96, p25-30

Can Numerical Estuarine Models be Driven at the Estuary Mouth, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with H. V. Wang and K. W. Kim, p255-267

Modeling the Impact of Uncertainty in Spatial Variability of Estuarine Boundary Conditions, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with K. W. Kim, p2731-2736

see Kim, K. W., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2737-2742

see Liu, Jinglian J., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3668-3673

Johnson, C. Philip

see Mekha, Basim B., ST Feb. 96, p142-149

Johnson, Carl A.

National Research Council Report:"Technical Bases for Yucca Mountain Standards"—A State of Nevada View, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p285-287

Johnson, Conor D.

see Fosness, Eugene R., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p228-231

see Fosness, Eugene R., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1176-1182

on, David Paul

see Nasland, Don K., CE June 96, p46-49

Dowlooment of a Hydrologic Model with Both Spatially Distributed and Physically Based Capabilities, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Arthur C. Miller, p3200-3205

Johnson, Don

see Nyquist, Jonathan E., (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p1-13

Johnson, E. A., Modal Filter Based On-Line Monitoring of Uncertain Structural Systems, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with L. A. Bergman, P. G. Voul-garis and L. C. Freudinger, p156-159

Studded Tire Research in Norway, Finland and Sweden, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), with Tony Barter and David Sterley, p676-687

Johnson, Eric G.

Cold Regions' Icy Reach, CE Sept. 96, p6

Johnson, Georgia

see Nieves, Alvaro, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p483-485

Johnson, James W. Bid Competition a Sign of the Times, CE Jan. 96, p28

Johnson, L.

see Majer, E., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p151-154

see Lambert, James H., (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p80-105

Spatial Statistics for Rainfall Forecasts Assessment, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Billy Olson, p2897-2902

see Liang, Qingfu, WR Nov./Dec. 96, p438-440

Johnson, M. L.

see Hu, Guang-dou, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996).

Johnson, Michael P.

A Surveying Trip Report from George Washington's Diary, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), with William P. Johnson, Jr., p1-12

Johnson, Peggy A.

Modeling Uncertainty in Prediction of Pier Scour, with Bi-lal M. Ayyub, HY Feb. 96, p66-72

Pier Scour at Wide Piers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2193-2201

Uncertainty of Hydraulic Parameters, HY Feb. 96, p112-

see Heil, Thomas M., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3286-3293

see Federlie, M. V., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p196-198

Johnson, Robert B.

On the Stamp Campaign, CE Dec. 96, p28-29

Modeling of Contaminant Transport in Groundwater in Areas of Discontinuous Permafrost, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Doug Kane, Larry Hinzman, Greg Light and Ann Farris, p82-93

see Scherer, Steven D., CE Aug. 96, p51-53

Johnson, Ronald

see Baker, William, CE Nov. 96, p42-45

Johnson, Samee Lal disc. (of Design of Branched-Water-Supply Network on Uneven Terrain, by Brian Young, EE July/Aug. 94, p974-980) with Rajesh Gupta and Pramod R. Bhave, EE May 96, p448

Johnson, Stewart W.

Architectural Considerations in Design of Lunar-Based Astronomical Observatories, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Koon Meng Chua, Milton Schwartz and Jack O. Burns, p871-880

Engineering, Construction, and Operations in Space, 2 vols, 1996, 0-7844-0177-2, 1365pp.

Johnson, Terry L. see Coleman, Neil M., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p205-207

on, Thom

Application of Circulation and Sediment Transport Modeling within San Diego Bay, (Estuarine and Coastal Mod-eling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Claudio Fassardi, p596-607

Johnson, Tod E.

see James, David E., EE Jan. 96, p74-76

Johnson, William P.

Modeling of NOM-Facilitated PAH Transport Through
Low-f., Sediment, with Gary L. Amy and Steven C.
Chapra, EE June 95, p438-446
err. EE Apr. 96, p337 err: EE Apr. 96, p337 see Martin, Michael J., EE May 96, p407-415

Johnson, William P., Jr. see Johnson, Michael P., (Civil Engineering History: Engi-neers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p1-12

on-Freese, Joan

Planning an International Moon Mission: Lessons Learned, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p109-115

Johnston, H. T.
see Hashmi, H. N., (North American Water and Environment Congress & Destructive Water, Chenchayya
Bathala, ed., 1996), p3812-3817

Johnston, John D.

Recent Progress in Thermally Induced Vibrations Research, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Richard S. Foster, David L. Eby and Earl A. Thornton, p1134-1140

Johnston, Robert A.
Travel Modeling with and without Feedback to Trip Distribution, with Raju Ceerla, TE Jan./Feb. 96, p83-86

Joint Task Force of the Water Environment Federation and the American Society of Civil Engineers, (Perry L. Schafer, chmn.)

Odor Control in Wastewater Treatment Plants, WEF Manual of Practice No. 22 (M&R No. 82), 1995, 0-7844-0085-7, 285pp.

Jokerst, Mark

Shear-wall Retrofit, CE Feb. 96, p36-39

Jolicoeur, Claude

Semicontinuous Mathematical Model for Bending of Multi-layered Wire Strands, with Alain Cardou, EM July 96, p643-650

Jolly, Steven D.

Design of Large Space Systems for Packaging and Launch on Multiple, Heterogeneous Vehicles, AS Apr. 96, p45-

Joly, G.

see Dujardin, C., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p87-91

es, B. H.

see Petrenko, A. A., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3886-3891 Jones, Christopher P.

A National Standard for Flood-Resistant Design and Construction, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), with Vernon K. Hagen, Christopher S. Hanson, Thomas C. MacAllen, David Greenwood and Clifford E. Oliver, p339-340

Jones, Chuck

930

The Fabric Dyers' Use of Recycled Water, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2666-2671

Earth Reinforcement and Soil Structures, Co-publisher: Thomas-Telford, ISBN: 0-7277-2525-4, 1996, 0-7844-0194-2, 380рр.

see Fakher, Ali, (disc), GT Dec. 94, p2083-2099

Jones, David D.

see Hagemeister, Michael E., EE Apr. 96, p248-258

Jones, Denny

see Bergman, Dave, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p12-18

Jones, George V.

Automation-Related Quality Improvements in Power Plant Design and Operation, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Phillip W. Garrett, Jones Randall E. and Carl K. Toner, p487-493

see Brown, P., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p13-19

Jones, J. Sterling

see Annandale, George W., CE July 96, p58-60

see Salim, Mohammad, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2202-2211

Jones, Kevin B.

see Grove, James D., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p466-474

Reader Questions Sea Level Prediction, CE Sept. 96, p32,35

Advances in System Identification Using Output Measurements, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with J. H. Ellis and K. Pan, p160-163

see Pan, K., (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p138-141

see Pan, K., (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p482-485

Jones, Nicholas P.

disc. (of Measuring Flutter Derivatives for Bridge Sectional Models in Water Channel, by Q. C. Li, EM Jan. 95, p90-101) with Robert H. Scanlan, EM Apr. 96, p389-390 see Jain, Anurag, ST July 96, p716-725

see Khare, Sandeep, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1236-1243

see Wagner, Robin M., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p78-79

Jones, Norman L.

see Nelson, E. James, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2903-2908

see Richards, David R., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2589-2594

see Zundel, Alan K., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p207-212

Jones, Ralph

see Jahren, Charles T., WW July/Aug. 96, p187-194

Jones Randall E.

see Jones, George V., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p487-493

es, Robert K.

Method for Estimating Boiling Temperatures of Crude Oils, EE Aug. 96, p761-763

Flight Crew Equipment Development and Integration with the International Partners, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p467-472

see Montgomery, F. O., (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p680-684

see Montgomery, F. O., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p685-689

Jones, Stephen M. see Burbey, Thomas G., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3490-3495

Jones, Thomas O.

Why Satisfied Customers Defect, ME Nov./Dec. 96, p11

Modeling Changing Freshwater Delivery to Apalachicola Bay, FL, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Wenrui Huang, p116-127

Jones, Warren L.

see Camper, Anne K., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1437-1441

Jones-Lee, Anne

see Lee, G. Fred, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3103-3108

Joosten, B. Kent

see Campbell, Charles H., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p392-398

see Sorge, Les L., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p776-782

Jordan, D. A., Jr.
see Bokde, A. L. W., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1070-1073

Jordan, Mabel

see Makris, Nicos, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p894-897

see Makris, Nicos, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1197-1204

see Makris, Nicos, EM Oct. 96, p1003-1011

Jordan, Raymond C. see Bergendahl, Bart S., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p479-488

Jorgensen, Steven F.

see Hotchkiss, Rollin H., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3399-3404

Jorissen, Richard E.

see Hallie, Frank P., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3019-3020

Joseph, Leonard M. see Baker, Clyde N., Jr., CE Nov. 96, p3A-6A

see Thornton, Charles H., (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p944-951

Joseph, Marekat C.

see Casey, Joann, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2685-2688

Joshi, Anupam see Jha, Mithilesh, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p388-393

Joshi, Arun

Removal of Arsenic from Ground Water by Iron Oxide-Coated Sand, with Malay Chaudhuri, EE Aug. 96, p769-

Joshi, C. B.

Parametric Study on Performance of Cross-Flow Turbine, with V. Seshadri and S. N. Singh, EY Apr. 95, p28-45 disc: V. R. Desai, EY Dec. 96, p126 disc: V. R. Desai, EY II clo: EY Dec. 96, p127

Joy, Douglas M. see Greenly, Blair T., GT Oct. 96, p789-796

ermo-Micromechanical Damage Modeling of Airfield Concrete Pavement, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Y. Zhang, p727-730

Ju, Jianing

Finite-Element Graphic Objects in C++, with M. U. Hosain, CP July 96, p258-260

Juang, C. H.

Determining Relative Density of Sands from CPT Using Fuzzy Sets, with X. H. Huang, R. D. Holtz and J. W. Chen, GT Jan. 96, p1-6 see Chen, J. W., GT May 96, p374-381

see Lin, Pin-Sien, TE Nov./Dec. 96, p462-467

Juang, C. Hsein

A Practical Approach to Uncertainty Modeling in Geotechriacal Engineering, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with David J. Elton, p1269-1283

Juch, Martha Ferrero

Technical Activities in a Large Branch or Section, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2248-2253

Judd, Lee

see Steele, Ken, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2815-2819

Judge, A. S.

see Steinmanis, J. E., (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996). p471-482

Juhasz, Charles

see Godiwalla, Adil, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p170-186

Julien, Pierre Y.

Julien, Fierre 1.

Alluvial Channel Geometry: Theory and Applications, with Jayamurni Wargadalam, HY Apr. 95, p312-325 disc: Willi H. Hager, HY Dec. 96, p750 disc: H. Q. Huang, HY Dec. 96, p750-751 clo: HY Dec. 96, p752-754

Transforms for Runoff and Sediment Transport, HE July 96, pl 14-122

see Williams, David T., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2843-2848

Jullien, Jean-François

Cause of Deformed Shapes in Cooling Towers, with Waeil Aflak and Yvan L'Huby, ST May 94, p1471-1488 disc: Luis A. Godoy, ST Feb. 96, p220-221 clo: ST Feb. 96, p221-222

Jun, Do Soon

see Yoo, Seung Ick, (High Level Radioactive Waste Management, p379-381 Technical Program Committee, 1996), Jun, Kyung Soo

Jun, Ayung Soo.
Calibration of a Water Quality Model Using the Influence Coefficient Algorithm, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Kil Seong Lee, p4010-4015

Junge, Richard see Khedro, Taha, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p579-585

Jungius, Christoph see Richter, Lutz, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p283-289

see Boguslavskii, Yu., GT Oct. 96, p806-812

Kabele, Petr

Finite Element Analysis of Fracture Behavior of ECC Shear Beams, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Hideyuki Horii, p409-418

Kacerek, Timothy F.

Kacerek, 1 mouty F. see Henning, Brian, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3592-3597

Fluid Pressure Polarization and Effective Response of Fluid-Saturated Materials with Cavities of Various Shapes, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Boris Shafiro, p487-490

Kachlakev, Damian I. see Lundy, James R., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p638-647

Kaczinski, Mark R.

Kaczinski, Mark R.
Full-Scale Fatigue Test of the Williamsburg Bridge Orthotropic Deck, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Frank E. Stokes, Peter Lugger and John W. Fisher, p329-336
see Van Dien, James P., (Building an International Com-

munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p337-344

Kaczmarek, Leszek M.

Boundary Layer Theory and Field Bedload, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Rafall Ostrowski and Ryszard B. Zeidler, p664-675

Kadavy, Kem C.

see Rice, Charles E., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p588-593

see Rice, Charles E., HY June 96, p292-297

Kadir, Tariq N.

A New Model of California's SWP/CVP Systems, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Miguel A. Marino, p3068-3073

Kadnar, Joy Orlando

see Yazdani, Nur, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p268-275

Kadūnas, Valentinas

Radunas, varintums
Geoenvironmental Evaluation of Geological Formations of
Lithuania for Radioactive Waste Disposal, (High Level
Radioactive Waste Management, Technical Program
Committee, 1996), with Jurgis Valiūnas, p83-85

Kai, Yoshiro

see Matsumoto, Shinji, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p140-144

Kajner, Lyle see Berthelot, Curtis F., TE Sept./Oct. 96, p337-341

Kakuno, Shohachi

Wave Forces on an Array of Vertical Cylinders, with Yoshihiro Nakata and Philip L.-F. Liu, WW May/June 96, p147-149

Kalaba, Robert E. see Udwadia, Firdaus E., AS July 96, p64-69

Kaliakin, V. N.

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Formulation and Implementation of Improved Zero-Thickness Interface Elements, (Engineering Mechanics,

Y. K. Lin and T. C. Su, 1996), p285-288

Generalized Plane Strain Finite Element Analysis: Geomechanical Applications, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with L. Cui and A. H-D Cheng.

Kaliakin, Victor N.

see Sheahan, Thomas C., ed., Measuring and Modeling Time Dependent Soil Behavior

Kalinski, Robert J.

see Pesti, Geza, WR Mar./Apr. 96, p97-104

Kaliprasad, Varanasi see Ramprasad, Godavarthy, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1015-1020

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- The Palo Verde Test Land Fallowing Program Case Study, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4030-4035

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History of Coastal Engineering in Canada, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p89-102

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Risk Assessment of Rockfall Hazard at Horse Mesa Dam: A Case History, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Kenneth M. Euge, p1402-1416

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A Multiperiod Approach for the Solution of Groundwater Management Problems using the Outer Approximation Method, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Alexander A. Spiliotopoulos and George F. Pinder, p129-134

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Comprehensive Modelling of Water Distribution Networks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Samuel S. Kpo and Kai-Wah Tang, p4107-4112

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Solid Waste and Materials Systems Alternatives Study Summary, (High Level Radioactive Waste Managemen Technical Program Committee, 1996), with Stephen T. Smith, p374-378

Inundation Studies in Case of Failure of King Talal Dam, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with M. Hanif Chaudhry and Muhammad R. Shatanawi, p1924-1929

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On Moment Stability of Markov Dynamical Systems, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Yevgeny Tsarkov, p546-549

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Probabilistic Assessment of Miter Gates, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p866-869

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Response Statistics of Moored Floating Structures Subject-ed to General Nonlinear Random Wave Forces, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Takashi Okasaki, p158-161

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Juvenile Fish Separator Design, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1117-1122

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Bayesian Decision Analysis for Contaminant Travel Time, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with Hewa A. Wijedasa, p207-218

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Inflatable Habitat Option for a Human Lunar Return Mission, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1076-1082

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see Rogers, Jerry R., ed., Civil Engineering History: Engineers Make History

Kent, Edward J.

The Scour at Bridges Management Program in Rhode Island, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Jeffrey S. Glenn and Joseph T. Boardman, p489-

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Initial EPRI Reaction to the NAS Yucca Mountain Standards Recommendations, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Kestler, Maureen A.

Assessing the Significance of Subgrade Variability on Test
Section Performance, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth,

107., ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p685-694
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Mexican Border Ground Water Agreement, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2330-2334

Problems with Metrication in Transboundary Water Projects, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3680-3684

Water Allocation on US/Mexico Boundaries, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3429-3433

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The Effect of Diameter Mismatch Upon Hemodynamics in the Distal Anastomoses of Vascular Bypass Grafts, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Mary M. Evancho, Rick L. Sims and Stanley E. Rittgers, p196-199

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Probabilistic Finite Element Analysis of Aerospace Struc-tures, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with H.-Z. Lin, T. Y. Torng, Y. Zhang and A. D'Angelo, p648-651

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Autotrophic and Heterotrophic Bacterial Diversity from Yucca Mountain, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), with D. L. Haldeman, A. Igbinovia, P. Castro, L. Ragatz and P. Amy, p9-11

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Impact of Sedimentation Caused by Runoff, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p708-713

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Perspectives of Rebuilding Inner City Airports in the Emerging Post-Soviet Environment, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p34-44

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Effect of Concrete Workmanship on Strength Reliability of R/C Beams, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with D. V. Rosowsky and M. G. Stewart, p238-241

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Khovlou, N.

The Effect of Moisture on Spalling of Normal and High Strength Concretes, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with G. L. England, p559-570

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Deep Geological Disposal Programs in Preparation and Under Development, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

agement, Technical Program Committee, 1996), p81-82 see Galetsky, L. S., (High Level Radioactive Waste Man-

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Ukrainian Program of Radioactive Waste Disposal in Geological Formations, (High Level Radioactive Waste Disposal in Geo-logical Formations, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), with Michail A. Pavlovsky and Valeri M. Starodoumov, p25-

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see Vipulanandan, C., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p851-862

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Factors Limiting Microbial Activity in Volcanic Tuff at Yucca Mountain, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with William P. Kovacik and Jennifer Taylor, p36-38

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Impacts of NAFTA on Environmental Engineering, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2306-231!

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Vibration Analysis of Special Orthotropic Plate with Variable Cross-Section, and with a Pair of Opposite Edges Simple Supported and the Other Pair of Opposite Edges Free, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Keyong Jin Kim and Do Sik Sim, p1408-1417

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Modeling the Impact of Sea Level Rise in Delaware Bay. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with B. H. Johnson, p2737-2742

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see Johnson, B. H., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2731-2736

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Verification of Site-Specific Live Load on Bridges, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Andrzej S. Nowak and Roger Till, p214-217

Practical Advanced Analysis for Braced Steel Frame Design, with Wai-Fah Chen, ST Nov. 96, p1266-1274

Practical Advanced Analysis for Steel Frame Design, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with Wai-Fah Chen, p19-30

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A Hybrid Data Model for Structural Health Monitoring, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with Stuart S. Chen, p286-297

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Telerobotic Servicing with Virtual Reality Calibration and Semi-Automatic Intermittent Model Updates, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Robert Brown, p43-49

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disc. (of Streamflow Forecasting for Han River Basin, Korea, by Haitham M. Awwad, Juan B. Valdés and Pedro J. Restrepo, WR Sept./Oct. 94, p651-673) with Yong N. Yoon and Hyoseop Woo, WR May/June 96, p228

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Evaluation of Microcrack Damage Growth and Healing of Asphalt Concrete Pavements Using Stress Wave Method, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Y. Richard Kim, p612-615

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Animation Techniques for Visualizing Coastal Flow Dy-namics, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng; 1996), with Patrick Col-lins, Duncan Galloway and Eric Wolanski, p192-203

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Multi Dimensional Modeling of Water Quality Using the Finite Element Method, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with John F. DeGeorge, p340-354

The Use of an Equivalent Porosity Method to Model Flow in Marshes, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Lisa C. Roig, p3734-3739

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see Peirson, William L., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), n632.643

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Kang, Seepaame Earthquake Hazard Assessment Through Geographic Information Systems, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Anne S. Kiremidjian and Kincho H. Law, pl.23-124

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International Space Station Traffic Model Development, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Neil W. Lemmons, p443-449

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Measured Seismic Behavior of a Two-Story Masonry Building. (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Guido Magenes and G. Michele Calvi, p123-134

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Performance of a Triodetic Foundation Near Fairbanks, Alaska, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p291-302

The Status of Cold Regions Research, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Robert Carlson and Howard Thomas, p196-202

Use of Geosynthetics in Road and Airfield Construction in Cold Regions, (Roads and Airfield in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p271-288

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Incorporating Uncertainty, Objective, and Subjective Data in Geologic Site Characterization, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Herbert H. Einstein, p104-118

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Air Transportation: A Systems Approach, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p246-253

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Kirby, Kenneth W. Managing Conflicting Demands from Endangered Species: Taking the Challenge, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4142-4147

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The Kobe Earthquake: Ground Shaking, Damage and Loss, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p908-916

Geographic Information Systems for Emergency Response Management of Transportation Systems, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Nesrin Basoz, Kincho Law and Stephanie King, p355-356

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Monotonic Loading of Brittle Materials: A Stochastic Dam-age Model, (*Probabilistic Mechanics & Structural Relia-bility*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with B. F. Spencer, Jr. and Satish Kandarpa, p354-357

Numerical Simulation of Permanent Deformation in Flexi-ble Pavement Systems Subjected to Moving Loads, (En-gineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Weixin Shen, Michael I. Hammons and Donald M. Smith, p430-433

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Fuzziness of the Modified Mercalli Intensity as a Measure of Damage, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Timothy H-J. Yao, p247-248

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Canal Crossing of High-Pressure Pipelines, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996),

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Rensitivity Analysis of the Seismic Capacity for a RC Silo Due to Variance of Its Material Properties, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Hitoshi Seya, p530-533

Kitchens, Michael

Estimating and Project Management for Building Contrac-tors, 1996, 0-7844-0148-9, 242pp.

Kithil, Richard

Lightning Safety: A Risk Management Approach, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p17-18

Kitipornchai, S. see Xiang, Y., EM Jan. 96, p54-63

Kitou, Nikos

see Katopodi, Irene, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p806-817

Kivett, Hanan A.

Lessons for Rail Access to Airports, (Meeting the Chal-lenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p96-105

Kiyokawa, Wataru see Okada, Hiroo, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p150-153

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see Stenback, Greg A., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p180-194

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Klein, K. G. Polarization and Conduction of Clay-Water-Electrolyte Systems, by J. Q. Shang, K. Y. Lo and I. I. Inculet, GT Mar. 95, p243-248) with J. C. Santamarina, GT Nov. 96, p954-955

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Kliemann, W.

see Pradlwarter, H. J., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p523-526

Kliewer, Julie E.

Aging and Low-Temperature Cracking of Asphalt Concrete Mixture, with Huayang Zeng and Ted S. Vinson, CR Sept. 96, p134-148

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see Thomas, Jay, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p924-931

Kliger, Howard S.

see Yoshizawa, Hiroyuki, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1608-1616

Kliger, I. Robert

Shear Properties of Components Used in Stressed-Skin Panels, with Patrick J. Pellicane, MT May 96, p77-82

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see Kareem, Ahsan, ST Feb. 95, p348-361

Kline, Thomas

see Thomas, Jay, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p924-931

Klingeman, Peter C.

Surface Bypass-Collector Concepts and Performance, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Lisa M. Wieland, Kenneth R. Elbert and Thomas K. Lorz, p673-678

see Bella, David A., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2613-2618

Klinkhachorn, Powsiri

see Petro, Samer H., (Building an International Comm of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p876-883

Klisinski, Marek

see Frangopol, Dan M., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p598-605

Klomp, Rob

see Dijkman, Jos, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3021-3022

Klos, Richard A.

Biosphere Modelling for Radioactive Waste Disposal, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Frits Van Dorp, p237-

Klosky, J. Ledlie

Mechanical Properties of JSC-1 Lunar Regolith Simulant, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Stein Sture, Hon-

Yim Ko and Frank Barnes, p580-688
Vibratory Excavation and Anchoring Tools for the Lunar Surface, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Stein Sture, Hon-Yim Ko and Frank Barnes, p903-911

Solar Power Satellites, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), pi281-1284

Kluenker, Charles H.

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Sediment Transport Modeling for the Glen-Colusa Irriga-tion District Fish Screen Modifications, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Mark Sailer, Ar-thur Glickman and Brent Mefford, p1027-1032

see Klyachko, Mark, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p76-77

The DIMAK Scale for Disaster Magnitude Measuring in Service, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), with Ilia

Klyachko, p76-77
Lessons of the Recent Earthquakes in Sakhalin Region, Russia, (Natural Disaster Reduction, George W. Hous-

Russia, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), p5-6 Urban Disaster Vulnerability Assessment & Lessening Is a Key for Safe Development, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p11-12

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Knickrehm, Phillip see McCullouch, Bob, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p760-766

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see Zoppou, C., (disc), EM Feb. 95, p230-243

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Knightes, Christopher D. see Peters, Catherine A., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p681-692

Knoke, John R.

see Martinez, Julio C., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p627-633

Knoll, Jessica

A New Hydrogen Microsensor for Space Applications, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1285-1289

Knoll, Malva A.

Student Guide for Space Conference Research Papers, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1319-1326

Knott, Michael A.

Risk Analysis of Ship and Barge Collision Loads on Bridges. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p724-727

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Knudsen, C. W.

see Brueneman, D. J., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p769-775

Knudsen, Christian W.

see Sorge, Les L., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p776-782

Knutson, John H. see Polasik, Stanley D., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3109-3114

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see Klosky, J. Ledlie, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p680-688

see Klosky, J. Ledlie, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p903-911

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Kocer, Fatma Y.

Design of Prestressed Concrete Transmission Poles: Optimization Approach, with Jasbir S. Arora, ST July 96, p804-814

timal Design of Prestressed Concrete Tran Poles, (Analysis and Computation, Franklin Y. Cheng,

ed., 1996), with Jasbir S. Arora, p111-122 Optimal Design of Steel Transmission Poles, with Jasbir S. Arora, ST Nov. 96, p1347-1356

Kochendorfer, John P.

Integrated Hydrological/Ecological/Economic Modeling for Examining the Vulnerability of Water Resources to Climate Change, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Jorge A. Ramirez, p2157-2162

Kocher, Walter M.

see Hinson, Roger K., EE Nov. 96, p1023-1030

Kodindouma, M. B.

see Idriss, R. L., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p238-244

Kodres, C. A.

Moisture-Induced Pressures in Concrete Airfield Pavements, MT Feb. 96, p41-50

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Fire Resistance of Circular Steel Columns Filled with Fiber-Reinforced Concrete, with T. T. Lie, ST July 96, p776-782

priorized for the priority of the see Lie, T. T., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p345-351 see Lie, T. T., ST Jan. 96, p30-36

Koehn, Enno "Ed"

Future Changes/Improvements in Construction Safety, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), with Mahendar R. Surabhi, p121-128

Koelliker, J. K.

see Govindaraju, R. S., HE July 96, p131-138

see Ramireddygari, S. R., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3241-3246

Koenders, E. A. B.

see van der Veen, C., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p892-898

Koenen, J. F., P.E.

Transportation Shortcuts Exist, CE Oct. 96, p37-38

Koerner, Robert M.

Bearing Capacity of Hydrated Geosynthetic Clay Liners, with Dhani Narejo, GT Jan. 95, p82-85 disc: Yacoub M. Najjar and Imad A. Basheer, GT Dec. 96, p1023 disc: Daniel J. De Battista and Patrick J. Fox, GT

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GT Dec. 96, p1024-1025

Kogiso, Nozomu

Reliability Design of Laminated Plate for Buckling, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Shaowen Shao and Yoshisada Murotsu, p627-634

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Koh, Hyun Moo

see Kim, Jac Kwan, EM Sept. 96, p807-817

Reliability Analysis of Beam with Initial Deflection by Entropy Model, (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Toyofumi Takada and Atsunori Mi-yamura, p652-655

Kohanowich, Karen M.

Acoustic Sediment Flux Measurements from DUCK '94, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Timothy P. Stanton and Edward B. Thornton, p739-748

Kohlenberg, Bryan W.

see Urbonas, Ben R., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3533-3538

Kohno, Mamoru

Fire Reliability at Earthquake Occasions, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p198-201

Adaptive Self-Tuning Control of Excavators, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Allen D. Nease, p220-226

Modeling and Control of Excavator Dynamics during Dig-ging Operation, with M. Thoma, E. Kocaoglan and J. Andrade-Cetto, AS Jan. 96, p10-18

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Kollmannsberger, Florian

see Lancien, Daniel, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p30-38

Kolodko, Jerzy

Wave Run-Up: Recent IBW PAN Investigations, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Jaroslaw Kapiński, Marek Szmytkiewicz and Ryszard B. Zeidler, p197-208

Kolstad, Brian

see Skifalides, Nick, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3527-3532

see Iwata, Masafumi, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p203-207

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Koncz, Nicholas

A Strategy for Solving Static Multiple-Optimal-Path Tran-sit Network Problems, with Joshua Greenfeld and Kyriacos Mouskos, TE May/June 96, p218-225

Kondisetty, Sudhakar R.

Source Characterization at Contaminated Sites, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Priyantha Jayawickrama and Kenneth A. Rainwater, p927-943

Kondratjev, V. G.

Strengthening Railroad Roadbed Bases Constructed on Icy Permafrost Soils, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p688-

Kondziolka, Robert E.

Capacity Predictions for Full Scale Transmission Line Test Foundations, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Peter M. Kandaris, p695-709

Fluids, with I-Chung Liu, EM Feb. 95, p198-202 disc: Víctor H. Cortínez, EM June 96, p586-587 clo: EM June 96, p587

Konovalov, U. G.

see Borovikova, L. N., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p454

Field Observations of Instrumented Highway Sections with Different Frost Protections, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with G. Dore and M. Roy, p652-663
Permafrost Formation and Aggradation in a 23-m High Ho-

mogeneous Dyke: A Case-Study, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with R. Ladet, p700-711

see Shen, Mu, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p736-744

Konstantopoulos, I. see Burton, Scott A., EM Sept. 96, p897-906

see Pinchuk, L., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p192-195

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Kopchynski, David M.

see Moretti, Charles J., WR May/June 96, p197-204

Koplin, Robert E.

Problem and Technical Solutions: The Seven Oaks Dam, Physical Elements of the Seven Oaks Dam Feature, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2177-2184

see Sansalone, John, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3115-3120

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see Smith, Michael, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p140-145

Korenaga, Takashi

see Hosoi, Kazuyuki, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p694-700

Korflatis, George P.

In Situ Plume Interception and Treatment Technologies: An Overview, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Alexandros Makarigakis, p66-88

Korhonen, C. J.

Minimum Thermal Protection for Cold Weather Masonry. (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), with E. R. Cortez and R. D. Thomas, p128-140

Korista, Stan, P.E.

High Over Shanghai, with Mark Sarkisian, P.E. and Ahmad Abdelrazaq, CE Dec. 96, p58-61

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see Naaman, Antoine E., (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p782-791

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see Borovetz, Harvey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p35

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see Berndes, Stefan, (High Level Radioactive Waste Man agement, Technical Program Committee, 1996), p494-498

Kortikere, A

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Kosaric, Naim

see Rowe, R. Kerry, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2021-2026

Koscheyev, Victor S. Medical-Technical Problems of Human Protection, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1002-1007 see Leon, Gloria R., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

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Köse, İ. E.

H., Active Seismic Response Control Using Static Output Feedback, with W. E. Schmitendorf, F. Jabbari and J. N. Yang, EM July 96, p651-659

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Kossik, Rick

see Miller, Ian, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p944-964

see Venkatraman, Sankar N., CE Mar. 96, p14A-16A

Kostem, Celal N.

see Fazil, M. Arif, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p874-880

Kostura, K.

see Warner, J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2522-2527

Employment of Electronic Sand Level Gauges for Meas-urement of Beach Slope Deformation on Norderney Is-land, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with H. Kunz and I. Podymov, p651-663

Kotey, D. Todd

Buckeye Water Transmission Main Keswick Dam Cross ing, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p194-201 Kothvari, U. C.

Temporal Variation of Sediment Yield, with A. K. Tiwari and Ranvir Singh, HE Oct. 96, p169-176

Kotra, J. P.

NAS Recommendations and Current Legislative Proposals: Implications for U.S. NRC's Regulatory Program, (High Level Radioactive Waste Management, Technical Pro-gram Committee, 1996), with M. V. Federline, T. J. McCartin, N. A. Eisenberg and J. H. Austin, p269-271

Kotra, Janet P.

Use of Expert Judgment in the HLW Regulatory Program:
U.S. NRC Staff Draft Guidance, (High Level Radioactive
Waste Management, Technical Program Committee,
1996), with Michael P. Lee, Norman A. Eisenberg and
Aaron R. DeWispelare, p247-249

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Kou, Xiniian

Error Mohr Circle and Invariants of Cofactor Coefficient, with Jimian Song, SU Nov. 96, p158-167

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outsopoulos, Haris N.

Modeling Freeway Lane Changing Behavior, (Applications of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Moshe E. Ben-Akiva, Rabi G. Mishalani and Kazi I. Ahmed, p455-459

Koutsoukis, Michael

Random Elastic Response Characteristics of Bar Structures by Monte Carlo Simulation, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), with Edmund S. Melerski, p812-815

disc. (of New Analysis for Creep Behavior in Concrete Columns, by Raed M. Samra, ST Mar. 95, p399-407) with Allan J. Beasley, ST Nov. 96, p1389

Kovacik, William P.

see Kieft, Thomas L., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p36-38

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Royaneva, Agnessa Resonances in Nonlinear Stochastic Systems, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p736-739

see Kangari, Roozbeh, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p42-48

Köylüoğlu, H. Uğur Hysteretic MDOF Model to Quantify Damage for RC Shear Frames Subject to Earthquakes, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed.

chanics & Structural Retiability, Dan M. Frangopoi, ed. and Mircea D. Grigoriu, ed., 1996), with Søren R. K. Nielsen and Ahmet Ş. Çakmak, p768-771
System Dynamics and Modified Cumulant Neglect Closure Schemes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Søren R. K. Nielsen, p380-383

see Nielsen, Søren R. K., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p6-9

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Cross-Flow Vibrations of Cylinder in Irregular Oscillatory Flow, with B. Mutlu Sumer and Jørgen Fredsøe, WW Nov./Dec. 94, p515-534

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Kraak, Arie W.

see Visser, Paul J., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p583-594

Kraft, Jon

Please Include Site Plans, CE Feb. 96, p31

see Dutta, Subijoy, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3722-3727

Kranc, S. C.

see Sagüés, A. A., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1522-1530

Kranenburg, C. see van Kessel, Thijs, HY Dec. 96, p710-717

Kratky, Richard J.

disc. (of Comparative Analysis of Bridge Superstructure Deterioration, by David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136), ST June 96, p706-707

Krätzig, Wilfried B.

Dynamic Fatigue of High-Rise Natural Draught Cooling Towers, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p298-309

raus, Nicholas C.

History and Heritage of Coastal Engineering, 1996, 0-7844-0196-9, 610pp. see Brown, Cheryl A., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p681-694

Testing of Prestressed Clay-Brick Walls, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Ravi Devalapura and Maher K. Tadros, p37-48

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Krawinkler, Helmut

Steel Moment Frames with Welded Connections, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1115-1122

Kreamer, David K. see James, David E., EE Jan. 96, p74-76

Kreger, Michael E.

Behavior of High-Strength Concrete Beam-Column Joints, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Elias I. Sagan, p420-430

Kremer, Paul A.

see Behr, Richard A., AE Sept. 96, p95-99

A Family of Invariant Stress Surfaces, EM Mar. 96, p201-208

Kriebel, David

A Shoreline Risk Index for Northeasters, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Robert Dalrymple, Anthony Pratt and Vincent Sakovich, p251-252

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Anisotropic Plasticity with Anisotropic Hardening and Rate Dependence, with Kevin H. Brown, EM Apr. 96, p316-324

Krige, G. J.
IFPATS: A Link Between Distributed AI Systems and Expert Users, CP Apr. 96, p151-156

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see Sinclair, J. R., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p997-1004

Krinitzsky, Ellis L.

DSHA Versus PSHA for Critical Structures, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p241-242

Krishna, Paul M.

see Brocoum, Stephan J., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p272-273

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see Craig, Shala L., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2242-2247

Krishnamoorthi, S.

Arthanamorun, Effects of Sewage Effluent Irrigation on Paddy, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with K. Shy-amala and P. Govindan, p2372-2377

Krishnamurthy, Kailash

see McVay, Michael, ST Sept. 96, p1016-1024

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A Data Management Model for Change Control in Collaborative Design Environments, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Kincho H. Law, p536-543

Krishnamurthy, N.

disc. (of 3D Simulation of End-Plate Bolted Con by Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94, p3122-3136), ST June 96, p713-714

Evaluation of Bridge Strengthening Measures Using Forced Vibration Tests, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Frieder Seible and Gerald Pardoen, p845-852

Krishnan, R.

see Nerves, A. C., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p503-506

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see O'Holleran, Thomas P., (High Level Radioactive Waste Management, Technical Program Committee, 1996). p315-316

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Implementation of Structural Redundancy in Bridge Design A Probabilistic Approach, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Jamshid Mohammadi, p682-687

Lessons Learned from Multiphase Reconstruction Project, with Wei Lo and Ahmad Hadavi, CO Mar. 96, p44-54

Kroeger, Heidelore I.

Risk as a Sustainable Development Criteria, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Slobodan P. Simonovic, p1531-1536

Krogmeier, James

see Madanat, Samer, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p423-428

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see Hu, Guang-dou, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Anchoring a Landfill Expansion, with Michael S. Snow and Thomas A. Williamson, CE May 96, p64-66

Kroupa, Brandon

see Tiwari, Sanjay, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p1-7

Krstulovic-Opara, Neven
"SIMCON—A Novel High Performance Fiber-Mat Reinforced Cement Composite for Repair, Retrofit and New
Construction", (Materials for the New Millennium, Ken
P. Chong, ed., 1996), p288-297

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Kruer, Curtis R.

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Krug, Jim

Leadership Development, ME Nov./Dec. 96, p15-16 Promote People Skills, ME Sept./Oct. 96, pl

Final WIPP Compliance Criteria (40 CFR Part 194), (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Elizabeth Forinash, p224-225

Krumholz, Lee R.

see Clarkson, William W., (High Level Radioactive Waste Management, Technical Program Committee, 1996). p39-40

Kruse, Carl W.

see Kim, Byung R., EE June 96, p532-539

Krzysztofowicz, Roman

Probabilistic Flood Forecast-Warning System, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p231-232

Kuan, Tsun-Hou

see Tsoi, David, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2486-2491

Kubal, Michael T.

The Future of Engineered Quality, ME Sept./Oct. 96, p45-

Kucharska, L.

see Brandt, A. M., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p271-280

Kuchment, L. S.

Estimation of the Probable Maximum Rainfall and Snow-melt Floods Via Physically Based Model of River Runoff Generation, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1337

Kudo, Nobuaki

see Honjo, Yusuke, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p942-945

Kuehn, Jeff

see Patten, William Neff, P.E., (disc), ST Sept. 94, p2583-2601

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see Lunn, Stuart, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remedia-tion, Lakshmi N. Reddi, ed., 1996), p345-356

see Reitsma, Stanley, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p526-537

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see Gutknecht, D., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p718

see Helgeson, R. J., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p310-321

Kuhlmann, Joel

see Drotning, William, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p241-247

Context for Writing in Engineering Curriculum, with Karen Vaught-Alexander, El Oct. 94, p392-400 disc: Robert W. Day, El Jan. 96, p45 clo: El Jan. 96, p45

Experimental Measurement of Strain Gradient Effects in Granular Materials, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p881-885

Kuhn, Paul A.

disc. (of Procurement Issues, by Delon Hampton, ME Nov./Dec. 94, p45-49), ME Jan./Feb. 96, p58

Design of a Freeway Control System Based on Artificial In-telligence Methods for Travel Time Detection, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p439-443

ph. (d., 1996), p.39-443 Real-Time Traffic Control for Alternative Route Guidance Systems Based on the Dynamic Assignment Model, (Ap-plications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p563-567

Kuhnle, Roger A.

Closure to Discussion of: Incipient Motion of Sand-Gravel Sediment Mixtures, HY May 95, p448-450

see Chen, Q., EM Nov. 96, p1060-1068

Kulhawy, Fred H.

Engineering Judgment in the Evolution from Deterministic to Reliability-Based Foundation Design, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Kok Kwang Phoon, p29-48

Estimation of In-Situ Test Uncertainty, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Charles H. Trautmann, p269-

see McManus, Kevin J., GT Sept. 94, p1481-1497

see Phoon, Kok Kwang, (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p326-340

Kulicki, John M.

see Mertz, Dennis R., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1-8

see Wassef, Wagdy G., (Building an International Com nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p116-124

see Barneich, J., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1367-1382

Kulkarni, Ram B.

see Huntsman, Scott R., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p535-549

Dimensional Analysis of Bond Modulus in Fiber Pullout, ST July 96, p783-787

Kumar, Dipmani

Nonpoint Source Pollution Models, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Conrad D. Heatwole, p1705-1710

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Biological Phosphorus Removal: Effect of Low Tempera-ture, with Indu Mehrotra and T. Viraraghavan, CR June 96, p63-76

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Time Delayed Control of Classically Damped Structures, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with F. E. Udwadia, p751-755

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Damage Evaluation in Steel Box Columns by Cyclic Load-ing Tests, with Tsutomu Usami, ST June 96, p626-634 see Usami, Tsutomu, ST June 96, p635-642

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see Conte, Joel P., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p142-145

Kumar, Sree

Reservoir Sediment Management Practices of the Los An-geles County Department of Public Works, (North Amergeles County Department of Public Works, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Martin Moreno, p1651-1656
see Wang, Jun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p358-363

Community Involvement in Hazard Mitigation, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p282

see Singh, A. V., AS Apr. 96, p52-57

Kumaran, Susheela Andezhath

Beneficial Aspects of Flood and Rain in Countries Where the Drinking Water is Naturally Contaminated with Fluo-ride Where Fluorosis is a Major Public Health Problem, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2191

Kumaraswamy, Mohan M.

Systematizing Construction Project Evaluations, with Anto-ny Thorpe, ME Jan./Feb. 96, p34-39

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see Takayama, Makoto, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p310-321

Environmental Planning for Water Resources Development, Cuatro Cienegas Region, Coahuila, Mexico, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Dario Rodríguez-Bejarano, p1249-1254

Kunnath, Sashi K.

Experimental Investigation of Cumulative Seismic Damage in Concrete Bridge Piers, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Ashraf El-Bahy, William C. Stone and Andrew W. Taylor, p381-382

see Bracci, Joseph M., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p379-380

see Steputat, Christian C., (Building an International Con munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p837-844 see Wang, Jie, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p339-342

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see Kos'yan R., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p651-663

see Levitt, Raymond E., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p268-274

see Thomsen, Jan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p275-280

Kunze, Undine

CAD and Visualization in Architectural Design Education -A View from Germany, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p927-930

Kuo, A. Y.

Effect of Acceleration on Bottom Shear Stress in Tidal Es-tuaries, with J. Shen and J. M. Hamrick, WW Mar./Apr. 96, p75-83

see Shen, J., EE Nov. 96, p1031-1040

Kuo, Chiang Hai

see Hong, Andrew, EE Jan. 96, p58-62

Kuo, Chin Y.

Impacts of Sea Level Rise on Coastal Water Resources Management, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1822-1827

see Seybert, Thomas A., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2701-2706

Kuo, Ching-Ton

History of Coastal Engineering in Taiwan, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p500-512

Kuo, Chun-Yi

Uniformity Evaluation of Cohesionless Specimens Using Digital Image Analysis, with J. David Frost, GT May 96,

Kuo, C.-J.

Fatigue Reliability Analysis Based on Time Dependent First Passage, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with P. H. Wirsching, p466-469

Kuo, Jan-Tai

Risk Analysis of Joint Reservoir Operation in Central Tai-wan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Chang-Shian Chen and Yuan-Hsi Liao, p3158-3163 see Yu, Shaw L., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p4208-4213

see Awad, Heba, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2999-3004

Kuo, Shyh-Rong

see Yang, Yeong-Bin, (disc), EM Oct. 94, p2072-2101 see Yang, Yeong-Bin, (disc), EM Oct. 94, p2102-2125

Kuprenas, John A.

A Knowledge Based Construction Contractor Proposal Evaluation System, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Farzin Madjidi, p247-253

A Knowledge Based System for the Evaluation of Earthquake Damaged Structures, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with John Manios, p742-749

Total Quality Management Implementations and Results, with Carlos J. Soriano and Sanscho Ramhorst, SC May 96, p74-78

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see Hata, Kyoko, (Estuarine and Coastal Modeling, Mal-colm L. Spaulding and Ralph T. Cheng, 1996), p542-554

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Pipe-Soil Interaction Analysis of Field Tests of Buried PVC Pipe, with Balvant Rajani and Caizhao Zhan, IS Dec. 96, p119-120

Kurdziel, John

Designing Concrete Culverts to Resist Scour Damage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3942-3949

Kuroiwa, Julio

Peru's Program for Disaster Mitigation 1992-1995, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Dusan Zupka, p84-85

see Flerchinger, G. N., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p424-429

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see Collins, Patrick, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p200-205

Kuznetsov, Sergey Yu.

Influence of Short and Long Waves Coupling on Sand Suspending, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Nikolay V. Pykhov, p720-727

Kuzyk, G. W.

Controlled Drill & Blast Excavation at AECL's Underground Research Laboratory, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with D. P. Onagi and P. M. Thompson, p404-406

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see Kim, Jae Kwan, EM Sept. 96, p807-817

Kwan, A. K. H.

Shear Lag in Shear/Core Walls, ST Sept. 96, p1097-1104

see Wu, Y. S., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p73-75

Kwiecinski, Daniel A.

see Lindhult, Eric C., CE May 96, p49-51

Kwon, Sung-Hyun

Anaerobic Biodegradation of High Energetics in Digestion Sewage Sludge, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Frank J. Y. Shiu and Teh Fu Yen, p794-799

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see Thomsen, Jan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p275-280

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Anaerobic Degradation of Cornstarch in Wastewater in Two Upflow Reactors, with Herbert H. P. Fang, EE Jan. 96, p9-17

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Corrosion Control of Drinking Water Using Tray Aerators with Srinivas Chinthakuntla, EE July 96, p640-648

Substrate Consumption Kinetics in Anaerobic Biofilm Fluidized Bed Reactor, with Patricio Cascante, EE Mar. 96, p198-204

Leatsch, Edward M.

Natural Disaster Losses to Conventional Construction and their Mitigation (An Insurance Company Response to Catastrophic Losses Since Hurricane Hugo), (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Rose Geier Grant and Laird Macdonald, p778-785

Labadie, John W.

see Taher, Saud A., WR July/Aug. 96, p301-311

LaBelle, James C.

Developments in Sandwich Beam Theory and Practice, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1017-1026

Labieniec, Paula A.

Risk Variability Due to Uniform Soil Remediation Goals, with David A. Dzombak and Robert L. Siegrist, EE July 96, p612-621

SoilRisk: Risk Assessment Model for Organic Contami-nants in Soil, with David A. Dzombak and Robert L. Siegrist, EE May 96, p388-398 see Peters, Catherine A., (Non-Aqueous Phase Liquids

(NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p681-692

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Lacasse, Suzanne

Uncertainties in Characterising Soil Properties, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Farrokh Nadim, p49-

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see Dallaire, Éric, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p555-563

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see Drabkin, S., GT Nov. 96, p920-928

Lacy, H., P.E.

see Drabkin, S., P.E., CE Nov. 96, p30

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Crude Oil Pipe Line Crossing Western Panama, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Brant Brown, p356-364

Lacy, Jessica R.
Suspended-Solids Flux at a Shallow-Water Site in South San Francisco Bay, California, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with David H. Schoellhamer and Jon R. Burau, p3357-3362

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A Strength Sensitivity Index for Assessing Climate Warming Effects on Permafrost, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p35-45

see Fortier, Richard, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p459-470

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Significance of Particle Crushing in Granular Materials, with Jerry A. Yamamuro and Paul A. Bopp, GT Apr. 96, p309-316

ndrained Sand Behavior in Axisymmetric Tests at High Pressures, with Jerry A. Yamamuro, GT Feb. 96, p120-Un

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see Lindbergh, Charles, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p317-318

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Pilot Testing of a Zero-Discharge Treatment Process, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Paul R. Stuart and Ronald Zaloum, p99-104

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see Laroche, Anne-Marie, EE July 96, p622-630

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Design of Guide Banks for Bridge Abutment Protection, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with E. V. Richardson and L. W. Zevenbergen, p4188-4197

Training for Bridge Inspectors in Stream Stability and Scour, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with E. V. Richardson, p499-505

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see Christiansson, Per, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p21-27

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see Whitman, Robert V., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p113-114

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see Yin, S. C. L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1911-1917

Modeling Unsteady Open-Channel Flows Having Longitu-dinally Varied Fluid Density, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Tsan-Wen Wang, p1905-1910

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Lai, Leon L-Y

Detecting Damage in Highway Bridges from Vehicle Induced Girder Strains, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1122-1125

Fatigue Cracks at Stringer-Floorbeam Connections, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p483-490

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Lake, William

see Mobasheran, Amir S., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p330-332

Lakmazaheri, Sivand

Constraint Based Reasoning Using Grobner Bases, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p559-564

A Review and Assessment of the Journal of Computing in Civil Engineering, with William Rasdorf, CP Apr. 96, p95-96

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Lall, Upmanu

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Lally, Michael J.

Considerations for Realistic Lunar Excavation, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Scott P. Mackey and Laurie R. Gaskins, p896-902

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see Saquib, Najmus, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3515-3520

Laman, Jeffrey A.

Fatigue-Load Models for Girder Bridges, with Andrzej S.

Nowak, ST July 96, p726-733 Probabilistic Fatigue Models for Bridge Evaluation, (*Prob* abilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p286-289

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Lambert, James H.

The Impact of Multiple Failure Modes in Risk Analysis for Civil Infrastructure Management, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with Lori R. Johnson and Yacov Y. Haimes, p80-105

see Tulsiani, Vijay, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p142-

Lampo, Richard G. Lampo, Richard G.
Design Considerations for the Use of Plastic Lumber in Structural Applications, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Thomas J. Nosker and Richard W. Renfree, p1492-1500
Field Performance of FRP Composite Prestressing Cables, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with David E. Hoy and Robert J. Odello, p400-408

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Improving the Performance of Epoxy-Coated Rebar, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Dieter Schemberger, p1209-1218

see Davis, Gary A., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p628-632

Lancien, Daniel

Experimentation of the ERTMS System on the Italian, German and French Railways, (Applications of Advanced Technologies in Transportation Engineering, Yorgos, Stephanedes, ed. and Francesco Filippi, ed., 1996), with Florian Kollmannsberger and Paolo Ripamonti, p30-38

Lander, April

The Management and Policies of the BECC, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1813-1818

Landers, Mark N.

Scour Processes Observed in Field Data, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with David S. Mueller, p3052-3061

see Mueller, David S., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4154-4163

Landis, David W.
Telling Florida's Water Story, with Blair K. Hanuschak,
CE Feb. 96, p40-43

Landis, Eric N.

Landis, Eric N.
Observations of Internal Crack Growth in Mortar Using X-Ray Microtomography, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Edwin N. Nagy, Denis T. Keane and Surendra P. Shah, p1330-1336
Observations of Internal Fracture in Mortar using X-Ray Microtomography, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Edwin N. Nagy, Denis T. Keane and Nhan Huynh, p637-640
See Selleck, Scott F. (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p604-607

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see Ouyang, C., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p939-948

see Salas, J. D., (North American Water and Environ Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3387-3392

ane, William L.

Expected Moments Alogrithms for Flood Frequency Analysis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Timothy A. Cohn, p2185-2190

Laney, David F.

Management of Contaminated Groundwater Using Natural Attenuation, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2011-2020

Structural Aerodynamics (Available only in Focus on Structures Special Edition), with Hugh Muirhead, CE Jan. 96, p3A-7A

Lang, Derek E.

Sea Launch: Commercial Launch Competitiveness, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Darrel L. Choate and Marcus L. Nance, p419-425

Effect of Load Models and Limited Data on Load and Resistance Factors for Fatigue Design, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Steven R. Winterstein, p58-61

ange, D. A.

Behavior of Cementitious Composites with Randomly Dispersed Microfibers, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with C. Ouyang and S. P. Shah, p281-287

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Langhorne, Pat Guest Editorial, CR Mar. 96, p1-5

Lannom, Donald A.

Transportation of Alaska North Slope Natural Gas to Mar-ket, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), with David O. Ogbe, Akanni S. Lawal and F. Lawrence Bennett, p226-237

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see Ardillon, Emmanuel, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p692-695

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see Vargas, X., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1550-1551

see Halfawy, M. R., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p920-926

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see Petersen, Ole, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p906-909

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Numerical Simulation of Field Air Sparging Operations, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface En-vironment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Ronald W. Falta, p551-562

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The Great USA flood of 1993, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2

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Model of Beach Profile Change Under Random Waves, WW July/Aug. 96, p172-181

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Element-Embedded Localization Band Based on Regularized Displacement Discontinuity, with Kenneth Runes-son, EM May 96, p402-411

Lashkari, Ben

Residential Vulnerability Functions and Their Variability Based on Claims Data, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Ronald Wardrop, p307-308

Latona, M. C.

Environmental Impacts of Autoclaved Cellular Concrete, (Regineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), with R. D. Neufeld, L. E. Vallejo, W. Hu and C. Kelly, p57-69

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Evaluation and Upgrade of Major Transmission Lines Crossing Active Faults, (Pipeline Crossings 1996, Law-rence F. Catalano, ed., 1996), with David D. Lee, David L. Pratt and Marilyn L. Miller, p418-425

see Engel, Peter, (disc), HY Nov. 94, p1327-1336 see Engel, Peter, (disc), HY Dec. 94, p1385-1400

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Random Fields and Airplane Loads, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p684-687

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Analysis of Alternative Governance Models for Space Business Parks, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p177-

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disc. (of Dynamic Response Analysis of Slab-Type Bridges, by Jagmohan L. Humar and Ahmed H. Kashif, ST Jan. 95, p48-62) with R. E. Rossi, ST Apr. 96, p460-461

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disc. (of Performance of Multiple Mass Dampers Under Random Loading, by Ahsan Kareem and Samuel Kline, ST Feb. 95, p348-361), ST Aug. 96, p981-982

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Two-dimensional Sheetflow Modeling for Wetland Resto-ration, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Ananta K. Nath, p263-267

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disc. (of Bed Configuration and Hydraulic Resistance in Al-luvial-Channel Flows, by Fazle Karim, HY Jan. 95, p15-25), HY May 96, p287

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BASINS—a GIS-linked Watershed Analysis and Modeling Tool, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Marjorie C. Coombs and Marilyn Fonseca, p3629-3632

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1997), p123-124

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see Anagnos, Thalia, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p249-250

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Risk in Geotechnical Engineering for Embankment Dams, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), with Michael P. Forrest, p550-562

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see Rao, Achanta Ramakrishna, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p800-805

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see Hornet, P., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p756-759

Leadbetter, M. R.

Measures of Exceedance by Random Fields for Ocean Stress and Environmental Application, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Holger Rootzén, p258-261

Leaf, Robert T.

Annual Delivery Decisions in the Simulation of the California State Water Project and Federal Central Valley Project using DWRSIM, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Sushil K. Arora, p812-817

Asphalt Update, with R. Gary Hicks and Carl L. Mon-ismith, CE Apr. 96, p58-61

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see Clause, Dorinda L., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p762-775

Leamon, Toby D., P.E.

Creep Test Results Confirmed, CE Sept. 96, p30

Subharmonic Edge Waves. Stability Analysis, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p281-292

see Tidwell, Mike, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4119-4124

see Yuan, Weibo, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1099-1104

Ledbetter, R. H.

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San Francisco International Airport Light Rail System, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), with Gene Bordegaray, p106-114

Lee, Brian E.

Wind Engineering Co-operation: A Perspective of Europe and of China, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1069-1074

A Windstorm Damage Model for the Identification of In-surance and Reinsurance Risk, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with David R. Whiting, p197-198

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Watershed Modeling and Flood Routing for Safety Assess-ment of an Existing Dam, WR Sept./Oct. 96, p334-341

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Numerical Model for On-Offshore Sediment Transport with Moving Boundaries, with Moo-Hyun Kim and Billy L. Edge, WW Mar/Apr. 96, p84-92

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see Gugino, Anthony, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p245-253

see Sportiello, Michael G., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p378-384

Lee, Christopher (DM)²: A Modular Mobile Manipulator, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Yangsheng Xu, p107-113

see Falta, Ronald W., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p257-268

see Wright, Charles, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Rei diation, Lakshmi N. Reddi, ed., 1996), p151-162

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Assessing Water Quality Impacts of Stormwater Runoff, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Anne Jones-Lee, p3103-3108

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Lee, Gordon K.

The International Walking Machine Decathlon: A Design Competition to Enhance Undergraduate Engineering Education, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p296-302

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A Uniaxial Constitutive Model Accounting for Viscoelasticity and Damage Evolution under Cyclic Loading, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Y. Richard Kim, p693-696

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Dynamic Stability of Conducting Beam-Plates in Transverse Magnetic Fields, EM Feb. 96, p89-94

Lee, James Phillip

South Florida Water Management District: Reconstructing the Everglades Ecosystem, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1190-1196

A Unified Viscoplastic Model for the Inelastic Behavior of Ice, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), with Michel Aubertin, p828-836

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Electrical Tagging of Fiber Reinforced Cement Composites, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Gordon Batson, p887-896

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see Atkins, Joel E., (High Level Radioactive Waste Management, Technical Program Committee, 1996),

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Release Rates of Radionuclides through a Porous Material-Filled Borehole in a Radioactive Waste Repository, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Heui-Joo Choi, p279-281

Nearshore Hydrodynamic and Water Quality Modeling for Water Intake Evaluation and Design, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Bing Shen and Chung Shyan Wu, p2456-2461

A Parametric Study of Strength of Tubular Multiplanar KK-Joints, with S. R. Wilmshurst, ST Aug. 96, p893-904

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A Screening Level Model for Estimation of Vadose Zor Leaching and Saturated Zone Mixing: VLEACHSM, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1736-1741

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Studies in Guidance, Navigation and Control for an Articulated-Body Mars Rover Testbed, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Gordon K. Lee, p157-163

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Environmental Policy Making in Today's Political Environ-ment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2805-2809

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Lee, William W.-L.

Review of the Performance Assessment in the WIPP Draft Compliance Application, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p228-230

Whither Nuclear Waste Disposal—A 50th Anniversary View, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1592-1596

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Application of Artificial Neural Network to Guideway Demand Modeling, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Federico Frigerio, p214-219

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Scientific Visualization Techniques for Wave Transforma-tion Models, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Wayne W. Tanner, p704-710

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Area-average Wind Pressures on a Low-rise Building, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Jack E. Cermak, p1037-1044

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Reliability Analysis in the Rehabilitation of Corps Structures with Time-Dependent Needs, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p134-141

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Modeling Groundwater Response to a Perimeter Flood, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Michel Genoud, p748-752

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see Polasik, Stanley D., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3109-3114

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see Bouzar, Salah, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p124-128

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see Walch, Marc P., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1777-1782

Expedition Applications to Long Duration Space Missions, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Victor S. Koscheyev, p997-1001

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see Schwartz, Milton, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p349-354

Leonards, G. A.

Defects in Soft Clays: A Challenge to Site Characterization for Stability Analysis, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with R. J. Deschamps, p1347-1366

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ogies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p19-23 see Marqués, Antonio, (Applications of Advanced Technol-

Compressibility of Clays: Fundamental and Practical Aspects, GT July 96, p534-543

Leroneil, Serge

Importance of Strain Rate and Temperature Effects in Geo-technical Engineering, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), with Maria Esther Soares Marques, p1-60

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Strain Rate and Structuring Effects on the Compressibility
of a Young Clay, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and
Victor N. Kaliakin, ed., 1996), with Didier Perret and
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Some Design Aspects, with Ora Leshchinsky, Hoe I. Ling and Paul A. Gilbert, GT Aug. 96, p682-690

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see Wood, Andrew W., (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p19-37

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see Finnie, John, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p301-305

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Design Criteria for Pseudoductile Fiber-Reinforced Com-posites, EM Jan. 96, pl0-18 Micromechanics Based Design of FRCC Components, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Y. Philip Geng, p419-425 Micromechanics Based Design of Optical Fiber Crack Sen-sor, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Neill Elvin, p236-239

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Path-Storing Equilibration Algorithms for Several Traffic Assignment Models, (Applications of Advanced Technol-ogies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p633-638

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agement, Technical Program Committee, 1996), p170-171 see Certes, Catherine, (High Level Radioactive Waste Man

Lever, J. H.

A New, Low-Cost Ice Control Structure. Part 1: Concept New, Low-Cost Ice Control structure. Fail 1: Concept Development, (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with G. Gooch and A. Tuthill, p617-628

A New, Low-Cost Ice Control Structure. Part 2: Construction and Performance, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Impera-tive for the 21st Century, Robert F. Carlson, ed., 1996), with G. Gooch and C. Clark, p629-639

see Hopkins, Mark A., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p582-593

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Balancing on the Tides, with Joseph Klein, P.E., CE Oct. 96, p48-51

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The Virtual Design Team (VDT): Concurrent Design of Facility Products, Processes and Organizations, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), with Tore R. Christiansen, Geoff Cohen, Yan Jin and John C. Kunz, p268-274

see Jin, Yan, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p281-287

see Jin, Yan, (Computing in Civil Engineering, Jorge Vanigas, ed. and Paul Chinowsky, ed., 1996), p642-648

see Thomsen, Jan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p275-280

Levorsen, Mark K.

Deciphering LNAPL Migration Pathways in a Heterogeneous Hydrogeologic Setting, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Christine Dreier Bynum, p836-847

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Dynamic Stiffness Analysis of Lattice Structure, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Moshe Eisenberger, p526-533

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Conjunctive Water Use Transforms a California Desert, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2672-2678

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see Gajewski, Leonard, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p891-902

see Prinos, P., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582

Lewis A. W.
Flow Over Vortex Ripples: Models and Experiments, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with E. Hitching, G. Perrier, E. Asp Hansen, H. Earnshaw, K. Eidsvik, C. Greated, M. Sumer and A. Temperville, p686-697

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An Extended Relaxation Technique for Unsteady Flows in Networks, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with D. L. Fread and Ming Jin, p195-200

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see Shulman, Igor, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p268-282

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see Fread, D. L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3222-327

see Barnett, Ernest L., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3586-3591

Lewis, Kristin C.

see Perrin, Sallye E., (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p63-69

Lewis, Roy R., III

Wetland Mitgation Evaluation Ten Years After Florida Keys Bridge Replacement, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Curis R. Kruer, Sally F. Treat and Stephanie M. Morris, p759-763

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see Wittler, R. J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p340-345

see Wittler, R. J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3829-3834

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Structural Safety for Fire Conditions, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with R. W. Fitzgerald, p352-356

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see Chen, Lun, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p724-735

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see Bella, David A., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2613-2618

see Foschi, Ricardo O., (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p882-885

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Sprinkler Performance as Function of Nozzle Geometrical Parameters, IR July/Aug. 96, p244-247

Analysis of Proliferation Risk for Taiwan's Spent Fuels, (High Level Radioactive Wasse Management, Technical Program Committee, 1996), p489-491

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Bending Instability of Composite Tubes, AS Apr. 96, p58-

Design and Construction for Asphalt Pavements in Perma-frost Areas: Case Study of Qinghai-Tibet Highway, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), with Ralph Haas, p866-877

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Measuring Flutter Derivatives for Bridge Sectional Models in Water Channel, EM Jan. 95, p90-101 disc: Nicholas P. Jones and Robert H. Scanlan, EM

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Stability of Bounded-Noise Excited System, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p128-131

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Ll, Ruh-Ming Floodplain analysis of the Lower Santa Margarita River in Camp Pendleton Marine Air Base, California, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Anna Lantin and Hank Fehlman, p1870-1874 see Chen, Yen-Hsu, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996, p530-535 see Crum, Jim, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed. 1996, p1796-1800

la, ed., 1996), p1796-1800

see Fehlman, Henry M., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1033-1038

Water Line (Morth American Water and Environment Congress)

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Editorial, MT Nov. 96, p183 see Matsumoto, Takashi, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p426-435 see Naaman, Antoine E., (Materials for the New Millenni-

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Li, Yitian

Sediment Deposition in the Navigation Approach Channel of Three Gorges Project, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Jianheng Xie, p3852-3855

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Extraordinary Flood Disaster in Tai Lake Basin of China in 1991, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p48-54

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see Auchard, B., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4004-4009

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Anchorage Behavior of Shaft Anchors in Alluvial Soil, with C. D. Ou and S. C. Shu, GT July 96, p526-533

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Just One More Boring, and We'll Know for Sure!, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with David L. Druss, Thom L. Neff and Brian R. Brenner, p119-133

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An Experimental Study on the Use of Constructed Wet-lands for Stormwater Management, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Shaw L. Yu and Stephen J. Long, p2462-2467

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Waves on a 1:100 Slope: Experiments and Numerical Models, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with M. Petti, M. Drago and M. Sclavo, p355-365

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Lichtenstein, Journal of Meliding an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p734-741
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and T. C. Su, 1996), p955-958

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Fire Resistance of Steel Columns Filled with Bar-Reinforced Concrete, with V. K. R. Kodur, ST Jan. 96,

Structural Fire Resistance - Past, Present and Future, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with V. K. R. Kodur, p345-351

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Wellhead Protection: Local and Community Efforts, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p966-969

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see Johnson, Ron, (Cold Regions Engineering: The Cold Regions Intrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p82-93

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An Introduction to Taipei Suburban Sewage Collection and Treatment Systems, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Der-Liang Sheen, p3170-3175

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Simulation of Interaction between Canal Regulation and Groundwater, (North American Water and Environment Congress & Destructive Water, Chenchayya Buthala, ed., 1996), with Hwai-Ping Cheng, p1587-1591

Probabilistic Analysis of Complex Nonlinear Motions Under Combined Periodic and Random Excitations, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Solomon C. S. Yim, p2-5

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Lin, Jih-Gaw

Lan, Jin-t-saw Use of NaOH to Control pH for Solubilization of Waste Activated Sludge, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with Cheng-Nan Chang and Shih-Ling Hsu, p2468-2473

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see Chang, Ching-Yuan, EE Apr. 96, p299-305

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see Frangopol, Dan M., (Building an International Com nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p598-605

An Interactive Planning Environment for Critical Opera-tions, with Carl T. Haas, CO Sept. 96, p212-222 Multiple Heavy Lifts Optimization, with Carl T. Haas, CO Dec. 96, p354-362

Lin. M. S.

see Liu, S. W., (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p616-619

Lin, Min-Der

see McKinney, Daene C., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p842-847

see McKinney, Daene C., WR Mar/Apr. 96, p128-136 see Watkins, D. W., WR Mar/Apr. 96, p88-96

Lin, Pin-Sien

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Lin, Sum

see Davis, Thomas G., (disc), SU Feb. 95, p3-12

Lunar Concrete Made with the Dry-Mix/Steam-Injection Method, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Liang Tseng and Sam Chou, p592-599

see Horiguchi, T., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

p621-629

see Lin, Wei-Ming, (Engineering, Construction, and Oper-ations in Space, Stewart W. Johnson, ed., 1996), p585-591

see Powers-Couche, L. J., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p608-613

Lin, T. Y.

Singapore Showcase, with Tan See Chee, P.E., CE Nov. 96, p61-63

Lin, Tsair-Fuh

Transport and Sorption of Organic Gases in Activated Car-bon, with John C. Little and William W. Nazaroff, EE Mar. 96, p169-175

Transport and Sorption of Water Vapor in Activated Car-bon, with William W. Nazaroff, EE Mar. 96, p176-182

Lin, W.

A Progress Report on the Large Block Test, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with D. Wilder, J. Blink, P. Berge, S. Blair, V. Brugman, K. Lee, M. Owens, C. Radewan, Ramirez, A., N. Rector, J. Roberts, D. Ruddle and J. Wagoner, p122-124

Lin, Wei-Ming

Heat of Hydration of Pure Cement Compounds with Steam, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with T. D. Lin, Chao-Lung Hwang and Yaw-Nan Peng, p585-591

Lin, Wunan

Lin, wunan International High-Level Radioactive Waste Repositories, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p492-493

Relative Humidity in the Near-Field Environment, (High Level Radioactive Waste Management, Technical Pro-gram Committee, 1996), with Jeffery J. Roberts and David Ruddle, p128-129

see Roberts, Jeffery J., (High Level Radioactive Waste Management, Technical Program Committee, 1996),

see Nakagawa, Masami, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p386-389

Lin, Y. K.

Engineering Mechanics, 2 vols., with T. C. Su, 1996, 0-7844-0172-1, 1240pp.

Some Recent Advances in Stochastic Structural Dynamics, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996),

see Cai, G. Q., (Probabilistic Mechanics & Structural Reli-ability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p732-735

Lin, Yiching

Tracing Initiation and Propagation of Cracks in Composite Slabs, with J. Y. Richard Yen and Chen-Fung Chen, ST July 96, p756-761

Lin, Zihui

Lin, Zinui

Evaluation of System Constant Volume Control, (North
American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with David
H. Manz, p4353-4358

Evaluation of System Downstream Control, (North American Water and Environment Congress & Destructive
Water, Chenchayya Bathala, ed., 1996), with David H.
Manz, p1893-1898

System Downstream Control for On-Demand Irrigation Canals, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with David H. Manz, p824-829

Linarez-Royce, Nancy

see Plansky, Lee, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p341-348

Lincoln, William

Simulation and Visualization of Martian Rover, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p143-149

Lindbergh, Charles Natural Hazards Mitigation in South Carolina, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Maurice R. Harlan, p86-87

Structural Evaluation of Existing Buildings for Seismic and Wind Loads, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Maurice R. Harlan and James L. Lafrenz, p317-318

Lindell, Michael K.

Earthquake-Initiated Hazmat Releases: An Assessment, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Ronald W. Perry, p237-238

Linder, John

see Lynch, Gail, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2039-2043

Lindgren, Georg

see Rychlik, Igor, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p46-49

Lindhult, Eric C.

Cleaning Up Clay, with Daniel A. Kwiecinski, CE May 96, p49-51

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Linuquist, sixtaei Impact of Reservoir Flood-Control Operation on Interior-drainage Facilities, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with David Ford and Pete Hall, p.2939-

Line, Philip

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see Douglas, Bradford K., (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p798-803

Liner, Christopher L. Application of Ground-Penetrating Radar to a Site Investigation Involving Shallow Faults, (Case Histories of Geo-physics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), with Jeffrey L. Liner, p101-111

Liner, Jeffrey L.

see Liner, Christopher L., (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p101-

Ling, Chi-Hai see Chen, Cheng-lung, EM May 96, p469-480

Ling, Hoe I.

Effects of Stress Ratio on Behavior of Quasi-Preconsolidated Compacted Clay under Plane Strain Compression, (Measuring and Modeling Time Depend-ent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), with Fumio Tatsuoka, p151-165 see Leshchinsky, Dov, GT Aug. 96, p682-690

Lingras, Pawan

Average and Peak Traffic Volumes: Neural Nets, Regression, Factor Approaches, with Mario Adamo, CP Oct. 96, p300-306

Traffic Engineering Recurrent Spatial Knowledge Base: Design and Implementation, CP Jan. 96, p50-59

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Filling of Pipelines with Undulating Elevation Profiles,
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The Effects of Construction Joint in Mass Concrete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p193-202

Liou, F.

see Cheng, F. Y., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p322-338

Liou, Gin-Show

Structural Analysis Model for Mat Foundations, with S. C. Lai, ST Sept. 96, p1114-1117

Lippmann, T. C.

Wave Stress and Longshore Current on Barred Profiles, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with E. B. Thornton and A. J. H. M. Reniers, p401-412
see Reniers, A. J. H. M., (Coastal Dynamics '95, William
R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),
p413-424

Liston, Charles R. see Frizell, K. Warren, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p316-321

Liston, G. E.

see Jeffries, M. O., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996),

Litke, S. Scot Differing Site Conditions—Industry Consensus Opposes Ruling, ME July/Aug. 96, p14-15

see Marqués, Antonio, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), Little, John C.

see Lin, Tsair-Fuh, EE Mar. 96, p169-175

Interference Assemblies, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with G. R. Frederick and B. K. Park, p240-241

see Smith, Graham M., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p244-246

Littleboy, A. K.

Coupled Modelling of Groundwater Flow and Hydrochem-istry in the Sellafield Area, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with R. Metcaffe and D. J. Noy, p135-140

Littles, Jerrol W., Jr.

Ultrasonic Characterization of FRP Composites for Bridge Applications, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Laurence J. Jacobs and Abdul-Hamid Zureick, p959-962

Litwak, Philip

see Borovetz, Harvey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p35

see Wang, Xinwei, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p382-385

Liu, Changhong

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see Huang, Chihpin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2450-2455

Liu. Chine Shi

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New Approach to Roadway Performance Indices, with Robert Herman, TE Sept./Oct. 96, p329-336

see Fenske, T. E., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p407-415

see Fenske, T. E., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p435-443

see Fenske, T. E., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p444-452

see Fenske, T. E., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p472-481

Liu, David

see Rashedi, Novin, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3993-3997

see Youk, G. U., (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p248-254

Liu, Henry

see Cheng, Chih-Chiang, HY Feb. 96, p90-96

see Davis, Peter N., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p254-264

see Jaafari, Maher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997). p347-348

see Lun, Cliff K. K., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p390-393

Liu, I-Chung see Kong, Chin-Hwa, EM Feb. 95, p198-202

Liu, Jinglian J.

A Hydrodynamic FVM Algorithm on Arbitrary Grids, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Billy H. Johnson, Bharat K. Soni and Victor L. Zitta, p3668-3673

Modeling Groundwater Contaminant by Unstructured FVM, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Bharat K. Soni and Victor L. Zitta, p2212-

see Misra, Anil, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p348-355

Liu, Junbiao

Regeneration of Adsorbents Using Heterogeneous Photoca-talytic Oxidation, with John C. Crittenden, David W. Hand and David L. Perram, EE Aug. 96, p707-713

Tide-Induced Ground-Water Flow in Deep Confined Aqui-fer, HY Feb. 96, p104-110

Liu, Ko-Hui

Modeling Ground-Water Remediation at an Oil Refinery. (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Greg McNulty, p824-835

Global Project Documentation and Communications Using HTML on the World Wide Web, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with A. L. Stumpf and S. Y. Chin, p15-20

ACPSS-Animated Construction Process Simulation System, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p397-403

see Chin, Sangyoon, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p786-792

see Pocock, James B., CO June 96, p165-176

see Stumpf, Annette L., CP July 96, p204-212

see To, C. W. S., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p824-827

Intelligent Bridge Monitoring System, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), with Yun-Fu Luo and Shyh-Jang Sun, p608-611

Liu, Pen-Chi

see Madanat, Samer M., (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p286-291

Liu, Philip L.-F.

see Kakuno, Shohachi, WW May/June 96, p147-149

DRACULA - Microscopic, Day-to-Day Dynamic Model-ling of Traffic Assignment and Simulation, (Applications of Advanced Technologies in Transportation Engineer-ing, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Dirck Van Vliet and David Watling,

Liu. S. C.

see Chong, Ken P., IS June 96, p41-44

Surface Response of a Cracked Layered Half-space Subjected to an Antiplane Impact, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with J. C. Sung and M. S. Lin, p616-619

Liu, Shiping

Analysis of Bivariate Censored Low Flows, with Jye-Chyi Lu and Cemal Unal, HY Feb. 96, p97-103

see Bulleit, William M., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p786-791

see Hahn, G. D., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p188-191

Liu, Xiaojian

Minimum-Time Design of a Slewing Flexible Beam, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with David W. Begg, p1205-

see Begg, David W., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1237-1244

Liu, Xiaoping

Reliability-Based Optimization of Composite Structures, M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Sankaran Mahadevan, p122-125

Lloyd, Joan

Retaining Generation X Employees, ME Nov./Dec. 96, p5-

To Be Successful, ME Nov./Dec. 96, p7-8

Lloyd, Simon T.

see Quinn, Paul A., (Coastal Dynamics '95, William R. Dally, ed p293-304 ed. and Ryszard B. Zeidler, ed., 1996),

Lo, Chien-kuo

The Three Gorges Project: Relocation of Reservoir Population, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3841-3846

Lo. Irene M.-C.

Waste Using Organic-Clay Complex, EE Sept. 96, p850-

see Shang, J. Q., GT Mar. 95, p243-248

Lo Presti, Diego C. F.

Rate and Creep Effect on the Stiffness of Soils, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), with Michele Jamiolkowski, Oronzo Pallara and Antonio Cavallaro, p166-180

Lo, Shang-Lien

see Yu, Shaw L., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p4208-4213

Lo, Wei

see Krizek, Raymond J., CO Mar. 96, p44-54

see Leroueil, Serge, (Measuring and Modeling Time De-pendent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p137-150

Locher, Frederick A.

Getting Wet with Metric, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3685-3689

Locke, Carl E., Jr.

see Darwin, David, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p482-491

Locke, William R.

disc. (of Alluvial Fan: Proposed New Process-Oriented Definitions for Arid Southwest, by Richard H. French, Jonathan E. Fuller and Steve Waters, WR Sept./Oct. 93, p588-598), WR May/June 96, p229-230

Lockhart, Charles W.

Worth the Risk?, with William J. Roberds, CE Apr. 96, p62-64

Lockwood, James D., P.E.

Alluring Approach, with John R. Hillman, P.E., CE Nov. 96, p68-71

Loder, J. W.

colm L. Spaulding and Ralph T. Cheng, 1996), p454-465 see Hannah, C. G., (Estuarine and Coastal Modeling, Mal-

see Webster, Matthew T., EE Aug. 96, p714-721 see Webster, Matthew T., EE Sept. 96, p840-849 Löfman, Jari

Groundwater Flow Modelling at the Olkiluoto Site, Finland, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p141-144

Logan, B. E.

disc. (of Oxygen Utilization of Trickling Filter Biofilms, by Steven W. Hinton and H. David Stensel, EE Sept/Oct. 94, p1284-1297), EE Apr. 96, p333-336

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Logan, Bruce E.

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Design Heuristic for Globally Minimum Cost Water-Distribution Systems, with J. J. Greene and T. J. Ahn, WR Mar./Apr. 95, p182-192 disc: Thomas M. Walski, WR July/Aug. 96, p313-

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la, ed., 1996), p2522-2527 Logcher, Robert

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UV Disinfection of Wastewater: Probabilistic Approach to Design, with Jeannie L. Darby and George Tchobano-glous, EE Dec. 96, p1078-1084

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see Molina, Martin, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p320-324

see Ritchie, Stephen G., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p276-280

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Long, Stephen J.

see Liao, Shih-long, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2462-2467

Longinow, Anatol

Protecting Buildings against Vehicle Bomb Attacks, with Kim R. Mniszewski, SC Feb. 96, p51-54

Wind-Resistant Tie-Downs for Mobile Homes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Donald F. Meinheit and John E. Pearson, p966-973 see Pearson, John E., SC Nov. 96, p126-140

Longirow, A.

After Oklahoma City, Structural Redundancy Should Be Required, CE Feb. 96, p28,31

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see Camus, R., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p418-422

see Einziger, Robert, (High Level Radioactive Waste Management, Technical Program Committee, 1996), agement, p432-434

Loomis, Gary W. Recasting a Foundry (Available only in Structures Special Issue), with Dave P. Knepper, CE May 96, p14A-16A

Interferometric Imaging for Deep Space Asset Monitoring, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p214-223

Flood Control in the Brazilian Electric System Reservoirs at Parana River Basin, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with V. F. Rocha, p1979

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López, Arturo

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On the Relationship between Net-Momentum Fluxes and Wall-Normal Velocity Fluctuations, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), with Marcelo

García, p661-664

Synchronized Measurements of Bed-Shear Stress and Flow Velocity in Open Channels with Simulated Vegetation, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Marcelo García, p3651-3655
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Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3824-3828

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see Godoy, Luis A., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p135-136

Lopez-Anido, Roberto

Damage Mechanics Model for Evaluation of Bridge Deterioration, (Probabilistic Mechanics & Structural Reliabiliry, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Hota V. S. GangaRao and Raimondo Luciano, p458-461

Local Buckling Experiments on Pultruded Composite Local Buckling Experiments on Pultruded Composite Beams, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Rachid Bendidi, Hota V. S. GangaRao and Mohammed Al-Megdad, p914-923 Warping Solution for Shear Lag in Thin-Walled Orthotropic Composite Beams, with Hota V. S. GangaRao, EM May 96, p449-457

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On the Response of Transmission Structures to High
Winds, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Alan Garnett Davenport, p272-273

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Losada, M. A.

History of Coastal Engineering in Spain, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), with R. Medina, C. Vidal and I. J. Losada, p465-499

Loucks, Eric D.

Probability Based Estimation of Expected Annual Benefits,
(North American Water and Environment Congress &
Destructive Water, Chenchayya Bathala, ed., 1996), p298-303

see Morgan, Michael C., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p146-151

Lough, Dale W.
A Computerized Decision Support System Applied to
NAPL Cleanup, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Wade E. Hathhorn, p693-704

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Design-Build Limitations of Liability Are Successful, win William L. Cregger, CE Ed an. 96, p35

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clo: GT Apr. 96, p318 Practical Probabilistic Approach Using Spreadsheet, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1284-1302

Low, Chin-wah

see Wu, Tien H., GT June 96, p445-453

Low, Stanley S.
see Zayas, Victor A., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), pl 205-1212

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see Hughes, R. Cris, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997). p365-366

Lowe, Philip O.

Flood Control Studies for Arizona Communities, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Sam Arrowood, p1870-1874 Los Angeles River as a Water Source for a Freshwater Reservoit, (North American Water and Environment Con gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Novin Rashedi, p3987-3992

Lu, Chien-Hong

see Yau, Nie-Jia, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p600-606

Lu, J. John

Vehicle Traction Performance Comparison for Alaska Winter Seasons, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p664-675

Lu, Jye-Chyi see Liu, Shiping, HY Feb. 96, p97-103

Li, No. Q. The Research of the Relationship Between Earthquakes and the 30 Years of Intensive Geological Surveys in Xin Feng River, China, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p388

see Shen, Hung Tao, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996),

Lu. W.

see Dagher, H. J., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1458-1468

Lubarda, Vlado A.

Brittle-Ductile Transition in Porous Rocks by Cap Model, with Sreten Mastilovic and Jaroslaw Knap, EM July 96, p633-642

The Sawmill Creek Watershed Restoration Project, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2873-2878

Lucas, Paul F.

see Comfort, David E., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p139-146

Lucas, Warren K.

Constraint-Based Reasoning for Optimal Concrete Desig and Detailing, (Analysis and Computation, Franklin Cheng, ed., 1996), with W. M. Kim Roddis, p154-165

see Roddis, W. M. Kim, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p91-96

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Thin-Walled Prestressed Concrete Members under Combined Loading, with J. C. Reimundin and R. Danesi, ST Mar. 96, p291-297

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see Lopez-Anido, Roberto, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p458-461

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see Sawyer, Bernard, EE May 96, p368-373

Lueprasert, K.

see Deshpande, J. M., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

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see Kaczinski, Mark R., (Building an International Com munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p329-336

see Sheng, Grant, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p95-97

see Brocoum, Stephan J., (High Level Radioactive Waste Management, Technical Program Committee, 1996).

Lukas, Robert G. see Drumright, Elliott E., GT July 96, p598-599

Lukkunaprasit, Panitan

Collapse of Transmission Line Towers in Typhoon Gay, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p351-352

Lun, Cliff K. K.

Centrifugal, Gravity and Side-wall Effects in Annular Shear Cells, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p104-107

Simulation of Dilute Gas-Solid Flows in Horizontal Channels, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Hong S. Liu, p390-393

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Operating Rule Optimization for Missouri River Reservoir System, with Ines Ferreira, WR July/Aug. 96, p287-295 see Anex, Robert P., EE Apr. 96, p259-262

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Low Temperature Performance Rating Criteria for Lubrication Greases, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Terry McFadden, p153-172

undell, Robert H.

Demonstrating Brine Water Wells and Toilets for Deering, Alaska, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p558-569

Lundy, James R.

Evaluation of Bond Characteristics of Steel and Glass-Fiber Reinforcing Bars, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Damian I. Kachlakev, p638-647

Lung, Wu-Seng

Postaudit of Upper Mississippi River BOD/DO Model, EE May 96, p350-358

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Removal of DNAPL Pools Using Upward Gradient Ethanol Floods, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Bernard Kueper, p345-356

Luo, H.

Delamination Modes in Composite Plates, with S. Hanagud, AS Oct. 96, p106-113

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see Liu, Pei-Ling, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p608-611

Lutenegger, Alan J.

disc. (of Bearing Capacity of Shallow Foundations on Non-cohesive Soils, by Bohdan Zadroga, GT Nov. 94, p1991-2008) with Michael Adams, GT Feb. 96, p168-170

see Ostendorf, David W., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p91-102

Lutes, L. D.

see Papadimitriou, C., (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p744-747

Lutes, Loren D.

Decay of Residual Stress in Stochastic Fatigue, with Shahram Sarkani, ST Jan. 96, p92-98

Luthy, Richard G.

see Adeel, Zafar, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remedia-tion, Lakshmi N. Reddi, ed., 1996), p649-660

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Inhomogeneous Interfacial Transition Zone Model for the Elastic Moduli of Concrete, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), with Paulo J. M. Monteiro and Robert W. Zimmerman, p1246-1255

Luyben, K. C. A. M.

see Geerdink, M. J., EE Nov. 96, p975-982

see Duman, Jo Ann, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2318-2323

Lyles, Brad F.

see French, Richard H., HY Oct. 96, p573-578

Lvn. D. A.

Asymptotic Analysis of Intraparticle Diffusion in GAC Batch Reactors, EE Nov. 96, p1013-1022

Numerical Modeling of Flows in Ultraviolet Disinfection Channels, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3005-3009

Lynch, Daniel R.

see Holboke, Monica J., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

Emergency Repair of An Ocean Outfall, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with John Linder and Robert Ooten, p2039-2043

Where the Interstate Meets the Information Highway, CP Apr. 96, p91-92

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Moonlighting or Donating Professional Engineering Services Ethical?, El Jan. 96, p37-38

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see Pepper, D. W., (High Level Radioactive Waste Manage ment, Technical Program Committee, 1996), p105-107

Floodplain Management in Los Angeles County, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4131-4135

Ma. Chien-Ching

Plane Solutions of Interface Cracks in Anisotropic Dissimi-lar Media, with Jyi-Jiin Luo, EM Jan. 96, p30-38

see Chu, W. K., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p540-544

see Wilson, T. L., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p355-359

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see Nassersharif, Bahram, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Ma, Ming

see Hughes, Owen, EM Oct. 96, p1022-1029

Ma, Wenzheng

Resettlement of the Three Gorges Project in China, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Zonglou Guo, p3847-3851

Ma, Xian

Nonlinear Pounding of Bridges in Earthquakes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Chris P. Pantelides, p1180-1187

Ma, Xiaojiang

see Nagarajaiah, Satish, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p764-767

Maa, Jerome P.-Y.

Sediment Erosion Rate in the Baltimore Harbor, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Larry Sanford and Jeffrey P. Halka, p4383-4388

Mabey, Matthew A.

Assessing the Local Geologic Component of the Earth-quake Hazard in the Portland Metropolitan Area, (Natu-ral Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Ian P. Madin, p177-

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see Abbas, Khaled A., TE July/Aug. 96, p291-299

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see Tarhini, K. M., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p677-682

see Tarhini, K. M., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996).

MacAllen, Thomas C.

see Jones, Christopher P., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p339-340

Macari, Emir J.

see Arduino, Pedro, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p420-425

Macari, Emir José

Effect of Degree of Weathering on Dynamic Properties of Residual Soils, with Laureano Hoyos, Jr., GT Dec. 96, p988-997

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see Borda, Charles, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4036-4041

MacCay, Charlotte

Air Quality at a Zinc/Lead Mine in Arctic Alaska, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Jack Coutts, p804-

MacDiarmid, Tom

see Borda, Charles, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4036-4041

MacDonald, C. N.

see Strand, D., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p103-112

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see Laatsch, Edward M., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p778-785

MacDonald, N. J.

see O'Connor, B. A., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p173-184

MacDonald, Thomas C.

Evaluating Hydraulic Roughness in Tunnels, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Ken J. Susilo, p3645-3650

MacFarlane, Ian D. see Peck, Timothy J., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p103-114

MacGregor, D. C.

see Pinchuk, L., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p192-195

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see Marqués, Antonio, (Applications of Advanced Technol-ogies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p19-23

MacIntyre, Blair

see Webster, Anthony, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p913-919

MacIver, R. D.

Shear Stresses and Hydrodynamics of Combined Waves and Currents, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with R. R. Simons and A. J. Grass, p676-685

MacIver, Ruairi D.

see Simons, Richard R., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p161-172

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see Jasti, V., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p840-850

Mack, Stephen F.

disc. (of Changing Conditions and Water Elections, by Charles H. Lawrance, James M. Stubchaer and Jon A. Ahlroth, WR July/Aug. 94, p458-475), WR Mar/Apr. 96, p148

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Macke, Michael

On Translation Processes and Upcrossing Probabilities, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Christian Bucher, p608-611

BootStrapping Space Resource Utilization with Tethers, Regolith Rockets and Micro Rovers, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p321-327

Mackey, Scott P.

see Lally, Michael J., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p896-902

MacLeod, D. R.

Minimizing Costs of Northern Highways by Using BST, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), with Robin Walsh, p935-946

MacLeod, Donaldson

see Walsh, Robin, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p640-651

Madabhusi-Raman, Prabhu

see Davalos, Julio F., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1469-1478

An Enhanced Kalman Filtering Algorithm for Dynamic Freeway OD Matrix Estimation and Prediction, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with James Krogmeier and Shou-Ren Hu,

see Jha, Mithilesh, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p335-340

Madanat, Samer M.

A Sequential Hypothesis-Testing Based Freeway Incident Response Decision-Making System, (Applications of Ad-wanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Hua-Liang Teng and Pen-Chi Liu, p286-291

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see Delis, E. A., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1188-1196

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see Crespellani, Teresa, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p124-133

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see Mabey, Matthew A., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p177-178

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see Babcock, Roger w., Jr., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p788-793

Madison, Deb

Water Resources Planning for the Fort Peck Indian Reservation, Montana, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4026-4029

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see Kuprenas, John A., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996).

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see Perkins, Steven W., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p963-972

see Perkins, Steven W., AS Jan. 96, p1-9

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Maeda, Tatsuo

Wind-Induced Accidents of Train/Vehicles and their Countermeasures, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p70-73

see Maisumoto, Masaru, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p131-132

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see Brand, P. R., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p534-537

Maes, Marc A.

Ignorance Factors Using Model Expansion, EM Jan. 96, p39-45

Magee, A. B.

Optimization of a 550-/690-MPa High-Performance Bridge Steel, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with J. H. Gross and R. D. Stout, p1561-1570

Magee, Gregory L. Financial Management Primer for New Project Managers, ME Sept./Oct. 96, p62-67

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see Jasti, V., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p840-850

Magolske, Monique B.

Eastern San Joaquin County Groundwater Management, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Miguel A. Marino, p2781-2786

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see Dey, Animesh, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p700-703

see Liu, Xiaoping, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p122-125

see Tryon, Robert G., (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p636-639

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see Parola, A. C., HY Jan. 96, p35-40

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Probabilistic Seismic Hazard and Sensitivity Analysis: A Case Study from Southern California, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p299-300

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see Gucunski, Nenad, (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1083-1097

Maher, M. J.

Estimation of the Potential Benefits from an ATT System Using a Multiple User Class Stochastic User Equilibrium Assignment Model, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with P. C. Hughes, p700-704

Maher, Mary Lou

Co-Evolution of Design Specifications and Design Solu-tion, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Josiah Poon,

Design Case Adaptation Using Genetic Algorithms, (Com-Care Assiptation Using Genetic Algorithms, (Com-puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Andrés Gómez de Silva Garza, p294-300

Technology Potential and Limitations in a Vitual Design Studio, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p8-14

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A Program for the Reduction of Seismic Hazards Posed by Welded Steel Moment Frame Structures, (Natural Disas ter Reduction, George W. Housner, ed. and Riley M. g, ed., 1997), with Ronald O. Hamburger and James O. Malley, p157-158

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Water Balance of the Niger Basin, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with F. Olivera, Z. Ye, S. M. Reed and D. C. McKinney, p3411-3416

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Maidment, David R.

see Olivera, Francisco, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3212-3217

Mailhot, David J.

1500 mm Corrugated HDPE Pipe Installation and Performance, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p69-76

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see Zhang, Dachang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1279-1284

see Zhang, Dachang, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1754-1759

Maitin, Izak

see Douglas, William J., CE June 96, p59-61

Majer, E.

Majer, E. Results of Multiple High-Resolution Geophysical Surveys at Yucca Mountain, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with M. Feighner, L. Johnson, K. Lee, T. Daley, E. Karageorgi, P. Parker, T. Smith, K. Williams, A. Romero, T. McEvilly, D. Ponce and V. Langenheim, p151-154

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Structural Redundancy and Fracture in Composite Lattice/ Skin Structures, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with E. Fosness and D. Satpathi, p641-644

Acoustic Emission Monitoring of Pultruded Bridge Mem-bers, (Engineering Mechanics, Y. K. Lin and T. C. Su,

1996, p963-966

Terrestrial Applications of a Composite Lattice Space Structure, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Keith Donnelly and Michelle Salas, p1122-1126

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Makarchian, M. Simplified Method for Design of Underpinning Piles, with H. G. Poulos, GT Sept. 96, p745-751

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Makeev, Andrew

see Armanios, Erian A., AS July 96, p80-91

Makinde-Odusola, Babs

Management of Stream-Aquifer Systems in the 21st Century, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2787-2792

Makode, Prafulia V.

Optimal Rehabilitation of Locally Damaged Structures Using the Pseudo Distortion Method, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Ross B. Corotis and Martin R. Ramirez, p606-612

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Analysis and Design of ER Damper for Seismic Protection of Structures, with Scott A. Burton, Davide Hill and Mabel Jordan, EM Oct. 96, p1003-1011

An Electrorheological Damper with Annular Duct, (Build-ing an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Scott A. Burton, Davide Hill and Mabel Jordan, pl 197-1204

Macroscopic Models with Complex Coefficients and Cau-sality, with José A. Inaudi and James M. Kelly, EM June 96, p566-573

Modeling of the Oscillatory Response of Electrorheological Fluids, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Scott A. Burton, Davide Hill and Mabel Jordan, p894-897

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see Burton, Scott A., EM Sept. 96, P897-906

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Coupled Processes of Gas Hydrates Dissociation and Fluid Filtration in Saturated Porous Media, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p220-223

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Solving Mathematical Programming Problems Using Genetic Algorithms, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Jennifer R. Martin and Ricardo A. Medina, p233-239

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The Role of Macroflocs in Estuarine Sediment Dynamics and its Numerical Modeling, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with W. Zielke, p695-706

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Malenkov, M.

A Concept of Driving on Orbital Station, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with V. Gorbunov, S. Vladykin, V. Zhivoglotov, R. Beglov and V. Syromyatnikov, p559-565

Males, Richard

Integration and Interdisciplinary Issues in Water Resources for the 21st Century: Comments and Critique, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p4021-4025

Malhotra, V. Mohan

see Pigeon, Michael, MT Nov. 95, p208-211

Malilay, Josephine

Mortality and Morbidity Patterns Associated with the October 12, 1992 Egypt Earthquake, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Ibrahim Fayez Elias, David Olson, Thomas Sinks and Eric Noji, p266-268

Malla, R. B.

See Delis, E. A., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1188-1196

Double-Layer Grids: Review of Dynamic Analysis Meth-ods and Special Topics, with Reynaud L. Serrette, ST Aug. 96, p882-892

Double-Layer Grids: Review of Static and Thermal Analysis Methods, with Reynaud L. Serrette, ST Aug. 96, p873-881

Malley, James O.

Seismic Design Doubles Lateral Resistance (Available only in Structures special issue), CE Sept. 96, p14A-16A

see Mahin, Stephen A., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p157-158

see Soulages, Jeffrey R., (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p542-549

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see Fares, Nabil, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p910-913

Malvar, L. J.

Composite Applications in the Navy Waterfront Infrastruc-ture, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with G. E. Warren and C. M. Inaba, p1179-

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see Jensen, Peder, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p373-377

Man, Malcolm K.

Vapor Phase Biofiltration for Removal of VOCs, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Badri N. Badriyha, Walter Den and Massoud Pirbazari, p1209-1214

Mancuso, Michelle

Space Debris: A Growing Threat, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p1290-1294

Mandarino, William see Borovetz, Harvey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p35

Mandracchia, E. A. Measurement of Applied Stress in Steel Bridges, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996),

Mang, Herbert A.

see Meschke, Günther, EM July 96, p591-602

Manganello, S. J. see Chilton, J. M., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p100-107

see Focht, E. M., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1540-1550

Mangor, Karsten

Mangor, Narsue Morphological Impact Assessment of Artificial Islands for the Øresund Link Between Denmark and Sweden, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Andrew M. Driscoll, Ida Brøker and Ann Skou, p939-950

Manios, John

see Kuprenas, John A., (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p742-749

Manivannan, D. see Singh, R., IR July/Aug. 94, p814-819

Manivannan, Indumathi Dissolution of NAPLs Entrapped in Heterogeneous Porous Media, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Susan E. Powers and Garrey W. Curry, Jr., p563-574

Mankins, John C.

see Christensen, Carissa Bryce, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), p260-268

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Wave Field in the Efflux of River Water, (Coastal Dyna ics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Subandono Diposaptono, p185-196

Manogian, Michael E.
Diffraction of SH-Waves by Subsurface Inclusions of Arbitrary Shape, with Vincent W. Lee, EM Feb. 96, p123-129

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Mansfield, Christopher M.

Use of SALQR Optimization in Large Aquifer Cleanup, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Christine A. Shoemaker, p135-139

Mansour, A. E. see White, G. J., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p110-113

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Probability Based Design Requirements for Ship Struc-tures, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Paul H. Wirsching, Bilal M. Ayyub and Gregory J. White, p98-101

see Ayyub, Bilal M., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p102-105

see Wee, T. H., MT May 96, p70-76

see Vipulanandan, C., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1160-1169

Mantri, Suryanarayana

Vehicle Detection Using Radial Basis Neural Network, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), with Darcy Bullock, p188-192

Manukalo, V.

System of River Floods Warning in Ukraine, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1340

see Sosedko, M., (North American Water and Environ Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p247-248

Manz, David H.

see Lin, Zihui, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p824-829

see Lin, Zihui, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1893-1898

see Lin, Zihui, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4353-4358

Manzouri, Teymour Analysis of Masonry Structures with Elastic/Viscoplastic Models, (Worldwide Advances in Structural Concete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with P. Benson Shing and Bernard Amadei, p61-

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see Dowling, Stephen J., WR July/Aug. 96, p280-286

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see Vo, T. V., (Risk-Based Decision Making in Water Re-sources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p326-

Maragakis, E.
Full-Scale Resonance Tests of a Railway Bridge, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with B. M. Douglas, S. Haque and V. Sharma, p183-190 see Saiidi, M., ST Jan. 96, p61-68

Marandi, Seyed M.

Stress and Temperature Effects on Silt Frost Heave, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Douglas I. Stewart and Terrence W. Cousens, p23-34

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see Hopping, Paul, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1299-1304

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Seismic Rehabilitation of Earth Dams, with P. F. Hadala and R. H. Ledbetter, GT Jan. 96, p7-20

Transition from Partial Factors Method to Simulation Based Reliability Assessment in Structural Design, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Milan Guštar, p558-561

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see Chieh, James, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1399-1405

Margo, David A.

see Chang, Kuo-Chyang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p511-514

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see Scordelis, Alex C., (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p278-286

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see Kadir, Tariq N., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3068-3073

see Magolske, Monique B., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2781-2786

Mark, David J.

Hurricane-Induced Storm Surge Analysis for the City of New Orleans, LA, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Norman W. Scheffner, p343-344

see Scheffner, Norman W., WW Mar/Apr. 96, p93-101

Mark. D.L.

Development of a Large-Scale Tidal Circulation Model for the Mediterranean, Adriatic and Aegean Seas, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with N. W. Scheffner, p168-179

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Artificial Recharge Using Inflatable Rubber Dams, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Curtis A. Thompson and Matt Ulukaya, p736-741

Markus, Momcilo

see Welles, Edwin, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p223-224

Marqués, Antonio

Advanced Technologies Applied to Public Transport Fleets Maintenance: Diamante Project, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Vicente Sebastián, Vicente Macián and Ma. José Lerma, p19-23

Flexible Dynamic Scheduling: A Major Improvement for Public Transport, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Manuel Torregrosa, Arturo Camarena, K. Darby-Dowman, Shirley Moody and James Little, p134-138

Marriott, Martin J.

disc. (of Modeling Dry Weather Wastewater Flow in Sewer Networks, by D. Butler and N. J. D. Graham, EE Feb. 95, p161-173), EE Aug. 96, p773

disc. (of Prediction of Effects of Woody Debris Removal on Flow Resistance, by F. Douglas Shields, Jr. and Christopher J. Gippel, HY Apr. 95, p341-354), HY Aug. 96, p471

Marron, John F.

Just-In-Time Training on E-Mail, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p931-936

Marsh, Bruce E.

Traditional People and a Modern Mining Company Work-ing Towards Sustainability in Indonesia, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2982-2992

disc. (of Ethical Responsibilities of Engineering Profession, by Mark J. Holliday, El July 94, p270-272), El Jan. 96, p46

Marsh, Edred T.

Common Causes of Retaining-Wall Distress: Case Study, with Richard K. Walsh, CF Feb. 96, p35-38

Standardizing Environmental Assessments: A Practical Per-spective, with K. W. Green and T. Dong, EE Mar. 96, p222-226

Marshall, J. S.

Fluid Vortices edited by S.I. Green, HY July 96, p423

Basic Concepts of L₁ Norm Minimization for Surveying Applications, with James Bethel, SU Nov. 96, p168-179

Marshall, Matthew Fisk

The Space Exploration Initiative: Its Failure and Lessons for the Future, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p116-

Marshall, Orange S., Jr.
Composite Repair/Upgrade of Concrete Structures, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with John P. Busel, p932-938

Marshall, Steven

see Hearn, George, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p245-252

Marsteiner, Edward L.

Hydraulic Design of Subsurface Flow Wetlands, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Thom-as L. Theis, Anthony G. Collins and Thomas C. Young, p2421-2426

Martin, A. R.

see Moulford, W. E. F. L., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p762-768

Martin, Farrel

The Nature of Passivity of Reinforcing Steel, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Jan Olek, p1111-1120

Martin, Geoffrey R.

see Yen, Teh Fu, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1602-1607

Martin, J. B.

see Pinchuk, L., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p192-195

Martin, Jennifer R.

see Malasri, Siripong, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p233-239

Martin, K.

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Scaling Bacterial Filtration Rates in Different Sized Porous Media, with Bruce E. Logan, William P. Johnson, David G. Jewett and Robert G. Arnold, EE May 96, p407-415

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see Moulford, W. E. F. L., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p762-768

see Wilson, Chuck, (Design with Residual Materials: Geo-technical and Construction Considerations, Gordon Matheson, ed., 1996), p27-36

Martin, Scott C.

Collapse Analysis of Steel Frame Structures Under Earth-quake Loading, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Roberto Villaverde, p370-373

Martin, William D.

see Hsieh, Bernard B., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2218-2223

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Delay Estimation and Optimal Length for Four-Lane Divided Freeway Workzones, with Danquing Xu, TE Mar./ Apr. 96, p114-122

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Martinez, Julio

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Martinez, Julio C.
Using CPM-Chart Animation to Illustrate the Evolution of Schedules, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with John R. Knoke, p627-633
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see Melcher, Nick B., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p59-61

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see Godoy, Luis A., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p135-136

Martini, Kirk

Visualizing Global Force Distributions in Finite Element Models, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p697-703 Visualizing Global-Force Distributions in Finite-Element Models, AE June 96, p71-77

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see da Costa, A. Pinto, EM July 96, p613-622

Martinsen, Eivind A.

Hindcast Simulations of Ocean Currents in Norwegian Coastal Waters; Part 2: Summary of the Main Results, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p391-403

see Zaghloul, A. M., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1062-1065

Martys, Nicos S.

Sorption of Water in Mortars and Concrete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Chiara F. Ferraris, p1129-1138

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see Garbrecht, Jurgen, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2689-2694

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Finite-Element Analysis of Temperature Effects on Plain-Jointed Concrete Pavements, with Ramzi Taha and Balasingam Muhunthan, TE Sept./Oct. 96, p388-398

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Development of a Wireless Global Bridge Evaluation and Monitoring System (WGBEMS), (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Robert Egri, Abba Lichtenstein and Steven Chase, p734-741

Field Evaluation of a Wireless Global Bridge Evaluation and Monitoring System (WGBEMS), (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), with Robert Egri, Abba Lichtenstein and Steven Chase, p955-958

Maser, Kenneth R.

Condition Assessment of Transportation Infrastructure Using Ground-Penetrating Radar, IS June 96, p94-101

Evaluation of Bridge Decks and Pavements at Highway Speed using Ground Penetrating Radar, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p820-

Mashita, Kazuhiko

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Effect of Temperature and Salt Contamination on Carbona-tion of Cements, with C. L. Page and Rasheeduzzafar, MT May 96, p63-69

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Freeze-Thaw Durability of Concrete Cured Below 0°C Using Antifreeze Admixtures, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Herbert P. Schroeder, p185-195

Masonry Standards Joint Committee, (James Colville, chmn.)

Building Code Requirements for Masonry Structures (ACI 530-95/ASCE 5-95/TMS 402-95); Specification for Ma-sonry Structures (ACI 530.1-95/ASCE 6-95/TMS 602-95); Commentary on Building Code Requirements for Masonry Structures (ACI 530-95/ASCE 5-95/TMS 402-95); Commentary on Specification for Masonry Struc-tures (ACI 530.1-95/ASCE 6-95/TMS 602-95) (St No. 95-005, 95-006), 1996, 0-7844-0115-2, 97pp.

Masri, S. F.

Neural Network Approach to Detection of Changes in Structural Parameters, with M. Nakamura, A. G. Chassiakos and T. K. Caughey, EM Apr. 96, p350-360

see Xu, Weiming, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p747-750

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Size Effects in the Fracture of Fiber Reinforced Materials. (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Alberto Carpinteri, p462-473

Massarelli, Peter J.

Fatigue Lifetime Prediction of Steel Bridge Details, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Thomas T. Baber, p450-453

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see Gottlieb, Peter, (High Level Radioactive Waste Man-Technical Program Committee, 1996), agement, p345-347

Massel, Stanisłław R.

Wave Motion in Vegetated and Non-Vegetated Coastal Zones, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1-12

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see Webster, Anthony, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996). p913-919

Massmann, Joel W.

see Poulsen, Tjalfe G., EE Aug. 96, p700-706

Mastascusa, E. J.

Interactive Lessons for Instrumentation and Control, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Maurice F. Aburdene, p303-309

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A Stabilized Formulation of the Navier-Stokes Equations, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1135-1138

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Characteristics in Evaluating Stream Functions in Ground-Water Flow, HE Jan. 96, p49-53

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disc. (of Frost Resistance of Roller-Compacted HighVolume Fly Ash Concrete, by Michael Pigeon and V.
Mohan Malhotra, MT Nov. 95, p208-211), MT Nov. 96, p216

Matheson, Gordon
Design with Residual Materials: Geotechnical and Con-struction Considerations, Geotechnical Special Publica-tion No. 63, 1996, 0-7844-0207-8, 88pp.

Matheson, Gordon M.

Estimation of In Situ Hydraulic Properties of Saprolite, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p66-73

Matheson, Sam

Equity Measures for Selecting Sustainable Projects, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Barbara Lence, p4371-4376

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Strategies for the Use of IT in the Construction Industry of Singapore, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1065-

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USAID Efforts in Mitigating Natural Disasters, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Nathalie Valette-Silver,

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Investigation of On-Orbit Servicing Robot, (Engineering, Construction, and Operations in Space, Stewart Johnson, ed., 1996), with Y. Wakabayashi, p533-539

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Matsumoto, Masaru

Mechanism of Bluff Body Aerodynamics and Its Stabilization, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Fumitaka Yoshizumi, p74-77 Train/Vehicles Wind-Induced Hazard and Its Mitigation, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Tatsuo Maeda, p131-132

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Construction System for Lunar Base, (Engineering, Construction, and Operations in Space, Etwart W. Johnson, ed., 1996), with Nobuo Isome, Koji Oishi, Hiroshi Kanamori, Kenji Takagi, Yoshiro Kai, Michiya Suzuki and Satoru Suzuki, p140-144

see Sato, Takanori, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1155-1161

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Uniaxial Cyclic Behavior of Discontinuous Fiber Reinforced Composites, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Victor C. Li, p426-435

Matsuo, Minoru

Matsuo, Minoru
Design Decision Making for Infrastructures under the Restriction of the Energy Consumption, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Yusuke Honjo and Ikuo Sugiyama, p376-379

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Matthys, John H.

Masonry Designers' Guide - A Comprehensive Design Tool, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p322-333

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see Speidel, David, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p129-130

see Galli, C., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p676-679

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see Stricklan, Kimberly K., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p351-359

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Spawning a Hydroelectric Plant, with Ronald E. Israelsen, CE Mar. 96, p56-58

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Vector Analysis of Keyblock Rotations, with Richard E. Goodman, GT Dec. 96, p976-987

see Gerlinger, Tom, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2050-2055

see Moore, Mike, (North American Water and Environ Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1699-1704

see Robertson, George, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1431-1436

Mauro, V.

Stee Montgomery, F. O., (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p680-684

see Montgomery, F. O., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Mautner, Adrienne M.

see Chotiros, Nicholas P., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p804-807

Maxwell, Reed M.

Health Risk Sensitivity to Variable and Uncertain Parameters, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Susan D. Pelmulder, p1285-1290

see Montgomery, F. O., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p680-684

see Montgomery, F. O., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p685-689

Mayer, Robert

see Young, Ken, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3393-3398

Mayes, Ronald L. Seismic Isolation of Bridges Using Elastomeric Isolation Systems, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p33-40

Mayne Paul W.

see Hegazy, Yasser A., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p254-268

Maynord, Stephen T.

Entrainment of Eggs and Larval Fish Into Propeller Jets, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3147-3152

Toe-Scour Estimation in Stabilized Bendways, HY Aug. 96, p460-464

Mayo, Aloice W.

Modeling Coliform Mortality in Waste Stabilization Ponds, EE Feb. 95, p140-152 disc: Imad A. Basheer and Yacoub M. Najjar, EE

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see Zhao, Bing, (Risk-Based Decision Making in Water Re-sources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p180-

Mays, Larry W. see Zhao, Bing, HY June 96, p325-332

Mays, Timothy

see Helweg, Otto J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p954-959 see Helweg, Otto J., (North American Water and Environ-

ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2224-2229

History of Coastal Engineering in Mexico, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), with Rodolfo Silva and Carlos Sánchez, p375-389

Maze, T. H.

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Mazumder, Nitish C.

Formation and Propagation of Tidal Bore, with Somnath Bose, WW May/June 95, p167-175 err: WW Mar/Apr. 96, p107

Mazurek, David F.

Forensic Evaluation of Guyed Tower Collapses, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Jonathan C. Russell, p510-517

Mazzucchelli, M.

EMC Issues in Electric Railway Traction Systems, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with P. Pozzobon and G. Sciutto, p44-48

Mazzucchelli, Maurizio

Interport Modelling with State Automata, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Valerio Recagno and Giuseppe Sciutto, p104-108

McAnally, W. H.

Field Data Collection and Analysis for Verification of Estuarine Models, (Estuarine and Coastal Modeling, Mal-colm L. Spaulding and Ralph T. Cheng, 1996), with T. C. Pratt, G. T. Stevens and T. M. Parchure, p204-214

McBain, Gregory W.

see Collins, Frank X., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2044-2049

McBean, Edward

see Donald, Scott, (disc), GT Oct. 94, p1704-1724

McBean, Robert P.

Design of the Inlet/Outlet Tower for the Eastside Reservoir Project, (North American Water and Environ gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Clifford D. Dillon, p1783-1788

McCabe, Brenda

see AbouRizk, Simaan, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p220-226

McCabe, S. L.

see Schultz, A. E., ed., Worldwide Advances in Structural Concrete and Masonry

McCallen, David B.

Ground Motion Estimation and Nonlinear Seismic Analysis, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with Lawrence J. Hutchings, p416-427

Earthquake-Induced Landsliding Analyzed and Predicted With a Geographic Information System, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p3-4

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see Bicknell, Jill C., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3097-3102

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see Kotra, J. P., (High Level Radioactive Waste Manage ment, Technical Program Committee, 1996), p269-

McCauley, Michael W.

see Tedesco, Joseph W., (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p631-637

McClasky, Charles

see Iyer, Srinivasa, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p781

McCloskey, Charles C., P.E.

Reader Remembers Cost, Not Fish, CE Nov. 96, p32,36

McClure, Linden H.

The Educational Ozone Researcher: A University Satellite, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Ellen L. Riddle, p1327-1333

McClure, N. D., IV

Resolution of the ACT-ACF Water dispute with a Federal-State Partnership, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3417-3422

McClure, Nathaniel D., IV

Environmental Restoration Measures on the Tennessee-Tombigbee Waterway (TENN-TOM), (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Norman L. Connell, Sr., p3326-3331

McClure, Paul D.

Simulation of Bioventing for Soil and Ground-Water Remediation, with Brent E. Sleep, EE Nov. 96, p1003-1012

McConnell, D. W.

Status of Electronic Data Interchange for Steel Structures, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with J. A. Bohinsky, p389-396

McCook, Danny K.
Correlations Between a Simple Field Test and Relative

Density Test Values, GT Oct. 96, p860-862 disc. (of Surficial Stability of Compacted Clay: Case Study, by Robert W. Day, GT Nov. 94, p1980-1990), GT Mar. 96, p246-247

McCoy, J. Kevin
Fuel and Cladding Oxidation under Expected Repository
Conditions, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p396-398

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HF Interference in Space from Terrestrial Sources, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with John P. Basart and Monte Taylor, p854-860

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Consensus Building Model to Select CASIS in Small Com-munities, with Colin O. Benjamin and Vijay E. Ambavanekar, UP June 96, p46-70

Accelerating Innovation: New Style of Leadership Needed, ME Sept./Oct. 96, p3-5

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MCLues, Richard H.
Assessment of Kinematic Wave Time of Concentration, with Jill M. Spiess, HY Mar. 95, p256-266 disc: Arie Ben-Zvi, HY Aug. 96, p472 clo: HY Aug. 96, p472-473
The Elements of Academic Research, 1996, 0-7844-0171-

see Davis, Allen P., EI Apr. 95, p108-113 see Spencer, Colleen S., HE Jan. 96, p2-10

McCulloch, W. H.

Safety Analysis Requirements for Robotic Systems in DOE Nuclear Facilities, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p235-240

McCullouch, Bob

Design/Construction Integration through Multimedia Animation, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Dulcy Abraham and Phillip Knickrehm, p760-766 Editor's Letter, ME July/Aug. 96, p3-4

McCully, Doyle W.

Upper Mississippi River System Environmental Manage-ment Program (EMP), (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3320-3325

McDaniel, G. Thomas

McDaniel, G. Thomas see Antorena, Juan M., (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p582-589

McDonald, Blair J.

Calibration of XRF and Laboratory Analyses of Soil, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), with Janice J. Trautner, Alan G. Seelos and Richard K. Glanzman, p287-296

McDonald, Carolyn Evans see Fayette, Louise, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p317-322

McDonald, David B.

Slowing Corrosion Damage in Concrete: The Use of Organic-Coated, Ceramic-Clad, Metallic-Clad and Solid Metallic Reinforcing Bars, (Materials for the New Milennium, Ken P. Chong, ed., 1996), with Donald W. Pfeifer, Matthew R. Sherman and Gilbert T. Blake, p1266-1275

disc. (of Resistance of Silica-Fume Concrete to Corrosion-Related Damage, by Safwan A. Khedr and Ahmed F. Idriss, MT May 95, p102-107), MT Aug. 96, p177-178

McDonald, Donald F.

disc. (of Construction Claims and Disputes: Causes and Cost/Time Overruns, by Cheryl Semple, Francis T. Hart-man and George Jergeas, CO Dec. 94, p785-795), CO June 96, p197-198

McDonald, James R.

An Expert System for Wind-Resistant Residential Construction, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Douglas A. Smith and Kisshor C. Mehta, p315-316

see Mehta, Kishor C., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997). p46-47

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see Shinakis, E. G., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p310-314

McDonald, S. E.

See Baker, T. H. W., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p829-836

McDonald, Sean see Ping, W. Virgil, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p721-730

McDonald, Willie E.

Evaluation of Grout Materials for Anchor Embedments in Hardened Concrete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p958-967

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McDougal, William G.
Multiple-Pit Breakwaters, with A. Neil Williams and Keizo
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see Parr, A., (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p70-81

McEvilly, T.

see Majer, E., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p151-154

McFadden, Michael H.

Keys to Opening the Nation's First Deep Geological Re-pository in 1998, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), with Leif G. Eriksson, p220-223

McFadden, Terry

see Lundberg, Jan, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p153-172

McFarquhar, Dudley see Hallam, Kenneth, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p772-775

McGahan, Joseph

see Wichelns, Dennis, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p655-660

McGarry, J. Michael, III

Use of Limited Information in a License Application to Construct a Repository, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with F. Stanley Echols, p201-204

see Covino, B. S., Jr., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1512-1521

McGillicuddy, Kevin

Strategies for Operation of Orange County Water District Talbert Seawater Intrusion Barrier, California, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Timo-thy Sovich, p4078-4083

McGinnis, C. I.

see Gibson, G. E., Jr., CO Sept. 96, p274-280

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see Dortch, Mark S., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2583-2588

McGrath, Travis C.

Value and Reliability of DNAPL-Source Location Programs: A Preliminary Framework, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Robert B. Gilbert and Daene C. McKinney, p187-198

see Gilbert, Robert B., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J.

S. Roth, ed., 1996), p774-796

McGraw, Kirk D.

The Agent Collaboration Environment, An Assistant for Architects and Engineers, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Philip W. Lawrence, Jeffrey D. Morton and Jeff Heckel, p739-745

McGuffey, Verne C.

see Grivas, Dimitri A., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p426-433

McGuire, Joel see Cahill, Thomas H., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3969-3974

McGuire, Robin K.

Dose Rates from Repository Performance Assessment, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with John A. Vlasity, p325-

McInnes, Colin R.

see McQuade, Frank, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1169-1175

see Russell, Gordon, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p449-454

McIntosh, Dave

see Shane, Richard M., CE Jan. 96, p61-63

McKay, David S.

Concrete -- A Practical Construction Material for Mars, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Carlton C. Allen, p566-570

REGA (Regolith Evolved Gas Analyzer), (Engineering, Construction, and Operations in Space, Stewart Johnson, ed., 1996), with Carlton C. Allen, p673-679

see Allen, Carlton C., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p756-761

see Neil, David M., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p800-805

McKendrick, Jay D.

Rehabilitating Arctic Tundra in Alaska, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p764-769

McKenna, Gregory B.

see Ketcham, Stephen A., EM July 96, p669-677

agement, Technical Program Committee, 1996), p193-195 see Barnard, R. W., (High Level Radioactive Waste Ma

McKenna, Sean A.

Addressing Uncertainty in Rock Properties through Geo-statistical Simulation, (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Marc V. Cromer, Christopher A. Raut-man and William P. Zelinski, p297-311

Geostatistical Simulation, Parameter Development and Property Scaling for GWTT-95, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Susan J. Altman, p181-183

see Altman, Susan J., (High Level Radioactive Waste Man agement, Technical Program Committee, 1996), p190-192

see Ho, Clifford K., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p184-186

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see Yang, Hang, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p417-

McKeown, Denis

Classifying Vehicles Using Their Auditory Signature Based on an Auditory Model, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephaneds, ed. and Francesco Filippi, ed., 1996), with Stephen Hadland, Howard Kirby, Mark Dougherty, Luke libbatton Lewis Lowes and Batter Booch, 271, 273. Ibbetson, Louis Lopes and Peter Roach, p711-715

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see Maidment, D. R., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3411-3416

see Watkins, D. W., WR Mar./Apr. 96, p88-96

McKinney, Daene C.

Genetic Algorithms for the Design of Groundwater Remediation Systems, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Min-Der Lin, p842-847

Multigrid Methods in GIS Grid-Cell-Based Modeling Environment, with Han-Lin Tsai, CP Jan. 96, p25-30

Pump-and-Treat Ground-Water Remediation System Opti-mization, with Min-Der Lin, WR Mar/Apr. 96, p128-

see de Blanc, Phillip C., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p478-489

see McGrath, Travis C., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p187-198

see Watkins, David W., Jr., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p612-617

McKinney, Kathleen

Interactive 4D-CAD, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Jennifer Kim, Martin Fischer and Craig Howard, p383-389

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The Influence of Trust on Risk-Based Decision Makin (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with B. Katarina Hackman, p169-

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see Sahoo, Dipak, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1215-1220

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Reducing Environmental Impacts through Non-Uniform Loading of Casks, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p372-

McManus, Kevin J.

Cyclic Axial Loading of Drilled Shafts in Cohesive Soil, with Fred H. Kulhawy, GT Sept. 94, p1481-1497 disc: Ashraf M. Ghaly and Adel M. Hanna, GT Mar. 96, p255-256

disc: Yenumula V. S. N. Prasad, GT Mar. 96, p257 clo: GT Mar. 96, p257-258

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Comparison of Water Backwash and Brush Cleaning Systems for Vertical Panel Fish Screens, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Clint W. Smith, p1129-1134

White River Fish Screen Project Planning and Design, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with

Wayne Porter, p1123-1128

McNamara, Robert J. An Emerging Technology: Damping Design for Wind and Seismic Events, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1252-1260

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see Atkins, Joel E., (High Level Radioactive Waste Management, Technical Program Committee, 1996),

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Distributed Control for Serial Assembly in Space, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Colin R. McInnes, p1169-

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see Fear, Catherine E., GT Mar. 95, p249-261

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MCSpudden, James Review of the Solar Power Satellite, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Kai Chang, p254-259

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Pullout Simulation of Postinstalled Chemically Bonded Anors, with Ronald A. Cook and Kailash Krishnamurthy, ST Sept. 96, p1016-1024

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Wind Loads for Low-Rise Buildings on Escarpments, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Timothy A. Reinhold and Dale C. Perry, p1045-1052

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Structural Sensing with Fiber Optic Systems, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p224-227

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see Malasri, Siripong, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p233-239

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Beach Profile Evolution Under Mean Conditions, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Luis Moreno and José C. Santás, p595-606

Meegoda, Jay N.

Aggregates for Construction from Vitrified Chromium Contaminated Soils, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed, Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), with W. Kamolpornwijit, David A. Vaccari, A. S. Ezel-din, L. Walden, W. A. Ward, B. A. Noval, R. T. Mueller and S. Santora, p31-46

Engineered Contaminated Soils and Interaction of Soil Geomembranes, Geotechnical Special Publication No. 59, with Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996,

0-7844-0213-2, 144pp.

Use of Lunar Type Soil for Concrete Construction, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Hsin-Yu Shan, Jing-Fu Huang, Jia-Wen Tseng and Su-Hwa Cheng, p614-620

Use of Remediated Petroleum Contaminated Soils in Highway Construction, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), with Robert T. Mueller and Frank Palise, p1-16

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Mitigation Measures for Eroding Muddy Shores, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Robert Kirby, p3728-3733

Mehta, Kishor C.

Hurricanes Erin, Marilyn and Opal, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with James R. McDonald and Douglas A. Smith, p46-47

Mitigation of Windstorm Disasters, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Ernst W. Kiesling, p205-206 see Gupta, Himanshu, EM Nov. 96, p1031-1037

see McDonald, James R., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p315-316
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see Smith, Douglas A., (Building an International Con nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1029-1036

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see Bourne, R. Gregory, WR July/Aug. 95, p294-301

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see Otten, Leonard John, III, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p224-230

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see Roelvink, J. A., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p818-828

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see Collins, Frank X., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2044-2049

Meisner, Mark J.

Dissipated Energy as a Function of Material Microstruc-ture, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with George N. Frantziskonis, p1030-1033

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Integrated Planning Decision Support System (IPDS), (Nat-ural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Luis A. García, p189-

Integrated Planning Decision Support System (IPDS) Application: Glenwood Springs, Colorado, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Luis A. García, p386-387

Mekha, Basim B.

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Melcher, Nick B.

Frequency Analyses for Recent Regional Floods in the United States, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Patsy G. Martinez, p59-61

Melchers, R. E.

see Ahammed, M., TE Nov./Dec. 94, p989-1002

see Guan, X. L., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p688-691

Melchers, Robert E.

Towards a Probabilistic Model for Marine Corrosion of Steel, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p660-663

Melching, Charles S.

Key Sources of Uncertainty in QUAL2E Model of Passair River, with Chun G. Yoon, WR Mar/Apr. 96, p105-113

see Eisenberg, J. M., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p235-236

Melerski, Edmund S.

see Koutsoukis, Michael, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p812-815

Knowledge Acquisition and Engineering for Steel Bridge Fabrication, with W. M. Kim Roddis, Srinath Nagaraja and Michael R. Hess, CP July 96, p248-256

Sanitary Engineers in American Cities: Changing Roles from the Age of Miasmas to the Age of Ecology, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p108-122

Melville, B. W.

see Chin, C. O., HY Aug. 94, p899-918

Melville, Bruce W.

Effects of Foundation Geometry on Bridge Pier Scour, with Arved J. Raudkivi, HY Apr. 96, p203-209

see Chiew, Yee-Meng, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2556-2564

see Coleman, Stephen E., HY June 96, p301-310

see Ettema, Robert, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p251-256

see Wang, Yalin, HY June 96, p353-356

Memory, Richard D.

see Suchsland, Kurt E., (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Mendelsohn, Daniel

WQMAP in a Windows Environment, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Eoin Howlett and J. Craig Swanson,

see Swanson, J. Craig, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996),

see Swanson, J. Craig, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2642-2647

Méndez-Díaz, María M.

Buoyant Plumes from Multiport Diffuser Discharge in Deep Coflowing Water, with Gerhard H. Jirka, HY Aug. 96, p428-435

Mendoza, C.

Pollutant Transport Across Porous Stream Beds, (North American Water and Environment Congress & Destru tive Water, Chenchayya Bathala, ed., 1996), with D. Zhou, p1581-1586

see Zhou, D., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1447-1452

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A Model for Bed Surface Shear Stress Fluctuations, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p669-672

Meneguzzer, Claudio

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Oronputational Experiments with a Combined Traffic Assignment and Control Model with Asymmetric Cost Functions, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J Stephanedes, ed. and Francesco Filippi, ed., 1996), p609-614

Menendez, Roger

see Rosenthal, Andrea, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2033-2038

Menendez, Roger J.

see Reutter, David S., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p753-758

Mengel. Mike

see Robertson, George, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1431-1436

Menhaj, Atika

see Deloof, Pascal, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p661-665

Menniti, John P.

Using Computers Effectively in Today's Civil Engineering Office, CP Oct. 96, p261-262

Menon, Rajendra M.

see Yeung, Albert T., GT Aug. 96, p666-673

Menon, Sunil

A Pore-Scale Study of the Stability of Nonaqueous Phase Liquid Ganglia under the Influence of Vibrations, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Arun Pant and Lakshmi N. Reddi, p538-550

see Thangavadivelu, Suri, (Uncertainty in the Geologic En-vironment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1303-1317

Menyailov, Anatoly I.

Statistical Dynamics of Pipe-Line with One-Side Contact Supports Under Turbulence of Cross-Wind Loads, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Christian G. Bucher, p986-989

Menzemer, Craig C.

see Sharp, Maurice L., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1027-1036

see Di Stefano, R., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Mercer, Gary

see Brink, Philip N., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2415-2420

Mercer, James W.

A Review of NAPL Modeling Approaches for Remedia-tion, (Non-Aqueous Phase Liquids (NAPLs) in Subsur-face Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Zafar Adeel and Charles R. Faust, p46-65

Lining the Line, with Vojtech Gall and Gerhard Sauer, CE Mar. 96, p50-52

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see Playan, E., IR Sept/Oct. 94, p837-856

Merriam, John L.

disc. (of Two-Dimensional Simulation of Basin Irrigation. 1: Theory, by E. Playán, W. R. Walker and G. P. Merkley, IR Sept/Oct. 94, p837-856), IR Jan./Feb. 96, p65

Merrill, Kelly S.

Case History of a Lined Wastewater Treatment Lagoon Failure, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Matt Stephl, p518-532

Comparison of Static and Dynamic Test Results for Driven Steel Pipe Piles in Highly Saline Permafrost, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Richard E. Riker, p238-253

Merritt, Frederick S.

Architectural Office Standards and Practices: A Practical Users Guide by Larry D. Jenkins et al., AE Mar. 96, p41 Building Evaluation Techniques by George Baird et al., AE Sept. 96, p122-123

The Digital Architect: A Common-Sense Guide to Using Computer Technology in Design Practice by Ken Saunders, AE Mar. 96, p42

Minimum Design Loads for Buildings and Other Structures: American Society of Civil Engineers Standard 7-95, AE June 96, p80-81

Partnering Manual for Design and Construction by William C. Ronco and Jean S. Ronco, AE Sept. 96, p122

Practitioners' Forum, AE Dec. 96, p125-128

Structural Studies of Historical Buildings IV, AE Mar. 96, p42-43

Successful Partnering: Fundamentals for Project Owners and Contractors by H. J. Schultzel and V. P. Unruh, AE June 96, p82

Tensioned Fabric Structures—A Practical Introduction edited by R. E. Schaeffer, AE Sept. 96, p121

TQM and ISO 9000 for Architects and Designers by Charles Nelson, AE June 96, p81

Mertz, Dennis

Editorial, BE Feb. 96, pl

see Edberg, William, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p502-508

Mertz, Dennis R.

Bridge Design by the AASHTO LRFD Bridge Design Specifications, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with John M. Kulicki, p1-8

Cross-Frame Diaphragms for Steel Girder Bridges Using the AASHTO LRFD Bridge Design Specifications, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p307-312

see Reid, Jonathan S., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p294-297

Merz, Clifford R.

Sedimentation Dynamics of Tidal Inlets, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Panagiotis D. Scarlatos, p4377-4382

Mesa, Oscar J.

Streamflows Prediction Models for the Colombian Generation System Considering El Niño Effect, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Ricardo A. Smith, Pedro J. Restrepo, José E. Salazar, Luis F. Carvajal and Juan D. Velásquez, p1477-1482

Meschke, Günther

Large Strain Finite-Element Analysis of Snow, with Changhong Liu and Herbert A. Mang, EM July 96, p591-602

Meselhe, E. A.

Three-Dimensional Numerical Model for Fish Bypass Studies, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with A. J. Odgaard and V. C. Patal, p159-164

Messiha, Hany M.

see Arditi, David A., IS Mar. 96, p5-14

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see Jensen, Peder, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p373-377

Mester, Zoltan C.

Marine Engines Emissions for Vessels of the United States Coast Guard, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3355-3356

Metcalf, J. B.

see Pericleous, M. I., MT Feb. 96, p7-10

Metcalfe, R.

see Littleboy, A. K., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p135-140

Metzger, Daniel D. G. T.

Bus Gate, Pre-Signal and Queue Relocation: The Park View Road Bus Priority Scheme, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p81-86

Meunier, N.

see Sreekrishnan, T. R., EE Nov. 96, p995-1002

Meurer, Claire P.

see Dvorak, Bruce L, EE July 96, p571-580

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3D Flow Structures - From Laboratory to Field Applications, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with K.-P. Holz, p3446-3451

Meyer, Barry

see Schade, Paul R., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p574-581

Meyer, Christia

Alkali-Silica Reaction in Concrete with Waste Glass as Aggregate, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Stephen Baxter and Weihua Jin, p1388-1397

Potential of Waste Glass for Concrete Masonry Blocks, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Stephen Baxter and Weihua Jin, p666-673

see Fang, Li, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p436-445

see Shimanovich, Semyon, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1687-1693

Meyer, Grant

Crystal Growth in Microgravity, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1295-1297

Meyer, John J.

High Density Polyethylene Pipe under High Fill: A Continuing Study, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with J. L. (Jack) Hilfiker, p77-87

Precast Concrete Low-Head Pressure Pipe Significant in Historic Irrigation Canal Rehab, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Steven K. Wagner, p265-274

Meyerson, Robert E.

see Campbell, Charles H., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p392-398

Meza, David

see Carrasco, Cesar J., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1141-1147

Meza, Raul

see James, George, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1127-1133

Michael, Barbara

see Rosenthal, Andrea, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2033-2038

Use of Geophysics to Aid in Mapping Basalts Relevant to Ground Water Flow and a Landslide Hazard at Hager-Ground water riow and a Landstole Hazarda in Hagerman Fossil Beds National Monument, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), with L. Growney and P. Donaldson, p14-26

Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Geotechnical Special Publication No. 62, with Richard Woods, ed., 1996, 0-7844-0208-6, 128pp.

Michalopoulos, Panos G. Cost Benefit Analysis of Video-Based Vehicle Detection, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), with Craig A. Anderson and Richard D. Jacobson, p176-182

Michalowski, Radoslaw L.

Michalowski, Radosiaw L.

Bearing Capacity of Footings over Two-Layer Foundation
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Failure of Fiber-Reinforced Granular Soils, with Aigen Zhao, GT Mar. 96, p226-234

Failure of Unidirectionally Reinforced Composites with Frictional Matrix, with Aigen Zhao, EM Nov. 96, p1086-1092

Micheels, Kurt Anthony
The Surface Extreme Environment Dwelling System (SEEDS) for Mars, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1020-1026

Michelini, Mark

see Bodnar, Randal F., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3206-3211

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Comparison of Some Simulation Algorithms on Basis of Distribution, with Maruvada V. Harish, EM Feb. 96, p172-176

Peculiarities of the Mode Shapes of Two-Dimensional Spinning Bodies, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Chris D. Eick, p1001-1004

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Ultimate Compressive Strength of Orthogonally Stiffened Steel Plates, with Kazuhisa Niwa, ST June 96, p674-682

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see Bokde, A. L. W., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1070-1073

An Interactive Operator Interface for Task-Level Direction of a Robot in Uncertain Environments, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Robert H. Cannon, Jr., p50-56

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Miles, Robert S.

Twenty-First Century Partnering and the Role of ADR, ME May/June 96, p45-55

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see Brown, Cheryl A., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p681-694

Milke, Mark W.

see Birchler, Deborah R., EE Sept./Oct. 94, p1109-1131

Miller, Arthur C.

see Johnson, Dennis L., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3200-3205

Miller, B. A.

Critical Needs for Sustainable Water Resources: Bridging the Gap Between Science and Implementation, (North American Water and Environment Congress & Destruc tive Water, Chenchayya Bathala, ed., 1996), with M. J. Sale, p1297-1298

Miller, Bill

Naturally-Occurring Chemical Analogues for Repository-Derived Radionuclides, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p50-52

Miller, Calvin D.

Experimental Study of One-Dimensional Immiscible Fluid Drainage in Layered Sands, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Deanna S. Durnford, p628-638

Miller, Dale E.

Design Guidelines for Bioengineered Bank Stabilization, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

Miller, Daniel P.

Environmental Improvement in Southern Africa, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1069-1074

Miller, Eugene A. What Is the Standard of Care?, ME Nov./Dec. 96, p40-46

Miller, Ian

Probabilistic Simulation of Geologic Waste Disposal Facilities Using the Repository Integration Program (RIP), (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Rick Kossik, p944-964

see Van Zyl, Dirk, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p563-585

Miller, James D.

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Miller, John

Frequency Distributions and Bayesian Techniques for Estimating Performance in Composite Materials, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with José Gomez, p492-501

Miller, John P.

Seismic Base Isolation Study for a Kentucky Building, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Nathan C. Gould, p389-396

Miller, Julianne I.

Mitigation of Flood Hazard on Alluvial Fans, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Richard H. French, p2324-2329

Miller, Marilyn L.

see Lau, Robert W., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p418-425

Miller, Percival A.

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see Qasim, Syed R., EE Sept. 96, p875-878

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Miller, W. L.

see Townsend, T. G., EE Apr. 96, p263-268

Milligan, Darrell

see Vaith, Kartik, (North American Water and Environment Congress & Destructive Water, Chenchavva Bathala, ed., 1996), p64-74

Milligan, James E. Effective Subsurface Retention/Detention Systems, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2276-2281

Milligan, Victor

see Van Zyl, Dirk, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p563-585

Mills, William R., Jr.

Groundwater Recharge with Reclaimed Water Another Step Closer to Potable Reuse, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3898-3903 Implementing a Successful Conjunctive Use Program,

(North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996). p3074-3078

Millwater, Harry R.

Implementation and Application of Parallel Processing Computer Methods for Probabilistic Analysis, (Probabi listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p266-269

see Riha, David S., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p922-925

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Flood Forecasting Based on Radar Rainfall Measurements, with E. A. Baltas, WR May/June 96, p151-156

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Verification of the Bruun Rule for the Estimation of Shoreline Retreat Caused by Sea-Level Rise, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Hisamichi Nobuoka, p607-616

Minciardi, Riccardo

Miniciard, Riccardo Customer Oriented Train Scheduling in Underground Rail-way Systems, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Massimo Paolucci and Raffaele Pesenti, p149-153

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see Asselin, Stephane, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p512-517

Mines, Richard O., Jr.

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see Angelbeck, Donald I., EE Jan./Feb. 94, p122-137

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Glazed Opening Designs for Windborne Debris Impact, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p117-118

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see Roca, P., ST Dec. 96, p1427-1436

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Development of Probabilistic Earthqake Damage Estima-tion Models, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with C. Scawthorn, p243-244

Mirmazaheri, Mike

Dredging in the Southern Sacramento-San Joaquin Delta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., p2636-2641

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see Shahawy, Mohsen, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p73-82

see Xu, Zefang, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p366-369

Mirza, C.

disc. (of Geotechnical Properties of Oil-Contaminated Kuwaiti Sand, by Hasan A. Al-Sanad, Walid K. Eid and Nabil F. Ismael, GT May 95, p407-412), GT Sept. 96, p786

Mirza, S. Ali

Physical Tests and Analyses of Composite Steel-Concrete Beam-Columns, with Ville Hyttinen and Esko Hyttinen, ST Nov. 96, p1317-1326

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Rectangular Plates Resting on Tensionless Elastic Foundation: Some New Results, with Sekhar K. Chakrabarti, EM Apr. 96, p385-387

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see Vallikat, Vinod, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p293-294

see Xiang, Yanyong, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p108-110

see Yang, H. Xin, (High Level Radioactive Waste Manage ment, Technical Program Committee, 1996), p308-

Misra, Anil

ASR Behavior of Class C Fly Ash Modified Cement, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with H. P. Niu, Bryan R. Becker and Jinshi Liu, p348-355

Behavior of Crumb Rubber Modified Hot Mix Asphalt, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with H. P. Niu and Yi-Herng Lee, p144-153

Deformation Patterns in Biaxial Shear of Particulates, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Hongjun Jiang, p568-571

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see Soga, Kenichi, (Measuring and Modeling Time De-pendent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p243-257

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A Predicting Method of Typhoon Wind Damages, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Takeshi Fujii and Ichiro Nagashima, p970-973

Mitteau, Jean-Claude

Printeau, Jean-Claude

Error Estimates for FORM and SORM Computations of Failure Probability. (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p562-565

Social Consequences of Flood Mitigation, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p369-370

Mitts, T. M.

see Vo, T. V., (Risk-Based Decision Making in Water Re-sources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p326-

Miura, N.

see Bergado, D. T., Soft Ground Improvement in Lowland and Other Environments

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see Yoshizawa, Hiroyuki, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1608-1616

see Goda, Yoshimi, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p269-280

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Mobasher, B.
A Computer Controlled Filament Winding Technique for Manufacturing Cement Based Cross-Ply Laminates, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with A. Pivacek, p.1347-1356
Effect of Copper Slag on the Hydration of Blended Cementitious Mixtures, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with R. Devaguptapu and A. M. Arino, p1677-1686

Mobasheran, Amir S.

Impacts of SNF Burnup Credit on the Shipment Capability of the GA-4 Cask, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with William Lake and John Richardson, p330-332

Mobley, Mark H.

Aeration of Reservoirs and Releases TVA Porous Hose Line Diffuser, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with W. Gary Brock, p1311-1316

see Hadjerioua, Boualem, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3188-3193

see Smith, G., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p783-794

Mockros, L. F.

Engineering Design Considerations for Artificial Lungs, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with K. E. Cook, p33-34

Modak, Abhljit R.

Optimal Regional Scheduling of Solid Waste Systems. II:

Model Solutions, with Jess W. Everett, EE Sept. 96,

see Everett, Jess W., EE Sept. 96, p785-792

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Adaptive Diffuse Element-Finite Element Technique for Transient Analysis in Porous Media, (Engineering Me-chanics, Y. K. Lin and T. C. Su. 1996), with Philippe Aubert, p1082-1085

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see Naess, Arvid, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p514-517

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see Reaveley, L. D., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1123-1130

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disc. (of Simulated Seismic Load Tests on Reinforced Concrete Columns, by S. Watson and R. Park, ST June 94, p1825-1849) with A. M. Rodríguez and D. E. Lehman, ST Feb. 96, p218-219

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Permanent Deformation and Fatigue Characteristics of SMA Mixtures, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Harold R. Paul, p622-630 see Puppala, Anand J., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p559-562

Mohammadi, Jamshid

see Ghosh, S. K., ed., Building an International Community

see Ghosh, S. N. Cu. Bulleng an International Community of Structural Engineers
see Kritzler, Robert W. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p682-687

see Weiwen, Luo, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p42-45

see Zuo, Jiahong Jane, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1042-1045

Mohan, S.

Multiobjective Optimization of Multireservoir System, Multiobjective Optimization of Multireservoir System, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with K. Elango and M. G. Devamane, p1968-1975 disc. (of Comparison of Methods for Estimating REF-ET. by D. M. Amatya, R. W. Skaggs and J. D. Gregory, IR Nov./Dec. 95, p427-435) with N. Arumugam, IR Nov./Dec. 96, p361-362

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Changes in OSHA in the Last 25 Years, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p93-112

Mohr, Gunnar

Higher Moments of Weighted Integrals of Non-Gaussian Fields, (Probabilistic Mechanics & Structural Reliabiliry, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p254-257

Mohraz, Bijan

The Design of Building Structures by Wolfgang Schueller, AE June 96, p82-83

An Appropriate Technology to Treat Domestic Sewage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2748-2753

Wastewater Reuse: An Alternative for Potable Water, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), n2976-2981

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A Review of Dynamic Behavior of Sector Plates and Curved Bridge Decks, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with I. E. Harik, p993-996

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Application of Neural Networks for the Performance Eval-uation of Bridges, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with Karen C. Chou, p298-301

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Control of an Irrigation Canal, with J. P. Miles, HY July 96, p403-410

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An Architecture Integrating Symbolic and Connectionist Models for Traffic Management Center Decision Support, (Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Filippo Logi, Stephen G. Ritchie and Jose Cuena, p320-324

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see Yang, Chih Ted, HY May 96, p237-244

Insect Robots: Case Studies for Teaching Students About Design of Computer-Aided Experimentation, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Osama Ettouney, p310-316

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Depth-Averaged Boussinesq Equations Applied to Flow in a Converging Channel, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Gang Zhao, p328-333

disc. (of ORP Measurement in Anaerobic Systems Using Flow-Through Cell, by Munish Gupta, Ashutosh Gupta, Makram T. Suidan, Gregory D. Sayles and Joseph R. V. Flora, EE Nov./Dec. 94, p1639-1645), EE Mar. 96,

Monadjemi, Parviz

Alternative Urban Flood Control, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2540

Aspects of River House Cleaning During Floods, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2192

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see Walton, Raymond, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p352-357

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A Model of the Juncture Vortex, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with M. R. Dhanak, p1126

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Moisture Removal from the Repository by Ventilation and Impacts on Design, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Nick Stellavato, p423-425

Simulation and Observation of ESF Tunnel Effects on Barometric Conditions, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Nick Stellavato, p92-94

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see Biggiero, Luigi, (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p66-70

gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p59-65 see Cascetta, Ennio, (Applications of Advanced Technolo-

Montemarano, Thomas W. see Focht, Eric M., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p91-99

Montes, J. S. disc. (of Normal-Depth Equations for Irrigation Canals, by Prabhata K. Swamee, IR Sept./Oct. 94, p942-948), IR Jan./Feb. 96, p67-70

Jan/Feb. 96, pof-70

Montgomery, F. O.

PRIMAVERA: A Best Practice Manual for Innovative UTC Schemes, (Applications of Advanced Technologies in Transportation Engineering, Vorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with A. D. May, K. A. Fox, F. Biora, V. Mauro and S. Jones, p680-684

PRIMAVERA: Integrated ATT Strategies for Urban Arterials, (Applications of Advanced Technologies in Transportation Engineering, Vorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with A. D. May, K. A. Fox, F. Biora, V. Mauro and S. Jones, p685-689

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Monti, Giorgio

Nonlinear Response of Bridges under Multisupport Excita-tion, with Camillo Nuti and Paolo E. Pinto, ST Oct. 96, p1147-1159

IFMS: Evaluation of Pilot Projects, (Applications of Ad-Vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p475-479

Montoya, Frank P.

see Samad, Mohammed A., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2288-2293

Moody, Shirley

see Marqués, Antonio, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p134-138

Moon, Sungwo

Graphic-Based Interactive Path Planning for Large-Scale Bridge Maintenance Cranes, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Leonhard E. Bernold, p79-85

Moon, Young-Il

Atmospheric Flow Indices and Interannual Great Salt Lake Variability, with Upmanu Lall, HE Apr. 96, p55-62

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disc. (of Design—Cornerstone of Your Career: Advice for Young Engineers, by Rodney Attwood, El July 94, p241-245), El July 96, p135

disc. (of The Importance of Being Historical: Civil Engineers and Their History, by Jane Morley, El Oct. 94, p419-428), El Jan. 96, p46-47

Mooney, M. A.

Issues of Uncertainty Regarding Localized Strains in Granular Soils, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with R. J. Finno, G. Viggiani and W. W. Harris, p312-

Mooney, Michael A.

see Finno, Richard J., GT June 96, p462-473

Moore, Brian M.

Santa Ana River Mainstern Project, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2169-2175

Moore, Mike

Identifying Potential Trophic Relationships and Bioaccu-mulation Pathways Between Fish and Invertebrates, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Don Maurer, George Robertson, Hai Nguyen and Tom Gerlinger, p1699-1704

Moore, N. R.

Probabilistic Fatigue Life Analysis of High Density Electronics Packaging. (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with E. A. Kolawa, S. Sutharshana, L. E. Newlin and M. Creager, p886-889

Probabilistic Simulation of Decomposition of Liquid Propellant, (Probabilistic Mechanics & Structural Reliabili- Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with N. W. Ferraro, D. H. Ebbeler, L. E. Newlin, J. J. Blandino, R. A. Beaudet, C. M. Moran and S. H. Moore, p640-643

see Ebbeler, D. H., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p776-779

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see Reed, Brian E., EE Jan. 96, p48-50

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see Moore, N. R., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p640-643

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Moore, 1 imothy F. see Wildermuth, Mark J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3300-3313

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Moo-Young, Horace K. Geotechnical Properties of Paper Mill Sludges for Use in Landfill Covers, with Thomas F. Zimmie, GT Sept. 96,

Moo-Young, Horace K., Jr.

Predicting the Level of Frost Penetration into Landfill Covers, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Thomas F. Zimmie and Morris H. Morgan, III, p745-756

Mora-Camino, F.

see Pereira, A. Lopes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p99-103

Mora-Camino, Félix

see Pereira, Amaranto Lopes, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p639-643

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see Afshar, Abbass, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1962-1967

Morain, Stanley A.

Statist Century Earth Observing Systems: Emerging Role for Spaceports, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p245-253

see Moore, N. R., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p640-643

Moran, Donald M.

see Timerson, Benjamin J., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), pl15-126

Morelli, Ugo

The FEMA Program of Seismic Safety of Buildings, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p159-160

see Rojahn, Christopher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p276-277

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Controlling Microbial Biota Transfer in the Garrison Diversion Unit, with David M. Kopchynski and Tia L. Cruise, WR May/June 96, p197-204

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Morgan, Michaet C. Flood Quantiles for Small Watersheds Using Peak Eleva-tion to Volume Method, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Eric D. Loucks, p146-151

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see Duran, C., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1095-

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Mori, Yasuhiro

Probability Analysis Method Using Fast Fourier Transform, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Jun Sakamoto and Takayoshi Sekioka, p696-699

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Aid-to-Decision for Variable Message Sign Control in Motorway Networks during Incident Condition, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p378-382

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"Acts of God": The Symbolic and Technical Significance of Foundation Failures, CF Feb. 96, p23-31
The Importance of Being Historical: Civil Engineers and Their History, EI Oct. 94, p419-428

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Sediment Impacts on Yield from a Two-Reservoir System in Puerto Rico, (North American Water and Environ Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2103-2108

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see Jeffries, M. O., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p855-865

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see Auchard, B., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p4004-4009

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An Analysis of Damage from Hurricane Andrew; A Dissenting View, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p293-294

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Use of a Technical Clearinghouse during Emergencies, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Richard K. Eisner, James F. Davis and Michael S. Reichle, p309-310

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see McGraw, Kirk D., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p739-745

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A Technique for the Direct Measurement of the Aerated Zone Resulting from Field Air Sparging Operations, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Ron W. Falta, David S. Henderson and Chris A. Kern, p127-138

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Experimental Study of the Flow Around a Breakwater, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Luc Hamm, p501-

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Measurement of Indoor Bioaerosol Levels by a Direct Counting Method, with Daniel K. Cha and Jon Qian, EE May 96, p374-378

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Risk Based Analysis of Major Rehabilitation of Hydraulic Structures Using REPAIR, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2498-2503

Moser, David A.

see Haimes, Yacov Y., (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p422-434

see Haimes, Yacov Y., ed., Risk-Based Decision Making in Water Resources VII

see Skaggs, L. Leigh, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2403-2408

Moses, Fred

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see Ghosn, Michel, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p716-719

Moshchuk, Nikolai

Moment Lyapunov Exponent and Stability Index for Linear Stochastic Systems with Small Diffusion, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Rafail Khasmigetti 6738-541. Khasminskii, p538-541

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Moskowitz, Joel

Canal Road Water Treatment Plant Intake Tunnels, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Robert T. Wisniewski, II, Vincent Tirolo and Peter Evensen, p322-331

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Guideline for Automatic Docking in Space, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p164-170

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Progress in Chemical Admixtures: Where Are We?, CE Mar. 96, p6

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A Preliminary Design of a Pilot Plant for the Production of Lunar Oxygen. (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), with A. R. Martin, P. W. Cains, P. D. Martin and G. Tan, p762-768

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Evaluation of Structural Integrity of Damaged Masonry Building, with Farouk A. El-Hakim, CF May 96, p73-78

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Development of the Deterministic Caltrans Seismic Hazard Map of California, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p297-298

see Frankel, A., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p173-174

Mueller, David S.

Detailed Measurements of Scour at Bridges, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2541-2549

Laboratory Evaluation of a Conductivity Probe for Scour Monitoring, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Mark N. Landers, p4154-4163

see Landers, Mark N., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3052-3061

Mueller, K. J.

A Wheeled Mobile Robot for Automated Pavement Crack Sealing, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with D. Hong and S. A. Velinsky, p178-184

Mueller, R. T.

see Meegoda, Jay N., (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p31-46

see Meegoda, Jay N., (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), pl-16

see Rizkalla, S. H., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1063-1071

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see Mullen, Robert L., (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p310-313

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Estimation of Flood Forecasting Errors and Flow-Duration Joint Probabilities of Exceedance, with Nada Monsour, HY Mar. 96, p130-140

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Rates of Release of PAHs from DNAPL Mixtures, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Catherine A. Peters and Walter J. Weber, Jr., p575-582

Mullen, C. L.

see Cakmak, A. S., (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p200-210

Mullen, Robert L.

Structural Analysis with Fuzzy-Based Load Uncertainty, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Rafi L. Muhanna, p310-313

Evaluation of Design Wave Impact Pressures, with T. J. T. Whittaker, WW Jan./Feb. 96, p55-58

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Photoelastic Determination of Contact Stresses of Foundations, GT Aug. 96, p692-696

Muller, Philip

Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p958-961

see Rizos, D. C., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p480-486

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see Thilakasiri, S., (disc), GT Aug. 94, p1394-1412

see Engebretson, Dan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1592-1600

see Sen, Rajan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1601-1607

Mulvihill, Michael E.

see Crum, James M., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4125-4130

Muncy, Fredrick M.

Smithfield Interceptor Force Main River Crossings, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996). p173-179

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see Haimann, Richard, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p431-441

Munns, A. K.

Measuring Mutual Confidence in UK Construction Projects, ME Jan./Feb. 96, p26-33

Muñoz, Rebecca F.

Agroforestry as a Method of Salt and Selenium Management on Irrigated Land in the San Joaquin Valley, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Vashek Cervinka, p400-405

Munson, D. E. see Fossum, A. F., EM Mar. 96, p209-217

Munson-McGee, Stuart H.

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Energy Dissipation in Dynamic Failure Simulations, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Karsten Rix and Kaspar Willam, p1046-1049

see Hansmire, William H., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p385-387

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see Ito, Masahiro, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p698-708

Murakami, Linda K.

Environmental Justice: An Issue for States, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Sia Davis and Deb Starkey, p480-482

Prediction of Time-Dependent Behaviour of Remolded Soft Marine Clay in Axi-Symmetric Undrained Conditions, (Measuring and Modeling Time Dependent Soil Behav-ior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), with Kazuya Yasuhara and Kaoru Bessho, p181-

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Between the Devil and the Deep Blue Sea: A Tale of Two Scientific (?) Analyses, El Jan. 96, p1-5

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see Nakatsuji, Keiji, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p618-631

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see Harleman, Donald R. F., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4096-4100

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see Kogiso, Nozomu, (Building an International Comm ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p627-634

see Okada, Hiroo, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p150-153

see Shao, Shaowen, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p704-707

see de Vries, Marten J., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p64-67

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see Chen, Dar-Hao, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1018-1021

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Strategies for Searching an Area with Semi-Autonomous Mobile Robots, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with J. Jake Sprouse, p22-28

see Blitch, John G., (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p36-42

see Gifford, Kevin K., (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p15-21

Murphy, S.

System Effects and Uplift Capacity of Roof Sheathing Fas-teners, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), with S. Schiff, D. Rosowsky and S. Pye, p765-770

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Seismic Rehabilitation of a Non-Ductile Concrete Frame Building Using Shearwalls, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with James H. Parker, p373-380

Murray, Thomas M.

see Hanagan, Linda Morley, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p428-435

Water-Related Hazards: India's Experiences, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3275

Muscolino, G.

Probability Density Function of Linear Systems Subjected to a Random Stream of Poisson Pulses, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with G. Ricciardi, p388-391

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Dynamically Modified Linear Structures: Deterministic and Stochastic Response, EM Nov. 96, p1044-1051

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see Peralta, R. C., WR Nov./Dec. 95, p490-498

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see Tart. Rupert G., Jr., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p923-934

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see Furmańczyk, Kazimierz, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1018-1023

Musolino, G.

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An User Behaviour Analysis in Signalized Urban Intersec-tions by Artificial Neural Network, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Giuseppe Reitani and Savino Rinelli, p208-

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see Nakagawa, Masami, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p386-389

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Fatigue Strength of Externally Reinforced Concrete Beams, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with R. L. Sierakowski, p648-656

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see Hotchkiss, Rollin H., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3399-3404

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see Borovikova, L. N., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p454

Myers, Garry D.

More Research Needed for Steel Moment Frames, CE July 96, p29,31

Myers, John W.

Balancing Aviation, Highway, and Development Needs: Multimodal Planning at Indianapolis International Airport, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Senevirance, ed., 1996), p.24-33

see Yoshizawa, Hiroyuki, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1608-1616

Naaman, Antoine E.

Investigation of the Use of Carpet Waste PP Fibers in Con-crete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Sandra Garcia, Marwan Korkmaz and Victor C. Li, p782-791

see Alwan, Jamil M., (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p474-483

Nabak, William F.

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see Bogardi, Istvan, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p61-

Nader, Marwan N. Shaking Table Tests of Rigid, Semirigid, and Flexible Steel with Abolhassan Astaneh-Asl, ST June 96,

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An Approximation Method for Estimating Extremes of Narrow-Band Non-Gaussian Random Vibration, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Tor Espen Hagen, p90-93

A Method for Extrapolation of Extreme Value Data, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Random Vibration of a Hysteretic Oscillator, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Vibeke Moe, p514-517

Stochastic Response of Offshore Structures Excited by Drag Forces, with Solomon C. S. Yim, EM May 96, p442-448

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Lateral Load Behavior of High Strength Fiber Reinforced Concrete Columns, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with David H. Sanders, p396-407

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Response of Base Isolated USC Hospital Building in the 1994 Northridge Earthquake, (Analysis and Computa-tion, Franklin Y. Cheng, ed., 1996), with Xiaohong Sun, p212-223

System Identification Study of a 1:10 Scale Steel Model using Earthquake Simulator, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Xiaojiang Ma, p764-

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The Direction of the Point Source Program, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Gregory W. Currey and Will Hall, p3580-3585

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Technology for Mining of Building Materials at First Stages of Moon Development, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p830-839

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see Singh, Y., ST Nov. 94, p3105-3121

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see Landis, Eric N., (Engineering Mechanics, Y. K. Lin and

T. C. Su, 1996), p637-640
see Landis, Eric N., (Materials for the New Millennium,
Ken P. Chong, ed., 1996), p1330-1336

Nahajski, Anthony P.

Monitoring Scour at Bridge Piers in Snohomish Co., WA, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1156-1161

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Nair, R. Shankar, P.E.

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Coastal Evolution Downdrift of St. Joseph Harbor on Lake Michigan, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with L. E. Parson,

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Modeling Stress-Strain Response of Clay Using Neural Nets, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Imad A. Basheer and Hossam A. Ali, p697-700

A Neural Network Approach for Site Characterization and Uncertainty Prediction, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Imad A. Basheer, pl34-148

disc. (of Artificial Networks and Durability of Sphinx Limestone, by Jayanta K. Bandyopadhyay, Srinivas S. Yerrapragada and K. Lal Gauri, MT Aug. 95, p174-117) with Imad A. Basheer, MT Aug. 96, p179

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50, pa2-85) with intaid A. Basheer, VI Dec-98, p102-86 disc. (of Stress-Strain Modeling of Sands Using Artificial Neural Networks, by G. W. Ellis, C. Yao, R. Zhao and D. Penumadu, GT May 95, p429-435) with Imad A. Basheer, GT Nov. 96, p949-950
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see Starrett, Steven K., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1693-1698

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Kegregation in Hopper Flows, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Xiaoshan Lin and G. G. W. Mustoe, p386-389

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Improvement of Road Network Reliability under Different Route Choice Principles, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Hiroshi Wakabayashi and Yasunori lida, p594-598

Nakagiri, Shigeru

Finite Element Interval Estimation by Convex Model, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Nobuhiro Yoshikawa, p278-281

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see Masri, S. F., EM Apr. 96, p350-360

Optical Waveguide Solar Energy System for Lunar Materials Processing, Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with J. A. Case and C. L. Senior, p783-790

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see Fukumoto, Tadashi, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p707-721

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Coating of Steel Structures in Cold Regions, (Cold Regions Engineering: The Cold Regions Infrastructure—An In-ternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Taiichi Inaba and Akihiro Tamada, p173-184

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Local Sponsorship and Floodplain Management, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2350-2351

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Anticyclonic Upper Layer Residual Circulation and Estua-rine Circulation in Osaka Bay, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Tateki Fujiwara, p128-142

Three-Dimensional Modeling of Wind-Driven Upwelling of Anoxic Bottom Water 'A-oshio' in Tokyo Bay, (Estu-arine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Jong Sung Yoon and Koji Muraoka, p618-631

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Nand, Artsana Risk Analysis of Drinking Water Treatment and Supply Fa-cilities Handling Highly Hazardous Chemicals, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Bruno Loran and Morley Male, p776-780

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see Tulsiani, Vijay, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p142-

Grouted Anchors for Carbon FRP Tendon, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Jay Thomas, p527-534

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Improvements in Mining Technology, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p806-812

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Vagliasindi, Federico G. A., (North American Water and Environment Congress & Destructive Chenchayya Bathala, ed., 1996), p1801-1806

Náprstek, Jiří

Strongly Nonlinear Stochastic Response of a System with Random Initial Imperfections, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p740-743

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Long Term Prediction of Far-Field Heat Conduction, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Lixing Ma, p438-441

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Effect of Ground Condition on Earthquake Damage, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p233-234

Screening Hospitals and Fire Stations for Seismic Potentials in City of Tehran, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p349-350

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Laying Sequence Planning for Continuous Girder Rein-forced Concrete Floor System by Genetic Algorithms, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with S. Mukandai, K. Yasuda and H. Furuta, p79-90

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see Riccardi, G. A., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3704

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System Integration in Traffic Management Centres, (Applications of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p485-489

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Pavement Evaluation with Seismic Tomographic Imaging.
(Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), with D. Yuan, D. Doser and K. Dhanasekharan, p56-72

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Geochemical Modeling of Lead in Vadose Zone, (North American Water and Environment Congress & Destruc-tive Water. Chenchayya Bathala, ed., 1996), with R. S. Govindaraju, A. P. Schwab and L. E. Erickson, p1221-1226

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High-Strength, Rapid-Setting Concrete with Blended Cement, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1627-1636

Polyolefin Fiber Reinforced Concrete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Edward F. O'Neil, p113-122

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PsD Test on Four-Story R/C Building Designed According to Eurocodes, with A. V. Pinto, G. Verzeletti and G. E. Magonette, ST Dec. 96, p1409-1417

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Commercial Mining Activities for the Space Frontier, (Engineering. Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Russell J. Miller, David S. McKay and Brad R. Blair, p800-805

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Automated Tools for Spatially Distributed Rainfall/Runoff Modeling, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Norman L. Jones, p2903-2908 see Quimpo, Rafael G., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2915-2920

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see Perko, Howard A., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p689-698

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see Taggart, William C., (North American Water and Environnent Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p600-605

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A Strategy for Active Control of Tall Civil Structures Using Regenerative Electric Actuators, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with R. Krish-

Nesarajah, S.

see Thevanayagam, S., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1417-1431

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see Brocoum, Stephan J., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p272-273

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Deposition of Particles from a Vertical Jet, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with H. J. S. Fernando and A. A. Neves, p442-445

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Data Acquisition and Handling for the Minnesota Road Research Project, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Joseph A. Cornell, p510-514

Simulation of Dune and Nourished Berm Erosion During Storm Surges, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Hans-H. Dette, p850-861

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see Moore, N. R., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p886-889

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Microgravity's Effects on the Muscular System of the Human Body, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1298-

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see Naot, Dan, HY Nov. 96, p671-673

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MRI Studies of Direct Shear Tests on Round Particles, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996). with Marlene Kelley and James Sampson, p572-575

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Modelling of Thermal-Hydrological-Mechanical Processes in a Discrete Joint, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with A. P. S. Selvadurai and P. Flavelle, p60-63

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Automated Code Compliance Checking for Building In-spection, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), with Claude Bédard and Kinh Huy Ha, p1020-1026

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Space Sickness, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1303-1306

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see Sajjadi, S. G., (Estuarine and Coastal Modeling, Mal-colm L. Spaulding and Ralph T. Cheng, 1996),

Nicholl, Michael J.

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A One-Dimensional Cross-Shore Transport Model, (Coast-al Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with B. A. O'Connor, p795-805

Nicholson, Peter G.

Soil Creep and Creep Testing of Highly Weathered Tropi-cal Soils, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kalia-kin, ed., 1996), with Philip W. Russell and Clint F. Fujii, p195-213

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A Cost-Effective approach to In Situ Remediation of Soil and Groundwater at a Diesel Fuel Spill Site, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with James N. Baker, p1379-1386

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see Giannattasio, P., (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p500-504

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Wave Induced Reaction Forces and Tension in TLP Ten-dons, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Dadi S. Soemantri and Oriol R. Rijken, p586-587

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Nielsen, Søren R. K.
Path Integration Applied to Structural Systems with Uncertain Properties, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with H. Uğur Koylüoğlu, p6-9 see Köylüoğlu, H. Uğur, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p380-383
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Statewide Programming: Implementing Transportation-Policy Objectives, with Tracy L. Reed, G. Scott Ruther-ford and Pat Morin, IS Mar. 96, p30-39

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History and Heritage of German Coastal Engineering, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), with Hartmut Eiben and Hans Rohde,

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Environmental Justice: The Department of Energy's Re-sponse to Executive Order 12898, (High Level Radioac-tive Waste Management, Technical Program Committee, 1996), with Dee Wernette and Georgia Johnson, p483-

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The Tram Simulation in Helsinki - A New Research Method, (Applications of Advanced Technologies in Transpor-tation Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), with Kari J. Sane, p76-80

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Inelastic Strains of Porous Saturated Media, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p927-930

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A Heuristic Model for Particle Entrainment into Suspension, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Marcelo García, p812-815

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Nitao, John J.

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Rain Making: The Professional's Guide to Attracting New Clients by Ford Harding, ME Nov./Dec. 96, p6-7

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Simulation of Pulsatile Flow Past a St. Jude Valve, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with D. Bluestein and R. T. Schoephoerster, p330-333

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Nivargikar, Rao Significance of Geologic Features on the Contaminant Mi-gration from Landfill Sites, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Thomas Voss, p988-993 see Rodrigo, A. Mahendra, (North American Water and En-vironment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2027-2032

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Noonis, F. Flood Trends in Austria, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with P. Lorenz, p917 see Gutknecht, D., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p718

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see Dobson, S., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p673-676

see Dobson, S., (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p838-841

see Wang, Y., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p954-957

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see Shakeri, C., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p863-876

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Probabilistic Stability Analysis of Shallow Arches, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with K. S. Hussain, p124-127

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Professional Associations Offer Design Resources for Civil Engineers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3343-3348

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Nottingham, T.

see Christopherson, A. B., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996, p315-326

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Hazard Assessment of Extreme Earthquakes and Floods Using the Theory of Outstanding Values, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p66-67

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Target Safety Level for Bridges, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Vijay K. Saraf, p696-703

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Operational Aspects of Warning, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with N. S. Gavrilova, p1552

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see Siewert, Sam, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p122-128

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Managing the Impacts of Storm Surges on Victoria Island, Lagos, Nigeria, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3496

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Nyquist, Jonathan E.
Ground and Airborne Magnetic and Electromagnetic Surveys at a Hazardous Waste Site, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), with Les P. Beard and Don Johnson, p1-13

Nzewi, Emmanuel U.

Using Probabilistic Balancing Rules in the Development of Multi-Purpose Multi-Reservoir Systems Operation Models, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Wen Chen, p1948-1955

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BMP for Control of Agricultural Nonpoint Source Flow, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with J. C. Guitjens, p1489-1494

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Computer Optimization of a Groundwater Treatment Facility, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Thomas L. Theis, p2492-2497

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O'Connor, B.

see Prinos, P., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582

O'Connor, B. A.

Combined Refraction-Diffraction - Wave-Current Interaction Over a Complex Nearshore Bathymetry, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with P. B. Sayers and N. J. MacDonald, p173-184

see Nicholson, J., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p795-805

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Historic Concrete Structures Assessment and Repair, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with James M. Cutts and Gregory R. Yates,

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O'Connor, Kevin M.

Uncertainty in Evaluation of Historical Subsidence Measurements, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Sean M. Killen, Mark R. Chandler, Jan E. Stache and John A. Siekmeier, p710-726

O'Connor, Robert E.

Environmental Worldviews and Water Resources, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Sta-khiv, ed., 1996), with Richard J. Bord and Ann Fisher, p10-18

Public Attitudes, Behavior, and the Willingness to Sacrifice to Mitigate Uncertain Adversity: Water Management Implications for Climate Change, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Richard J. Bord and Ann Fisher, p1828-1833

O'Connor, Thomas P.

see Field, Richard, EE Aug. 96, p741-748

O'Connor, William P.

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Simple Method for Upgrading an Existing Reinforced-Concrete Structure, with Carlos J. Aldrete, SC Feb. 96, p47-50

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State-of-the-Art of Roller Compacted Concrete Pavement, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1439-1448

O'Gallagher, Joseph J.

Using Ultra High Solar Flux in the Lunar Environment: Production of Cement and Other Applications, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p571-577

Ogbe, Abigail A.

Municipal Solid Waste Characterization in a Cold Remote Region, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Christina Behr-Andres, p780-791

see Lannom, Donald A., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p226-237

Distributed Hydrologic Modeling of Humid Regions, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Brent A. Watts and B. Saghafian, p2909-2914

Experimental Uncertainty and Measurement Errors in Hydraulic Engineering, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1135-1138

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Soil Type Effect on NAPL Removal by Surfactant, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Mark A. Tumeo, p281-291

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see Okumura, Mikiya, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996),

Obi. Takao

Effects of Transport Model Alternatives Incorporating Precipitation on the Performance of Engineered Barriers, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Kaname Miyahara, Morimasa Naito and Hiroyuki Umeki, p274-275

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see Tamura, Yukio, (Building an International Community of Structural Engineers, S. K. Ghosh, e Jamshid Mohammadi, ed., 1996), p1244-1251

O'Holleran, Thomas P.

National High-Level Waste Systems Analysis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Keith Kristofferson, p315-316

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vironment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2550-2555

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Oio, S. O.

Effective Management and Control of Urban Flood Disas-ters in West Africa, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3705

see Adachi, Toshihisa, (Measuring and Modeling Time De-pendent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p61-95

A Method for Structural Reliability Analysis of Marine Method for Structural Reliability Analysis of Marine Structures Using Combined Plate and Frame Structure Models, (Probabilistic Mechanics & Structural Reliabili-ty, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Koji Masaoka, Yoshisada Murotsu, Shi-geyuki Hibi and Wataru Kiyokawa, p150-153

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Lunar Textile Method for the Shield Wall on the Lunar Surface, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Takao Ueno and Yasuhiro Ohashi, p889-895

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From Cholera to Cancer to Cryptosporidiosis, EE June 96, p453-458

disc. (of Environmental Engineering Forum, by Takashi Asano and George Tchobanoglous, EE Aug. 95, p548), EE May 96, p446-447

First Mars Outpost Architectural Study, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p928-934

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Crossing Fault Lines with Large Diameter Water Pipelines in the Houston Area, (*Pipeline Crossings 1996*, Law-rence F. Catalano, ed., 1996), p155-162

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Oleszkiewicz, Jan A.

Cold Temperature Nutrient Removal from Wastewater, (Cold Regions Engineering: The Cold Regions Infra-structure—An International Imperative for the 21st Cen-tury, Robert F. Carlson, ed., 1996), with Shahnaz Danesh, p533-544

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Joint Effort by ASCE and FEMA to Develop Flood Hazard Mitigation Standards, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Harry B. Thomas, p337-338

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see Maidment, D. R., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3411-3416

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Runoff Computation Using Spatially Distributed Terrain Parameters. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with David R. Maidment, p3212-3217

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Chaotic Advection in a Bioengineering System, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Victor Stickel and Rene Chevray, p450-453

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Oneacre, John

Oneaere, John Ground Water Variability at Sanitary Landfills—Causes and Solutions, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Debbie Figueras, p965-987

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High-Performance Pipe Products Fabricated with Reactive Powder Concrete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with William M. Dowd, p1320-1329

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O'Neill, Michael W. see Yoon, Gil L., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p759-773
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Role of Computing: Practitioners' Perspective, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), with Robert M. Henry and Thomas A. Lenox, p670-676

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Dynamic and Quasi-Static Design of High-Rise Buildings

Subjected to Wind Loads, (*Natural Disaster Reduction*,

George W. Housner, ed. and Riley M. Chung, ed.,

1997), with Guillermo Claure, p141-142

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Ooten, Robert

see Lynch, Gail, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2039-2043

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COASTMAP: An Integrated System for Environmental Monitoring, Modeling and Management, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Malcolm L. Spaulding and Craig Swanson, p2528-2532

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Salinity Management for the Upper Gila River, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with E. W. Wessman, p4257-4262

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The Mamala Bay Study, Oahu, Hawaii: Introduction, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Camilla M. Saviz, Jerry R. Schubel and Rita R. Colwell, p4101-4106

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Data Analysis for Computer Modeling of Thermal Dis-charges, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Shu-Fang Peng, p3758-3763

An Engineering Information System Application for Water Supply and Distribution Systems, (North American Water and Environment Congress & Destructive Water, Chenchayya Buthala, ed., 1996), with Sérgio Teixeira Coelho and Helena Alegre, p4214-4219

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The Importance of Plant Community Structure on Form and Function of Created Wetland Systems, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1197-1202

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FRP Applications in Geotechnical Engineering, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p535-544

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Effectiveness of Blast-Furnace and Gasifier Slags at Reducing Ingress of Chloride Ions into Portland Cement Concretes in Marine Environments, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1503

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Mobile Robots for Security, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Vladimir Kemurdjian and Boris Safonov, p290-295

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Ostendorf, David W.

Ostendorf, David W.

LNAPL Detection, Measurement, and Distribution in the Subsurface Environment, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Alan J. Lutenegger, Russell J. Suchana, Paul S. Cheever and Samuel J. Pollock, p91-102

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Fatigue Failures of Hexa'lliptical Steel Davit Arms Induced by Acolian Vibrations at Resonant Conditions, (Probabi-listic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p874-877

Resonance Induced Steel Cross-Arm Fatigue Failures, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p983-986

Oster, J. D.

California's Visions of Groundwater: a Water Source and a Salt Sink, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1936-1941

Ostertag, Claudia P.

Transition from Brittle to Quasi-Brittle Behavior in Fiber Reinforced Brittle Matrix Composites, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1219-1227

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Micromechanics of Damage in Random Composites, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with A. Al-Ostaz, I. Jasiuk and K. Alzebdeh, p362-363

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Stochastics of Sediment Transport, Shore Evolution and Their Input, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Zbigniew Pruszak, Grzegorz Różyński and Ryszard B. Zeidler, p963-974

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Monitoring Results of a Nearshore Disposal Berm, (Coast-al Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p547-558

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Spaceborne Fourier Transform Hyperspectral Imager, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Andrew D. Meigs and R. Glenn Sellar, p224-230

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A Fracture Mechanics Model for Shrinkage Cracking Ring, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with W. Yang and S. P. Shah, p861-864

Freeze-Thaw Durability of Concretes With and Without Class C Fly Ash, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with O. J. Lane, p939-948

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Anaheim State-of-the-Art Water Treatment Plant - Six years from Conception to Completion, (North American Water and Environment Congress & Destructive Water, Chenchavva Bathala, ed., 1996), p2654-2659

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History of Coastal Engineering in Great Britain, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), with Tritton Limited Development and Engi-neering Consultants, ed., p214-274

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System and Input Identification with Partially Correlated Load Processes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with N. P. Jones and J. H. Ellis, p138-141

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Experimental Implementation of Hybrid Control, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Z. Akbay, M. Uras and H. Aktan, p1172-1179

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Energy Dissipation in Concrete Materials Due to Viscoelas-tic and Damage Mechanisms, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Saurabh Bahuguna and Dimitris Soldatos, p857-860

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Response to Arbitrarily Time-Varying Forces Using Convex Model, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Shyh-Rong Tzan, p1252-1258

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Papadimitriou, C.

Asymptotic Approximation of Reliability Integrals for Uncertain Systems, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with J. L. Beck and L. S. Katafygiotis, p574-577

Response Cumulants of Nonlinear Systems Subject to Ex-ternal and Multiplicative Excitations, (Probabilistic Me-chanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with L. S. Kaand Mircea D. Grigoriu, ed., 199 tafygiotis and L. D. Lutes, p744-747

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A Probabilistic Formulation of Damage Detection, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Ephrahim Garcia, p350-353

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Passenger Information Terminals: Towards Standardisaissenger information ferminals. Towards Statusdations, tion, (Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with S. Basbas and D. Panayotakopoulos, p24-29

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A Note on the Incipient Motion of Sediment Particles, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with P. Diplas, M. Balakrishnan and C. Dancey, p657-

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Waves with Two-peaked Spectrum in the Gdańsk Bay, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p33-44

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Compression of Bonded Blocks of Soft Elastic Material: Variational Solution, with James M. Kelly, EM Feb. 96,

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Assessment of Risks of Flooding by Use of a Two-Dimensional Model, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with P. Farissier, p3915-3916

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Vision Technique for Platoon Driving, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Pascal Daviet and Sofiane Abdou, p666-675

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Equivalent Strength of Porous Fractured Rock, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p216-219

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Transport of Organic Compounds in Thermoplastic Geomembranes. I: Mathematical Model, with Joni P. Sakti and John A. Hoopes, EE Sept. 96, p800-806

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Structural Behaviour of High Strength Concrete Columns, (Worldwide Advances in Structural Concrete and Ma-sonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p365-374

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American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Tracy Hart, p4317-4322

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Incorporation and Rejection of Alum Sludge Flocs by an Advancing Freezing Front, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Anthony G. Collins and John P. Dempsey, p757-768

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Design Synthesis: Transcending to Stochastic Realm Part 3: Optimization, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p130-133

Mathematical Techniques & Software for Stochastic Design Optimization, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Chun Li, pl 18-121

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A New Direction in Remediation, with Ronald M. Klemovich, CE Apr. 96, p55-57

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The 1995 Floods of Rhine and Meuse - How Predictable are Water Levels in the Netherlands, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p249-250

Effects of Rectangular Foundation Geometry on Local Pier Scour, with S. K. Mahavadi, B. M. Brown and A. El Khoury, HY Jan. 96, p35-40

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Fart, A. Loss of Contaminants from Soil During Runoff Events, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), with S. Zou and B. McEnroe, p70-81

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Regionalization of Annual Precipitation Maxima in Montana, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p57-58

The Ranger Telerobotic Flight Experiment: Mission, Technologies, and Programmatics, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with David L. Akin, p136-142

Stabilization/Solidification of Hazardous Wastes Using Fly Ash, with Stuart H. Munson-McGee and Robert Steiner, EE Oct. 96, p935-940

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Turbulence Measurements in Saline Gravity Current Fronts, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Marcelo H. García, p914-917

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Decision Support Environment for Structural Steel, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with W. M. Kim Roddis, p371-382

A Decision Support Tool for the Steel Building Industry, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with W. M. Kim Roddis, p725-731

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Hydrologic Risk, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p416-418

Reliability of a Box Culvert Structure under a Levee during Project Floods, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with Mary Ann Leggett, p118-133 Pathak, R. C.

Constructional and Environmental Aspects of Structural Materials at Antarctica and Indian Himalayas, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p968-977

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Central Artery/Tunnel (CA/T) Project Environmental Permitting, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p2236-2241

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Recent Innovations in Undergraduate Civil Engineering Curriculums, with Anthony R. Ingraffea, El July 96, p123-133

Use of Traffic Information System in Congested Area, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with A. Sarpedon and G. Saulnier, p305-309

Pavich, Milan J.

Appalachian Piedmont Regolith: Relations of Saprolite and Residual Soils to Rock-Type, (Design with Residual Ma-terials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p1-11

Pavlov, Andre V.

Florida Department of Transportation's MastArm Program—Placing the Engineer in Control, (Computing in Civil Engineering, Josep Vanegas, ed. and Paul Chinowsky, ed., 1996), p473-479

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see Zhang, Dachang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1754-1759

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see Snyder, R. L., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p430-435

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see Wise, Louise P., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3574-3579

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see Davis, Cheryl K., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3696-3700

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An Approximate Method for Assessment of Seismic Damage on Buildings, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with Jeffrey S. Janover, p428-434

see Chang, Howard H., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996).

Pearson, David

see Young, Ken, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2775-2780

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Experimental Study of Steady and Pulsatile Flows in Models of Abdominal Aortic Aneurysms, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Tiffany J. Riehle, Matthew L. Parsons, Brian P. Giles and Edward I. Bluth, p318-321

Péchon, Philippe Comparison of Computed Three-Dimensional Wave-Driven Currents with Measurements, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Arnaud Desitter, p513-520

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Coast, (Coastal Dynamics '95, William R. Dally, ed. an Ryszard B. Zeidler, ed., 1996), with R. J. M. Sweet, H. N. Southgate, S. Boxall, A. Matthews, R. Nash, J. Aiken, H. Bottrell and R. Wilson, p1024-1034

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Characterizing In Situ DNAPL Distribution, Mobility State, and Dissolution, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remedia-tion, Lakshmi N. Reddi, ed., 1996), with Joy E. Ligé, Ian D. MacFarlane and Frank T. Barranco, p103-114

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Impact of Point and Nonpoint Discharges on the Water Quality of a Reach of the Red River of the North, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with G. Pad-manabhan, p2504-2509

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Pellegrini, P. F.

Enhanced Movements Estimation Methods for High Resolution Airport Surface Radar Images, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with A. Boccellari, E. Piazza and R. Valenti, p92-98

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Regional Groundwater Management with Health Risk Assessment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Yung-Hsin Sun, p1291-1296

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Information Technology for Better Management of Change, Cost and Schedule in Construction Projects, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), with Hong Chen, p613-619

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Insight into the Inelastic Response to a Fully Nonstationary Earthquake Ground Motion Model, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), with Joel P. Conte, p269-272

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The Use of Surfactants to Remediate NAPL-Contaminated Aquifers, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Linda M. Abriola and Laura E. Loverde, p221-232

see Prak, Dianne J. Luning, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p639-648

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Early Surveys in the Nation's Capital, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p86-95

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Networks, by Anthony T. C. Goh, GT Sept. 94, p1467-1480), GT Apr. 96, p323-325 see Ellis, G. W., GT May 95, p429-435

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An Adaptive Finite Element Model for Saturated and Unsaturated Porous Media, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with M. L. Lytle and D. B. Carrington, p105-107

Optimal Dispersed Ground-Water Contaminant Manage-ment: MODCON Method, with J. Solaimanian and G. R. Musharrafieh, WR Nov/Dec. 95, p490-498 err: WR Mar/Apr. 96, p150

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Peregrine, D. Howell

Vorticity and Eddies in the Surf Zone, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p460-464

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Pereira, A. Lopes

Using Fuzzy Logic in Aircraft Navigation Systems, (Appli-cations of Advanced Technologies in Transportation En-gineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with A. K. Achaibou and F. Mora-Camino, p99-103

Pereira, Amaranto Lopes Improved Path Selection in Congested Networks by Al Techniques, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Félix Mora-Camino, p639-643

Pereiro Luis S

Research Agenda on Sustainability of Irrigated Agriculture, with James R. Gilley and Marvin E. Jensen, IR May/June

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The Secondary Inlet of the Eastside Pipeline Project, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Aida G. Garabetian, p702-707

Value Engineering Changes to the Eastside Pipeline, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Fran-cisco Becerra and John Vrsalovich, p697-701

Resilient Modulus of Cement-Stabilized Phosphogypsum, with J. B. Metcalf, MT Feb. 96, p7-10

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Risk Assessment of Vapors in Cold Regions, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p360-371

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Stream-Aquifer Interaction Model with Diffusive Wave Routing, with Antonis D. Koussis, HY Apr. 96, p210-

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Mechanical and Load-Settlement Characteristics of Two Lunar Soil Simulants, with Craig R. Madson, AS Jan. 96,

Scale Effects of Shallow Foundations on Lunar Regolith, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Craig R. Madson, p963-972

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Surface Cleanliness Effects on Lunar Regolith Shear Strength, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with John D. Nelson and Willy Z. Sadeh, p689-698

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see Leroueil, Serge, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheal Victor N. Kaliakin, ed., 1996), p137-150

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see Lewis A. W., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p686-697

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The Changing Role of Construction Mitigation, (Civil Engi-neers Influencing Public Policy, Maureen K. Cotton, ed., 1996), with Kristin C. Lewis, p63-69

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Perry, Christopher J. Maximizing Resources to Produce High Quality Results. (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p958-964

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see Means, Brad, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1045-1052

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see Wolff, Thomas F., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p636-650

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see Fleischman, R. B., (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1139-1146

A Unified Description of Soil Behavior, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p281-284

Combining Geophysical and Well Data for Identifying Best Well Locations, with William E. Kelly, Istvan Bogardi and Robert J. Kalinski, WR Mar./Apr. 96, p97-104

eterman, Z. E.

Localized Alteration of the Paintbrush Nonwelded Hydro-logic Unit within the Exploratory Studies Facility, (High Level Radioactive Waste Management, Technical Pro-gram Committee, 1996), with R. W. Spengler, F. R. Singer and S. C. Beason, p46-47

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see Wallin, Bill, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p41-42

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Multicomponent NAPL Composition Dynamics and Risk, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Paula A. Labieniec and Christopher D. Knightes, p681-692

see Mukherji, Suparna, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p575-582

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Hydrologic Modeling System, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Arlen Feldman, p3776-

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Peters, John F.
Research to Application: Network Models to Simulate Flow and Transport in Heterogeneous Media, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Stacy E. Howington, p2571-2576

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Dilution of Dense Bottom Plumes, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), with Torben Larsen, p906-909

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Comparison of Near-Field Dilutions Derived from In Situ Measurements and Simulated Dilutions at the Sand Island Sewage Outfall Plume, HI, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with B. H. Jones, T. D. Dickey and P. J. W. Roberts, p3886-3891

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The Moon Within Our Grasp: A Strategy for Renewing Human Exploration of the Moon, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p133-139

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Fatigue Evaluation of Highway Bridges Using Ultrasonic Stress Measurements. (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Udaya B. Halabe, Paul Fuchs, Powsiri Klinkhachorn and Hota V. S. Gan-gaRao, p876-883

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see Angieli, Valer, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2536

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Methods of Experimental Research of Asteroid Properties in Space Missions, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with V. A. Simonenko and O. N. Shubin, p68-73

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Pettersson, Roger Approximations for Elasto-Plastic Oscillations with Gaussian White Noise Excitation, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p506-509

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Flow Induced Charging of Liquids in Reduced Gravity, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p545-551

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Salt-Saturated Concrete Strength and Permeability, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with F. D. Hansen and M. K. Knowles, p173-182

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Successful Implementation of Grouted Boulder Grade Control Structures on Drainageways in the Denver Metropol-itan Area, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p836-841 see Galuzzi, Michael R., UP Sept. 96, p101-108

ORDER: A Preliminary Concept for ORbital DEbris Removal, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p334-340

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Analysis of Shoring Loads Using Field Data, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with D. V. Rosowsky, p711-718

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Improved Analysis Techniques for the Capacity and Fatigue Assessment of TPG Railway Bridges, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Scott D. Schiff, p199-206

Solving Collection Problems to Increase Revenue: The Houston Experience, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4282-4287

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Design of Riparian Habitat Replacement in Active Flood-plains, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), pl.406-1412

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On Quantifying Inherent Soil Variability, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Fred H. Kulhawy, p326-340

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CCATS and CCIDS Technologies for Traffic Data and Incident Detection. An Overview of the Technology and the Main Applications, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with F. Lemaire, p183-187

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Prekering, Charles A.
Crossing the Cape Cod Canal; A Natural Gas Pipeline Interconnection, (*Pipeline Crossings 1996*, Lawrence F. Catalano, ed., 1996), p48-55

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Upper Chehalis River Pollutant Capacity and Load Alloca-tions, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1045-1050

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Pavement Design at Louisville: Optimizing Local Practice, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p187-198

Pierce, Phillip Windsor Bridge Pier Repairs, with Joseph Mieczkowski, SC May 96, p79-81

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Pavement Design for Rehabilitation and Minimizing Construction Effects on Aircraft Operations, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), with Lino H. Neri, Jr., p128-139

ierdinock, Michael J.

Peretunock, Michael J.
Delineation of a Dielectric Fluid LNAPL Using Discrete
Sampling Methods, (Non-Aqueous Phase Liquids
(NAPLs) in Subsurface Environment: Assessment and
Remediation, Lakshmi N. Reddi, ed., 1996), with Spence
S. Smith, Christopher L. Kingma and John Seferiadis, p139-150

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see Salazar, Guillermo F., (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p140-146

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disc: Bryant Mather, MT Nov. 96, p216 clo: MT Nov. 96, p216

Pigford, Thomas H.
The Yucca Mountain Standard: How Lenient Should It
Be?, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p263-266

Piggott, Andrew R.

Regression and Inverse Analyses in Regional Ground-Water Modeling, with A. Ghosh Bobba and Kent S. No-vakowski, WR Jan./Feb. 96, p1-10

Pigram, John J.

see Dudley, Norman J., (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p272-293

Pijaudier-Cabot, G.

see Delaplace, A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1171-1174

Pijaudier-Cabot, Gilles

Numerical Analysis of Damage in Lattices and Consequences on Continuum Modelling, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with A. Delaplace and S. Roux, p1034-1037

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Pilarczyk, Krystian W. see Hoffmans, Gijs J. C. M., HY Apr. 95, p326-340

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Pilkey, Orrin H.

see Bush, David M., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p185-186

Pinchuk, L.

Pinenus, L. Minimally Invasive Endoluminal Vascular Grafts, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with J. P. Dereume, H. Koniges, N. Frid, Y. P. Kato, B. A. Weber, J. B. Martin, I. J. Khan, R. Alcime, G. J. Wilson and D. C. MacGregor, p192-195

Pinder, George F., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p129-134

see Baxter, Sarah C., Engineering Mechanics, Y. K. Lin see Better, Sarah C., Engineering Mechanics, Y. K. Lin see Bednarcyk, Brett A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p628-631

see Bednarcyk, Brett A., AS Oct. 96, p93-105

Ping, W. Virgil

Evaluation of Engineering Properties of Problematic Soils in Highway Construction, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), with Sean McDonald and Robert K. H. Ho, p721-730

Pinheiro, Durval C. see D'Andrea, Robert, (disc), GT May 95, p407-412

Pintenich, Jeffrey L.
see Sauvé, Daniel S., (Non-Aqueous Phase Liquids
(NAPLs) in Subsurface Environment: Assessment
and Remediation, Lakshmi N. Reddi, ed., 1996),
p233-244

Pinto, A. V. see Negro, P., ST Dec. 96, p1409-1417

Pinto, Paolo E.

see Monti, Giorgio, ST Oct. 96, p1147-1159

Piorewicz, Jerzy Interaction Between Nearshore Natural Processes on Macro-Tidal Beaches. Case Study Along the Capricorn Coast, Australia, (Coastal Dynamics '95, William R.

Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Paul Boswood, p489-500

Piován, Marcelo T. see Cortínez, Víctor H., (disc), ST Mar. 95, p557-566

Pirbazari, Massoud see Badriyha, Badri N., (North American Water and Envisee Baunyia, Baunt N., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3010-3016 see Man, Malcolm K., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1209-1214

see Ravindran, Varadarajan, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1367-1372

see Williams, Mark, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1009-1014

Pirrotta, Antonina see Di Paola, Mario, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p930-933

Pitner, Patrice

see Ardillon, Emmanuel, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p692-695

Pitonzo, Beth

see Bergman, Dave, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p12-18

Pivacek, A

see Mobasher, B., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1347-1356

Piver, Warren T.

see Watkins, Paul S., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2366-2371

Plachco, Florencio P.

see Quisca A., Samuel, (disc), HY Dec. 94, p1350-1363

Planas, Jaim

see Bažant, Zdeněk P., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1179-1180

Plansky, Lee

An AI Agent Construct for Space and Planetary Science Applications, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), with Nancy Linarez-Royce, p341-348

Plas. M. A.

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Building Process Models for Design Management, CP July 96, p194-203

Flood Protection Using Inflatable Dams, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with S. Liapis and D. P. Telionis, p264-265

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Behavior of Three-Span Braced Columns with Equal or
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see Yoo, Rae-Hak, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p378-381

Plaxico, C. A.

A Micromechanical Model for Asphalt Materials, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with W. Uddin and R. M. Hackett, p761-770

Modeling Microtopography in Basin Irrigation, with J. M. Faci and A. Serreta, IR Nov./Dec. 96, p339-347

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Plizga, A. W.

see Winchell, F. C., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p881-886

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see Chambers, Donald R., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p667-672

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Negative Binomial Analysis of Intersection-Accident Fre encies, with Fred Mannering, TE Mar./Apr. 96, p105Pocock, James B.

Relationship Between Project Interaction and Performance Indicators, with Chang T. Hyun, Liang Y. Liu and Mi-chael K. Kim, CO June 96, p165-176

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see Frehs, Jim, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1331-1336

Podell, Leonard N.

Maryland SHA's Procedure for Assessing Existing Bridges for Scour Vulnerability and for Rating Unknown Foundations, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Stanley R. Davis and Dan Sajedi, p2766-

Podymov, I.

see Kos'yan R., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p651-663

see Edris, Earl V., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2577-2582

see Wingle, William L... (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), pl318-1330

Poh. K. W.

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clo: CF Feb. 96, p41

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Effective Stiffness Model for Reinforced Concrete Slabs, ST Sept. 96, p1025-1030

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see Greene, Marjorie, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p155-156

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see Day, Robert W., CF Aug. 96, p96-108

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Polasik, Stanley D.

Water Quality Mitigation for the San Joaquin Hills Trans-portation Corridor, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with John H. Knutson and James H. Lenhart, p3109-3114

Polidori, David C.

Approximate Solutions to Nonlinear Random Vibration Problems and the Fokker-Planck-Kolmogorov Equation, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with James L. Beck, p94-97

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see Tai, C. Charles, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p257-262 Pollak, Axel J.

Boston's Third Harbor Tunnel (Available only in Focus on Geo/Environmental Special Issue), with V. Peter Lalas, CE Mar. 96, p3A-6A

Pollard, Ritsuko

see Prian, Luca, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p54-62

Pollen, Jonathan D.

see Pollen, Michael R., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p494-505

Occurrence and Significance of Cryptosporidium parvum and Giardia lamblia in Surface Waters on Alaska's North Slope, (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Cindy L. Christian, Craig D. Nordgren and Jonathan D. Pollen, p494-505

Pollock, David G.

see Bracci, Joseph M., ST Nov. 96, p1357-1363

Pollock, Samuel J.

see Ostendorf, David W., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996),

Polonsky, V. F.

Physicostatistical Approach to River Delta Hydrology, HY June 96, p333-340

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see Rosenfeld, Arthur H., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1-13

Ponce, D.

see Majer, E., (High Level Radioactive Waste Manage Technical Program Committee, 1996), p151-154

Ponce, Victor M.

Runoff Curve Number: Has It Reached Maturity?, with Richard H. Hawkins, HE Jan. 96, p11-19

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see Vipulanandan, C., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p851-862

Ponti, M. A., Jr.

Lanfill Site Evaluation and Application of MODFLOW to simulate Hydraulically Conductive Zones in Bedrock As-sociated with Diabase Dikes in North Carolina, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p988-1002

Pooley, Bruce D., P.E.

Reinforced Glued Laminated Timber, CE Sept. 96, p50-53

see Maher, Mary Lou, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p77-83

Pope, R. B.

Fope, i. b.

Benefits/Impacts of Utilizing Depleted Uranium Silicate
Glass as Backfill for Spent Fuel Waste Packages, (High
Level Radioactive Waste Management, Technical Program Committee, 1996), with C. W. Forsberg, R. C.
Ashline, M. D. DeHart, K. W. Childs and J. S. Tang, p369-371

VOC Inventory at New York City Wastewater Treatment Plants, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Bert Aubrey and Demetrios Moschandreas,

Pope, Ron B.

see Forsberg, Charles W., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p366-368

Popescu, Radu

Influence of Spatial Variability of Soil Properties on Seismically Induced Soil Liquefaction, (Uncertainty in the Ge-ologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Jean H. Prevost and George Deodatis, p1098-1112

Simulation of Multi-Dimensional, Multi-Variate, Non-Gaussian, Homogeneous Stochastic Fields with Applica-tions to Soil Liquefaction, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with George Deodatis and Jean H. Prevost, p808-811

see Arora, Pankaj., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p203-212

see Coleman, D. H., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1281-1287

see Popova, S. N., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p988-996

see Ramasubramanian, M., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1007-1016

Popov, Branko N.

see Haran, Bala S., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p997-1006

Popov, Nikolay A.

Tornadoes and Severe Storms in Russia, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p133-134

Popova, S. N.

Corrosion Effects of Cement Stabilized Backfill on Galva nized Steel Reinforcement, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), with B. N. Popov, R. E. White, M. F. Petrou and D. Morris, p988-996

Modeling in Water Losses Evaluation for Nonhomogene-ous Furrow Set, with R. Kuncheva, IR Jan./Feb. 96, p1-6

Centrifuge Modeling of Geotextile-Reinforced Cohesive Soil Retaining Walls, with D. J. Goodings, GT Oct. 96, p840-848

Pornpinatepong, Somboon

Salt Transport Characteristics of Pak Phanang Estuary, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Malcolm L. Spaulding, p92-105

Porter, James C.

Substitute Goals, ME Jan./Feb. 96, p8-9

Porter, Jerry C.

see Sullivan, Edward C., (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p547-551

Porter, Wayne

see Dorratcague, Dennis, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p310-315

see McMillen, Morton D., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1123-1128

Ports, Michael

see Espey, William H., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2810-2814

Ports, Michael A.

see Froehlich, David C., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p225-226

see Shea, Conor C., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3662-3667

see South, Nathan R., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4300-4305

see Williamson, Randall D., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p729-735

see Nester, M. Russell, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p219-220

Postaire, J.-G.

see DeParis, J.-P., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p114-118

see Vannoorenberghe, P., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

Poston, David L

see Houts, Michael G., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p973-983

n, Randall W.

see Weaver, David L., (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p468-474

Postorino, Maria Nadia

Mobility Forecast in an Urban Area through the Use of Neural Networks, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Giuseppe M. L. Sarnè, p213-217

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see Bradley, A. Allen, HE Apr. 96, p63-68

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see Hauck, George F. W., (Civil Engineering History: En-gineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p53-65

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see Makarchian, M., GT Sept. 96, p745-751

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Effects of Vapor Extraction on Contaminant Flux to At-mosphere and Ground Water, with Joel W. Massmann and Per Moldrup, EE Aug. 96, p700-706

Powell, Charles D.

see Hancock, Bryan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p719-728

see Shea, Conor C., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3662-3667

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see Reid, Ian, HY Mar. 96, p170-173

Powell, L.

see Bennett, R. M., CF Nov. 96, p152-158

Powell, Mark D.

Hurricane Disaster Mitigation Through Real-time Wind Analysis, (Natural Disaster Reduction, George W. Hous-ner, ed. and Riley M. Chung, ed., 1997), with Samuel H. Houston and Ignacio Ares, p289-290

Powers, L.

see Gasparini, D. A., EM Feb. 96, p130-137

Powers, Myles

see Bonn, Betty, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p68-

Powers, R. G.

see Sagüés, A. A., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1522-1530

Powers, Susan E.

Wettability of NAPL-Contaminated Sands, with William H. Anckner and Thomas F. Seacord, EE Oct. 96, p889-896

see Anckner, William H., Jr., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p502-512

see Manivannan, Indumathi, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p563-574

Powers, William F., III

Suspicious" Implications Allayed, with Kerry B. Allen and Michael P. Bruen, CE Sept. 96, p31-32

Powers-Couche, L. J.

Fowers—Course, i. 3.

Behavior of Fresh Mortar in a Vacuum and Microstructure of Mortar Hardened in a Vacuum, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with T. D. Lin, p608-613

Pozzobon, P.

FOLLOWING, C. M. (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p44-48

Pradiwarter, H. J.

First Exit Times in Non-Linear Dynamical Systems by Advanced Monte Carlo Simulation, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with W. Kliemann, p523-526

see Schuëller, G. I., (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p966-969

Pradlwarter, Helmut J.

Pradiwarter, Heimut J.
On the Development of a Selective Algorithm in Advanced Monte Carlo Simulation, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Napat Hampornchai and Gerhart I. Schuëller, p14-17

Prak, Dianne J. Luning
Rate-Controlled Micellar Solubilization of an LNAPL in
Aquifer Materials, (Non-Aqueous Phase Liquids
(NAPLs) in Subsurface Environment: Assessment and
Remediation, Lakshmi N. Reddi, ed., 1996), with Kurt D.
Pennell, Linda M. Abriola and Walter J. Weber, Jr., p639-648

Prakash, Anand
Desorption of Soil Contaminants Due to Rainwater
Infiltration, HY Sept. 96, p523-525
Optimization of a Ground-Water Injection/Extraction Sys-

tem, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1167-1172

Prakash, J. see Hall, E., EE May 96, p424-429

Prakash, Shamsher

Prakash, Shamsher
Analysis and Design of Retaining Structures Against Earth-quakes, Geotechnical Special Publication No. 60, 1996, 0-7844-0206-X, 144pp.
Nonlinear Lateral Pile Deflection Prediction in Sands, with Sanjeev Kumar, GT Feb. 9, 130-138
see Wu, Yingwei, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p21-37

1996), p21-37

Embedded Crack Approach to Regularize Finite Element Solutions of Concrete Structures, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with J. C. Mould, Jr. and H. S. Levine, p554-558 Prasad, A. N.

Frasatt, A. N.
Indian Programme on Deep Geological Disposal of Radio-active Waste, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with K. Balu, R. K. Mathur and P. K. Narayan, p22-24

Prasad, Yenumula V. S. N.
Lateral Capacity of Helical Piles in Clays, with S.
Narasimha Rao, GT Nov. 96, p938-941
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GT Sept. 94, p1481-1497), GT Mar. 96, p257

Prat, Pere C.

see Bažant, Zdeněk P., EM Mar. 96, p245-254 see Bažant, Zdeněk P., EM Mar. 96, p255-262

see Gettu, Ravindra, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p506-517

Pratt, Anthony see Kriebel, David, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997),

Pratt, David L.

Preparing for the Big One - Risk Assessment and Mitiga-tion of a Major Earthquake, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p207-208

1991), 2017-202.
Utilizing Communications Strategies to Educate the Public on a Major Program, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p99-100
see Lau, Robert W., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p418-425

see McAnally, W. H., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p204-214

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Prevost, Jean H.

Frevost, Jean H.
see Popescu, Radu, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p808-811

see Popescu, Radu, (Uncertainty in the Geologic Environ ment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1098-1112

Prevost, R. C.

Structural Aspects of Pipeline Crossings, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p449-456

Prevost, Robert C.

disc. (of Reliability of Underground Pipelines Subject to Corrosion, by M. Ahammed and R. E. Melchers, TE Nov/Dec. 94, p989-1002), TE Sept/Oct. 96, p407-408

Thermogravimetric Analysis of Fiber Reinforced Plastics, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Ritsuko Pollard and Aaron Barkatt, p54-62

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see Schall, J. D., (North American Water and Environ Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p931-939

see Schall, J. D., (North American Water and Environ Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1990-1998

see Falta, Ronald W., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p257-268

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96, p461-463 disc: Julio A. Ramirez, ST Apr. 96, p463-464 clo: ST Apr. 96, p464-467

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see Smith, Daniel W., (Cold Regions Engineering: The Cold Regions Infraracture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p545-557

see Smith, Daniel W., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p570-581

Frinos, F. The 'Dynamics of Beaches' Project, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with A. S. Arcilla, N. Christiansen, J. van de Graaf, M. Hogedal, A. Lewis, B. O'Connor, F. Rivero and J. de Rouck, p571-582

Priore, Salvatore

see Foster, David, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remedia-tion, Lakshmi N. Reddi, ed., 1996), p583-594

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see Vance, R. E., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1183-1189

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Seismic Hazard Assessment of the NPPS in the ČR, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p179-180

Proctor, Joseph R., Jr.
Golden Rule of Contractor-Subcontractor Relations, SC Feb. 96, p12-14

Prokić, A.

New Warping Function for Thin-Walled Beams. I: Theory, ST Dec. 96, p1437-1442 New Warping Function for Thin-Walled Beams. II: Finite Element Method and Applications, ST Dec. 96, p1443-

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Conceptual Seismic Design Methods for Railroad Bridges, (Building an International Community of Structural En-gineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Kenneth E. Bruestle and Vinaya Sharma, p191-198

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see Hatfield, Jerry L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p418-423

Pruess, Theodore A.

Seismic Strengthening of Low Rise Buildings, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with John C. Theiss, p397-404

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see Ostrowski, Rafalł, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p963-974

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Long Term Scenarios for Europe in Space, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Angelo Atzei and David Raitt,

Puckett, Jay A.

see Gralund, Matthew S., CP Apr. 96, p97-105

Pufahl, Dennis E.

Frost Action, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p57-86

Puigpelat, Adrián Marín
DGT Architecture for Traffic Data Management Systems,
(Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Jesús López López, p238-

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Pupolin, Silvano

Pupolla, Silvano Outage Probability in Mobile Radio Communications in a Three-Dimensional Space, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Luciano Tomba and Michele Zorzi, p271-275

Puppala, Anand J.

Comparisons between Laboratory Measured and FWD Backcalculated Resilient Moduli, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Steven L. Cumbaa and William H. Temple, p347-350

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see Gambolati, Giuseppe, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p483-486

see Murphy, S., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p765-770

Pykhov, Nikolay V.

see Kuznetsov, Sergey Yu., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p720-727

Pyle, Richard

see Steele, Ken, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2815-2819

Pyle, Richard C.

see Zhou, James, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2958-2963

see Illangasekare, Tissa H., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p25-45

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see Ivarson, W. R., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1358-1366

Effect of Biodegradable Carbon on Biological Phosphorus Removal, with Walter Chiang, Guang Zhu and Rex Miller, EE Sept. 96, p875-878

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Effects of Non-Structural Elements on the Acceleration Response of Tall Multi-Story Buildings Under Wind Exci-tation, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p974-977

Multi-Coupled Disordered Periodic Systems, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p539-542

A New Method for Solving Large Deformation Problems, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p242-245

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Degradation and Toxic Effects of Acrylic Acid on Anaerobic Systems, with Sanjoy K. Bhattacharya, EE Aug. 96,

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Fate of Organics during Column Studies of Soil Aquifer Treatment, with Robert G. Arnold, L. G. Wilson, How-ard J. Gordon, David W. Graham and Gary L. Amy, EE Apr. 96, p314-321

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Recent Advancements in Smart Tagged Composites for In-frastructure, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Justin B. Berman, p1045-1054

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Quimby, T. Bartlett

Quinny, I. narry, I. narry, I. narry, I. narry, I. narry, I. narry, I. narry, I. Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Michael R. Fitzpatrick, p215-225

Quimpo, Rafael G.

Harnessing the Internet for Civil Engineering Course Delivery, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p355-361

Measures of Water Distribution System Reliability, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Hairnes, ed., David A. Moser, ed. and Eugene Z. Sta-khiv, ed., 1996), p388-395

On Communicating Hydrologic Risk, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p265-271

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Status Report - Task Committee on GIS Models and Distributed Models of the Watershed, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Paul A. DeBarry and E. James Nelson, p.2015-2920
see Bodnar, Randal F., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.3206-3211
see Nitivationno, Vijias WB Sept (Cr. 96, p.374-384)

see Nitivattananon, Vilas, WR Sept./Oct. 96, p374-384

Appropriate Sanitation Technology Advisor: A Planner's Tool in Less Developed Countries, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p.2993-2998

A System to Improve Water-Related Sustainability Characteristics of International Development Programs/Projects, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3259-3264

Quinn, Larry, P.E.

Sustainability: Another New Paradigm, CE Oct. 96, p6

Velocity Measurements of Post-Breaking Turbulence Genenacity Measurements of Post-Breaking Linducines coeffi-crated by Plunging Breakers, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Timothy C. D. Barnes, Simon T. Lloyd, Clive A. Greated and D. Howell Peregrine, p.293-304

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Thermal Impact of a Buried Chilled Gas Pipeline, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Xioalin Yuan and Dieter Weichert, p203-214

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see Kassimali, Aslam, (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p534-541

Rachwal, Tony

The Water Customer in Space, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Colin Waters and Tony Wachinski, p663-667

see Wachinski, Anthony M., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p668-672

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see Tang, Walter Z., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1273-1278

see Lin, W., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p122-124

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see Steinmanis, J. E., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p471-482

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Permeable Barriers to Remove Benzene: Candidate Media Evaluation, with S. Shelton and R. Dayaye, EE May 95, p411-415

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A Comparison Between Linear Stability and Direct Numerical Simulation of Waves in a Trailing Vortex, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1058-1061

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Effects of an Extended Set-Control Admixture on the Properties of Fresh and Hardened Concrete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1617-1626

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see Fenves, G. L., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p659-666

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Scaling-Up of Small-Scale Granular Sediment Transport Laws, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with P. K. Haff, p262-264

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Modeling Seasonal Furrow Irrigation, with W. W. Wal-lender, IR July/Aug. 96, p235-242

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A New Model of Risk Allocation for Construction Con-tracts based on Fair Liabilities between Parties, (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with David G. Carmichael, p35-

Rahman, M. S.

see El Zahaby, Khalid M., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1068-1082

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A Stochastic Model for Elastic-Plastic Fracture of Cracked Pipes, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p764-767

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disc. (of Modeling Non-Uniform-Sediment Fluvial Process by Characteristics Method, by Keh-Chia Yeh, Shian-Jang Li and Wen-Lin Chen, HY Feb. 95, p159-170), HY Apr. 96, p226-227

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Implicit Integration Procedures and Consistent Tangent Op-erators for Bounding Surface Plasticity Models, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), with S. Saigal, p140-143

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Coastal Engineering Laboratory and Field Measurements: Some Uncertainties in Measurement, (North American Water and Environment Congress & Destructive Water. Chenchayya Bathala, ed., 1996), p1139-1143

Raines, Gregory L., P.E. Honolulu's Street Relief, with James K. Honke, P.E., CE Sept. 96, p70-72

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Rainwater, Kenneth A.
see Kondisetty, Sudhakar R., (Uncertainty in the Geologic
Environment: from Theory to Practice, Charles D.
Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p927-943

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Rajbhandari, Haridarshan L.

Simulation of Dissolved Oxygen in Sacramento-San Joaquin Delta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Gerald T. Orlob and Francis I. Chung, p3545-3550

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A Morphology Model to Predict Erosion Near a Seawall, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with J. W. Kamphuis,

Ralls, Mary Lou
San Angelo High Performance Concrete Bridge in Texas,
(Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996),
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Constitutive Behavior of Granular Media Using a Lattice Type Model, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Muniram Budhu and George Frantziskonis, p713-716

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Ramakrishnan, V.
Performance Characteristics of Polyolefin Fiber Reinforced
Concrete, (Materials for the New Millennium, Ken P.
Chong, ed., 1996), p93-102
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see Zellers, R. C., (Materials for the New Millennium, Ken
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Dividing Rectangular Closed Conduit Flows, with Weimin Zhu and B. L. Carballada, HY Dec. 96, p687-691

Numerical Simulation of Hydraulic Jump, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with M. Hanif Chau-dhry, p4052-4057

Deriving a General Operating Policy for Reservoirs Using Neural Network, with V. Chandramouli, WR Sept./Oct. 96, p342-347

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Inhibiting Action of Calcium Nitrite on Carbon Steel Rebars, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with B. N. Popov and R. E. White, p1007-1016

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Petroleum Hydrocarbon Removal via Volatilization and Biodegradation at McGrath, Alaska, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Wayne L. Eberhardt, p94-105

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Modeling of Rattlesnake Creek Watershed Using "Swat"
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1996), with J. K. Koelliker and R. S. Govindaraju,
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see Costa, F. Vasco, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p413-428

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Studies on Herbal Desalination, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Varanasi Kaliprasad, p1015-1020

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Experiments with Elasto-Plastic Oscillator, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with O. Ditlevsen, p518-521

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Effect of Fiber Waviness on the Buckling of Composite Plates, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1102-1107

Elastic Stability of Composite Plates with Wavy Fibers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

onlinear Dynamics of Unidirectional, Fiber-Reinforced Tori, with Anthony N. Palazotto, EM Mar. 96, p271-276

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Water Quality Assessments, Los Angeles County Department of Public Works Storm Water Quality Assessments, Los Angeles, California, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with David Liu, p3993-3997

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Reductive Pyrolysis for the Destruction of Chloromethane:
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Water and Environment Congress & Destructive Water,
Chenchayya Bathala, ed., 1996), with Massoud Pirobazari,
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see Thevanayagam, S., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1210-1224

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Effect of Surface Water and Ground Water Interaction on Atrazine Transport to Pumping Wells. (North American Water and Environment Congress & Destructive Water, Chenchayva Bathala, ed., 1996), with David Soong, Deva K. Borah and George R. Roadcap, p1575-1580

Use of Artificial Neural Networks for Agricultural Chemi-cal Assessment of Rural Private Wells, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Kristopher K. Klindworth, p1687-1692 Raynal-Villasenor, Jose A.

FLODRO 2.0: A User Friendly Personal Computer Package for Flood and Drought Frequency Analyses, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p304-309

see White, D. C., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1645-1650

Reaveley, L. D.

Reavery, L. D.

Guidelines and Commentary for the Seismic Rehabilitation of Buildings (ATC - 33), (Building an International Community of Structural Engineers, S. K. Ghosh, et and Jamshid Mohammadi, ed., 1996), with D. Shapiro, J. Mochle, T. Atkinson, C. Rojahn and W. Holmes, p1123-

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George W. Housner, ed. and Riley M. Chung, ed.,

See Rojahn, Christopher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p276-277

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Flexure for Polymer Concrete Using PET Waste, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with D. W. Fowler, P.E., p1037-1044

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Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, 1996, 0-7844-0203-5, 864pp.

Representation of Compacted Clay Minifabric Using Ran-dom Networks, with S. Thangavadivelu, GT Nov. 96,

see Govindaraju, Rao S., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p454-465

see Menon, Sunil, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remedia-tion, Lakshmi N. Reddi, ed., 1996), p538-550

see Thangavadivelu, Suri, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1303-1317

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Laminate Bonding for Concrete Repair and Retrofit, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with G. B. Gervois and L. A. Carlsson, p1579-1591

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see Bhattacharya, Sujan K., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p311-322

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Sacramento River Pedestrian Bridge, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Jiri Strasky, p153-160

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do, J. M.

Redondo, J. M. Lift Off and Entrainment of Sediments, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with M. A. Sánchez and R. Castilla, p709-719

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Experimental Investigation of Tuned Liquid Dampers, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Harry Yeh, Jinkyu Yu and Sigurdar Gardarsson, p215-216

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Ethics in Graduate Education, El Apr. 96, p53

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Surface Oriented Fishway and Fish Guidance Curtain, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p165-170

Regan, Amelia C.

Dynamic Vehicle Allocation Under Real Time Information: Operational Considerations and Potential Efficiencies, (Applications of Advanced Technologies in Transporta-tion Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), with Hani S. Mahmassani and Patrick Jaillet, p690-694

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Design and Analysis of Approach Terminal Sections Using Simulation, with Dean L. Sicking and Gene W. Paulsen, TE Sept./Oct. 96, p.399-405

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Bridge Strength Evaluation Based on Field Tests, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Michael J. Chajes, Dennis R. Mertz and Geoffrey H. Reichelt, p294-297

movative Methods for Informing the Public—A Case Study, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p507-509

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Strength and Reliability of Reinforced Concrete Columns with Sustained Loading, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p234-237

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Business Plans Live and Grow, MF. Nov./Dec. 96, p3-4

Reinhart, D. R.

Reinhart, D. R.
Enhancement of In Situ Zero-Valent Metal Treatment of Contaminated Groundwater, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with C. Clausen, C. Geiger, N. Ruiz and G. Afiourny, p323-332 Reinhold, T. A.

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Reinhold, Timothy A.

Retinious, Limousy A.

Correlation of Component Damage, Insurance Losses and
Wind Storm Severity, (Natural Disaster Reduction,
George W. Housner, ed. and Riley M. Chung, ed.,
1997), with Gregory L. F. Chiu and Robert Akins, p191-

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Fuzzy Logic Based Control for Sliding Structures, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with Ravi S. Subramaniam and Michael A. Riley, p298-309

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see Behrens, Jon, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p4113-4118

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Ecological and Biological Considerations in River Restoration, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2601-2606

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Denitrification Incorporating Microporous Membranes, with E. D. Schroeder, EE July 96, p599-604

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Compositional Modeling Study of Alcohol Flooding for Recovery of DNAPL, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Bernard H. Kueper, p526-537

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Oblique Wave Interaction with Vertical Wall Structures, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Keh-Han Wang, p507-510

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A New Element Flexibility Based FEM for Stochastic Structures, (Probabilistic Mechanics & Structural Relia-bility, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Isaac Elishakoff, p918-921

Initial-Inflow-Variation Impacts on Furrow Irrigation Eval-uation, with W. W. Wallender, IR Jan./Feb. 96, p7-14

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Privatization: A Cure for Our Ailing Infrastructure?, CE Dec. 96, p6

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Rengaraju, V. R.

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Reniers, A. J. H. M.

Longshore Currents Over Barred Beaches, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with E. B. Thornton and T. C. Lippmann, p413-424

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Portable Flumes with Adjustable Throats, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Brian Wahlin, p2409-2414

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The 1995 Flood in Southeastern Norway - Operational Forecasting, Warning, and Monitoring of a 200-year Flood, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2537

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The Application of Time Domain Electromagnetics to a Regional Groundwater Investigation in Western Washing-ton, (Case Histories of Geophysics Applied to Civil Engi-neering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), with Robert H. Anderson,

Reutter, David

see Rosenthal, Andrea, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2033-2038

Reutter, David S.

Concept Ecology Integrated Project Engineering and Envi-ronment; Relating a Project to the Surroundings, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Roger J. Menendez, Peter J. Bottone and Robert L. Whitman, Ir. p753-75 Jr., p753-758

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Acoustic Efficiency Analysis Using Infrasound from NEOs, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Rodney W. Whitaker, p102-108

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Reynolds, David A.

Dissolution of Toluene Residuals: 3-D Laboratory Experiments, (Non-Aqueous Phase Liquids (NAPLs) in Subsur-face Environment: Assessment and Remediation, Laksh-mi N. Reddi, ed., 1996), with Philippe Lamarche and Michel Tétreault, p607-618

Overview of International Space Station Extra Vehicular Robotics, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p490-496

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Minimizing Uncertainties in Geotechnical Investigations, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p149-166

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Watershed Management for a Limited Coastal Aquifer Sys-tem, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1087-1092

Ribberink, Jan S.

Mathematical Modelling of Coastal Morphodynamics Near a Tidal Inlet System, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Eelco H. Negen and Gerrit Hartsuiker, p915-926

Ribeiro, J.

Identification of a General Linear Model for Reservoir Inflows Forecasting, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with J. Rousselle, J. D. Salas and H. Ta Trung, p2354-2359

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Zonification of Areas with Inundation Risk by Means of onincation of Areas with Intundation Risk by Means of Mathematical Modeling in the Rosario Region, Argenti-na, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with E. D. Zimmermann and R. A. Navarro, p3704

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Model Study of a Roller Compacted Concrete Stepped Spillway, with Kem C. Kadavy, HY June 96, p292-297

Rock Riprap for Grade Control, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Kerry M. Robinson and Kem C. Kadavy, p588-593

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The DOD Groundwater Modeling System: A Conceptual Model Approach, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with Norman L. Jones, p2589-2594 Richards, Dennis I

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Potential in Culverts, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Michael E. Zeller, p3920-3926 Grade-Control Structures for Salt River Channelization,

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"Design Control" and Scientific Investigations—Is There Any Linkage?, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p208-210

Threshold Accelerations for Rotation or Sliding of Bridge Abutments, with Kenneth L. Fishman and Randall C. Divito, GT Sept. 96, p752-759

Richardson, David N.
AASHTO Layer Coefficients for Cement-Stabilized Soil
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Richardson, E. V. Historical Development of Bridge Scour Evaluations, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3-

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see Lagasse, P. F., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p499-505 see Lagasse, P. F., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4188-4197 see Richardson, J. R., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1980-1989

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Applicability of Scour Equations in Tidal Areas, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with E. V. Richardson and B. L. Edge, p1980-1989

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Richardson, William see Hwang, Daekyoo, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p731-742

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Development of a Mobile Instrument Deployment Device (MIDD), (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Klaus Schilling, Marco C. Bernasconi, Christoph Jungius and César Garcia-Marirrodriga, p283-289

see Day, James, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1052-1058

Rickertsen, Larry D.

Strategy for Rapid Evaluation of Waste Containment and Isolation at the Yucca Mountain Site, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Edward C. Taylor, Janet A. Docka and Jean L. Younker, p303-304

Ricles, James

Grout Repair of Dent-Damaged Steel Marine Tubulars, with Troy Gillum, WW May/June 96, p110-117

Riddle, Charles H.

see Schraeder, Robert L., (Roads and Airfields in Cold Re-gions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p23-56

Riddle, Ellen L.

see McClure, Linden H., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1327-1333

Rlefler, R. Guy see Ahlfeld, David P., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p618-621

Riehle, Tiffany J.

see Peattie, Robert A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p318-321

Riemer, Michael F.

see Anderson, Scott A., GT Feb. 95, p216-220

Riemersma, Peter E.

A Comparison of Geological and Stochastic Approaches to Characterization of Heterogeneity and their Effects on Simulations of Pump-and-Treat Systems, (Uncertainty in The Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Jean M. Bahr and Mary P. Anderson, p1003-1018

Rigby, Doug see Desai, Chandra S., (disc), GT Sept. 94, p1554-1569

Righetti, G.
see Galli, C., (Applications of Advanced Technologies in
Transportation Engineering, Yorgos J. Stephanedes,
ed. and Francesco Filippi, ed., 1996), p676-679

Riha, David S.

A Finite Element Based Probability Contouring Method for Structural Analysis, (*Probabilistic Mechanics & Struc-*tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Harry R. Millwater, George Vellathottam and P. R. Perumalswami, p922-925

Rihani, Rami A.

Telerobotic Pavement Marker Application, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Leonhard E. Bernold, p171-177

Rijken, Oriol R.

See Niedzwecki, John M., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p586-587

Riker, Richard E.

Refer, Renaid E.

See Mertill, Kelly S., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p238-253

Riley, David R.

Space Planning Tools for Multi-Story Construction, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Iris D. Tommelein, p718-

Trial Applications of Multimedia Instructional Aids in a Building Construction Curriculum, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Clark Pace, p362-368

Riley, James H.

Prediction of Storm Induced Flows in Great Lakes Estua-rine Inlets. (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with William L. Wood, p583-595

see Yang, J. N., ST Jan. 96, p69-75 see Yang, J. N., ST Feb. 96, p179-186

Riley, Michael A.

see Reinhorn, Andrei M., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p298-309

Rinaldi, Giovanni

see Felici, Giovanni, (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p573-577

Rinaldi, Victor A.

The Dielectric Constant of Soil-NAPL Mixtures at Low Frequencies (100 Hz.—10 kHz), (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Emilio R. Redolfi, p163-174

Rinderman, Robert R.

see Chestnut, Michael J., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p310-311

Rindt, Craig

see Ritchie, Stephen G., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p276-280

Rinehart, K. A.

see Zoghi, M., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p384-385

Rinelli, Savino

see Mussone, Lorenzo, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p208-212

Ringelberg, David B.

In Situ Characterization of the Microbiota in Yucca Mountain Sediments, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), with Julia O. Stair, David C. White and Larry H. Hersman, p33-35

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see Zhu, Han, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p576-579

see Dedrick, A. R., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3470-3475

Ritchie, Philip A.

see Wassef, Wagdy G., (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p116-124

Ritchie, Stephen G.

Evaluation of a Real-Time Expert System for Surface Street Traffic Management and Control, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Filippo Logi, Seungmin Kang and Craig Rindt, p276-280

see Molina, Martin, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p320-324

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Ritter, Michael A

see Triche, Michael H., (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p276-281

see Wipf, Terry J., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p260-267

Cropping Systems on the Delmarva Peninsula to Reduce Ground Water Contamination, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with R. W. Scarborough, p2341-2346

Irrigation of Grain Sorghum on the Delmarva Peninsula, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with R. W. Scarborough, p3904-3909

Rittgers, Stanley E.

see Keynton, Robert S., (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p196-199

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Back to Bacteria: A More Natural Filtration, CE July 96,

"Do Nothing" Title Misleading, with Michael C. Kavanaugh and Jacqueline A. MacDonald, CE Nov. 96, p36,38

How Input Active Biomass Affects Sludge Age and Proc-ess Stability, EE Jan. 96, p4-8

Leachate Chemistry: Its Implications for Clogging, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Ian R. Fleming and R. Kerry Rowe, p28-33

see Seagren, Eric A., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p381-392

Ritz, Paul

Life Cycle Cost Analysis of a Storburn Propane Combus-tion Toilet, (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Herbert P. Schroeder, p816-827

Rivellini, Tommaso P.

Development Testing of the Mars Pathfinder Inflatable Landing System, (Engineering, Construction, and Oper-ations in Space, Stewart W. Johnson, ed., 1996), p1059-

RiveraMarzan, Aida

see Gunturi, Surya K., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p15-16

Rivero, F.

see Prinos, P., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582

Rivieccio, Nicholas J.

see Nayfeh, Jamal F., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1115-1121

see Münz, Thomas, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1046-1049

Rixey, William G.

see Cleveland, Theodore G., EE Mar. 96, p235-238

Rizak, Samantha N.

see Sharma, Satish C., TE Nov./Dec. 96, p430-439

Rizkalla, S. H.

Recent Innovation for Concrete Highway Bridges, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with A. A. Mufti, p1063-1071

Rizos, D. C.

Dynamic Through-the Soil Interaction of Adjacent Surface or Buried Structures, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with D. L. Karabalis, p180-183

anu T. C. Su, 1950, Num D. L. Karladuris, p.160-163. Finite Element Transient Analysis (FETA) of Solids and Structures Including Soil-Fluid-Structure Interaction, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chiniowsky, ed., 1996), with D. L. Karabalis, G. J. Cokkinides, J. L. Tassoulas and J. S. Mulliken, p480-486

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see Hicks, Randall T., CE Sept. 96, p54-57

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Comparisons of Site Characterization Methods Using Mixed Data, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Theodore P. Lillys and David E. Dougherty, p167-179

Rizzo, Paul C.

Seismic Hazard Assessment in Southeastern U.S., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Vaidya E. Bazan, p127-128

Roach, Dennis

see James, George, (Engineering, Construction, and Oper-ations in Space, Stewart W. Johnson, ed., 1996), p1127-1133

Roach, Peter

see McKeown, Denis, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p711-715

Roadcap, George R. see Ray, Chittaranjan, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1575-1580

Roark, Philip

Evaluating Sustainability of Water & Sanitation Projects: Case Studies in Developing Countries, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3253-3258

Roberds, William J. see Lockhart, Charles W., CE Apr. 96, p62-64

Roberts, Brian

Storm-Water Treatment Goes Underground, CE July 96, p56-57

Roberts, Brian C.

Water Quality Enhancement Using Subsurface Detention, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3338-3342

Roberts, J. see Lin, W., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p122-124

Roberts, Jeffery J.

X-ray Radiography of Fracture Flow and Matrix Imbibi-tion, (High Level Radioactive Waste Management, Tech-nical Program Committee, 1996), with Wunan Lin, p89-

see Lin, Wunan, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p128-

Roberts, P. J. W.

see Daviero, G. A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p918 see Petrenko, A. A., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p3886-3891

Roberts, Philip J. W.
Near Field Modeling, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3892-3897

Roberts, S.

see Zoppou, C., (disc), HY Sept. 94, p1089-1099

Roberts, Sarah K.

Intracrystalline Diffusion in Clinoptilolite: Implications for Radionuclide Isolation, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Brian E. Viani and Douglas Phinney, p48-49

Robertson, George The Balanced Indigenous Population (BIP) and Statistical Process Control (SPC) in Marine Pollution Ecology, (North American Water and Environment Congress & Obestructive Water, Chenchayya Bathala, ed., 1996), with Mike Mengel, Don Maurer and Irwin Haydock, p1431-1436

see Gerlinger, Tom, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2050-2055

see Moore, Mike, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1699-1704

Robertson, Raymond E. see Huang, Shin-Che, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1367-1378

Robinett, Rush D.

see Wilson, David G., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1225-1229

Robinson, David G.

see Acitty, Christopher B., (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p255-261

Fiber Orientation in Composite Structures for Optimal Re-sistance to Creep Failure, with Wei Wei, EM Sept. 96, p855-860

Robinson, K. M.

see Hanson, G. J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2427-2432

Influence of Backwater on Headcut Advance, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Gregory J. Hanson, p117-122

see Rice, Charles E., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p588-593

Robinson, Nikki

see James, George, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1127-1133

Robinson, Ridgley see Hansen, William, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4220-4225

Boston's Home Run, CE July 96, p.36-39
Detecting Leaks Electronically (Available only in Geo/ Environmental Engineering Special Issue), CE Nov. 96,

Pavement Management Pays Off, CE Apr. 96, p44-47 Rock 'N' Roll in Cleveland, CE Feb. 96, p48-49 Saving Scotland's Busiest Bridge, CE Jan. 96, p48-51

Variability in Site-Specific Seismic Ground-Motion Design Predictions, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with W. J. Silva, G. R. Toro and N. Abrahamson, p1113-1133

Roca, P.

Geometric and Material Nonlinearities in Steel Plates, with E. Mirambell and J. Costa, ST Dec. 96, p1427-1436

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Going Global: A CEO's Perspective, ME Mar./Apr. 96, p21-24

Rocha, V. F.

see Lopes, A. L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1979

Rock, Brian A., P.E.

Postoccupancy Indoor Environmental Quality Evaluation of an Institutional Building, with Craig A. Hillman, AE Sept. 96, p88-94

Roddis, W. M. Kim

Single-Criteria Genetic Optimization for Design and Detailing of Concrete Structures, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Warren K. Lucas and Vorathum Chun-

1996), with Warren K. Lucas and Vortanium Chun-nanond, p91-96
see Lucas, Warren K., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p154-165
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see Pasley, Gregory P., (Analysis and Computation, Frank-lin Y. Cheng, ed., 1996), p371-382

see Pasley, Gregory P., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p725-731

Rodi, Wolfgang

see Lee, Joseph H. W., EM Jan. 96, p19-29

Rodrigo, A. Mahendra

Engineering Aspects of Wetland Mitigation, (North Ameri-Can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Kenneth P. Dunne, Lewis O. Morgan and Rao Nivargikar, p2027-

Rodrigues, João Paulo C. see Neves. I. Cabrita, MT Nov. 96, p189-194

Study of Surf-Zone Macroturbulence and Mixing Using Delta '93 Field Data, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with A. Sánchez-Arcilla, J. Gomez and E. Bahia, p305-316

see Sánchez-Arcilla, A., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p437-448

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Rodríguez Agrait, Leandro

see Guzmán, Alberto L., (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p902-905

Rodriguez, Michael A.

Rodriguez, Michaet A.
A Follow-Up Study to: Job Performance Aids to Criticality Safety, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p348-350

Rodriguez, P. I.

see Hackett, R. M., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p771-780

Rodríguez-Bejarano, Dario

see Kunkel, James r., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1249-1254

Rodwell, Julie

The Strategic/Master Plan at Boeing Field: A Means of Optimizing Airport Utilization at an Inner City Airport, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p12-23

Roeder, Charles W.

Experimental Results for Seismic Resistant Steel Moment Frame Connections, with Douglas A. Foutch, ST June 96, p581-588

Seismic Behavior of Older Steel Structures, with Brett Knechtel, Eric Thomas, Anne Vaneaton, Roberto T. Leon and F. Robert Preece, ST Apr. 96, p365-373

Roeder, Eberhard

Swelling of DNAPL by Cosolvent Flooding to allow its Removal as an LNAPL, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Scott Eppes Brame and Ronald William Falta, p333-344

see Falta, Ronald W., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p257-268

Roegiers, J.-C. see Bai, M., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p48-51

see Cui, L., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p471-474

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Field Validation and Application of a Coastal Profile Model, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Th. J. G. P. Meijer, K. Houwman, R. Bakker and R. Spanhoff, p818-

Roesner, Larry A.
see Burgess, Edward H., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1230-1235

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see Mekha, Basim B., ST Feb. 96, p142-149

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Rogers, Cassandra T.

Geo-data System for Landslide Hazard Assessment, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p70-71

Civil Engineering History: Engineers Make History, with Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996, 0-7844-0209-4, 208pp.

Rogers, W. E.

see Work, P. A., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1047-1058

Rohan, Karol

see Belfadhel, Mahrez Ben, WW Jan./Feb. 96, p8-15

see Niemeyer, Hanz D., (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p169-

Rohde, John

see Azizinamini, Atorod, (Building an International Com munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p900-907

Rohrbaugh, Janelle K.

see Hartmann, Thomas W., SC Feb. 96, p40-46

Roig, Lisa C.

see King, Ian P., (North American Water and Environm Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3734-3739

Roise, Charlene K.

Grounded by History: Airports and Historic Resources, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p223-233

Rojahn, C.

see Reaveley, L. D., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1123-1130

Rojahn, Christopher

A Critical Evaluation of Current Approaches to Earthquake Resistant Design, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Andrew Whittaker, p331-332

Andrew Writtuaer, p331-332.

Development of Integrated Inventory Databases and Earthquake Damage and Loss Estimation Methodologies for Structures in Utah, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Stephanie A. King, Roger E. Scholl, Anne S. Kiremidjian, Lawrence D. Reaveley and Robert F. Wilson, p7-

Nationally Applicable Guidelines for the Seismic Rehabili-tation of Existing Buildings, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Daniel Shapiro, Lawrence D. Reaveley, Wil-liam T. Holmes, Jack P. Moehle, James R. Smith and Ugo Morelli, p276-277

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Interface Design for Pen-Based Computers in the FIRS Project, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Anthony D. Songer, p1027-1033

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Rojeski, Peter, Jr.

Indoor Air Quality Cost Comparisons in Three Typical Buildings, with Harmohindar Singh, AE Sept. 96, p107-

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Roll, Richard R.

Continuing Data Needs for Lunar Radiation Protection, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p646-652

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see Ambrosino, G., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p515-519

ańczyk, W.

see Boczar-Karakiewicz, B., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p862-867

Romanelli, E.

disc. (of Behavior of Three-Span Braced Columns with Equal or Unequal Spans, by Raymond H. Plaut and Yu-Wen Yang, ST June 95, p986-994), ST Sept. 96, p1125

Romanini, Edivaldo

see Betti, Raimondo, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p314-317

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see Thomas, Wilbert O., Jr., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p303-304

Romeo, A.

see Gasparini, D. A., EM Feb. 96, p130-137

Romer, Andrew E.

PVC Lined Steel Pipe Bridges for Gravity Sewers, (Pipe-line Crossings 1996, Lawrence F. Catalano, ed., 1996), p441-448

Romero, A.

see Majer, E., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p151-154

Romero, Antonia M.

see Avalos, Benito, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3236-3240

see Garcia, Jorge A., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p946-953

see Garcia, Jorge A., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3610-3616

Romero, Salome

Characterization of Granular Material by Low Strain Dy-namic Excitation and ANN, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Sibel Pamukcu, p1134-1148

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see Taft, E. P., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p171-176

Ronagh, Hamid Reza

Parameters Affecting Distortional Buckling of Tapered Steel Members, with Mark Andrew Bradford, ST Nov. 94, p3137-3155

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Ronchi, Alfredo M.

De Architectura-Hypermedia On-line Architecture, Builde Architectura—Hypermedia On-line Architecture, build & Construction Bookshelf: The First Step Toward an Hypermedial Approach to Computer Aided Architectural Design, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p746-752

Rooney, Frank J.

Meteoroid Hazards in the Lunar Environment, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with John V. Gies, p653-662

Rooney, James W.

Road and Airfield Development in the Subarctic and Arctic, Alaska and Northwest Canada, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), with Ted S. Vinson, p1-

see Vinson, Ted S., (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wil-bur H. Haas, ed., 1996), p151-202

see Vinson, Ted S., ed., Roads and Airfields in Cold Regions

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see Davidoff, B., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p189-194

Climate Change: What the North American Water Engineer Should Know, (North American Water and Environm Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1471-1476

Drought in California: When Does It Begin and When Does it End?, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1081-1086

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River Dnister Pollution with Toxic Waste as a Result of Accident at Potassium Fertilizers Factory, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3499

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Rosati, Julie D.

Design of a Laboratory Facility for Longshore Sediment Transport Research, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with David G. Hamilton, Jimmy E. Fowler and Jane M. Smith, p771-782

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see Springer, A. M., EE May 96, p437-444

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Are Erosion Control Programs Reducing Sedimentation?, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with R. Sinclair, Gary Eicken and Pat Woods, p2879-2884

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see Blom, Ronald, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p305-306

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Engineering Education for Appropriate Technology, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2743-2747

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see Bruinsma, Dan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1614-1619

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Cool Roofs and Pavements to Help Hot Smoggy Cities, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Hashem Akbari, Haider Taha and Melvin Pomerantz, p1-13

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Evaluation of Potential Impacts to Endangered Species
That Use Wetland Areas: A Case Study, (North American Water and Environment Congress & Destructive
Water, Chenchayya Bathala, ed., 1996), with David
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Probabilistic Modeling of Roof Sheathing Uplift Capacity, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with S. D. Schiff, p334-337

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see Knot, E. H., Probabulistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p238-241
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Combustion Processes and Applications in Reduced Gravity, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p527-532

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A Fuzzy Logic Paradigm for Fault Trees and Event Trees in Risk Assessment, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Sunil Donald, p369-375

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see Kim, Byung R., EE June 96, p532-539

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see Shackelford, Charles D., ed., Uncertainty in the Geologic Environment: from Theory to Practice

see Di Stefano, R., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). p49-53

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Analysis and Simulation of Road Profiles, with M. A. Sek and T. Perry, TE May/June 96, p241-245

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A Decision Support System for Dynamic Pre-Trip Route Planning, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with S. Ranji Ranjithan, Wael El Dessouki, Timothy Smith and E. Downey Brill, p325-329

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see Bradley, E. Craig, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p192-198

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Advective-Diffusive Contaminant Migration in Unsaturated Sand and Gravel, with K. Badv, GT Dec. 96, p965-975

Biodegradation of Dichloromethane in Leachate. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Leila Hrapovic, Naim Kosaric and D. Roy Cullimore, p2021-2026

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Risk Analysis of Levee Closures Using Range/Confidence Estimates, (Risk-Based Decision Making in Water Re-sources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with Michael Burn-ham, p367-387

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Characteristics of the Craft Workforce, with Mark O. Federle and Sara A. Birkland, CO Mar. 96, p83-90

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Pitting Corrosion of Container Materials in Anticipated Re-pository Environments, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with R. Daniel McCright, p454-456

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Strain Level and Uncertainty of Liquefaction Related Index Tests, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with R. G. Campanella, P. M. Byrne and J. M. O. Hughes, p1149-1162

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see Bonn, Betty, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p68-

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see Boutin, C., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p796-799

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Relocation of Existing Pipelines at New Highway Cross-ings, (Pipeline Crossings 1996, Lawrence F. Catalano. ed., 1996), p290-297

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Range of Impacts of Some Recent U.S. Disasters and The Implications for Housing Recovery, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p168-170

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ADR, 25 Years of Progress, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p21-29 see Goldstein, Stanley H., P.E, CE Oct. 96, p40-44

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Steel Water Pipe for Exposed and Buried Crossings, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996). with Robert Card, p105-111

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Integrating the Refraction Seismic Method into Stream tegrating the Retraction Sestimic Method into Stream Crossing Characterization for Scour and Excavation Conditions, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1163-1177

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see Lin, W., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p122-124

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Development of Localization in Undrained Deformation, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p939-942

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Ruegg, Fillmer W.

Storm-Driven Trajectories of Rain near Balconies on Tall Building, AE Sept. 96, p100-106

On the Origin of Infragravity Waves in the Surf Zone of a Dissipative Multiple Bar System, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p93-104

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Owner-Contractor Relationships on Contaminated Site Remediation Projects, with David A. Dzombak and Chris T.
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see Wittler, R. J., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3829-3834

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see Fotherby, Lisa M., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4178-4187

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A Probabilistic Framework for Brittle Fracture Assessments of Structures —Constraint and Ductile Tearing ments of Structures — Constraint and Ducture rearing Effects, (Probabilistic Mechanics & Structural Reliabili-ty, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Robert H. Dodds, Jr., p878-881

see Reinhart, D. R., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Reme-diation, Lakshmi N. Reddi, ed., 1996), p323-332

Dynamic Analysis of Multi-Pool Irrigation Canal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Jorge Castillo and B. de León-M., p818-823

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Automated Generation of Productivity Functions, (Comput-ing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Simaan AbouRizk, p261-267

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Russell, Clinoru S.
Risk Communication: Guidelines and Commentary, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with Duane D. Baumann, p396-400

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The Rapid Simulation of a Signalised Road Network, (Appilications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Neil Ferguson, Paul Shaw and John McInnes, p449-454

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Education: Pathway to Mitigation, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p35-36

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Consensus! Engineering Students Need More Management Education, with James P. T. Yao, John Farr, P.E., Stuart G. Walesh, P.E. and John Bishop, P.E., ME Nov./Dec. 96, p17-29

Russell, Jeffrey S.

Constructor Prequalification: Choosing the Best Construc-tor and Avoiding Constructor Failure, 1996, 0-7844 0052-0, 200рр.

The Idea of Building: Thought and Action in the Design and Protection of Buildings by Steven Groak, ME July/ Aug. 96, p15-17

Predicting Contractor Failure Using Stochastic Dynamics of Economic and Financial Variables, with Huaming Zhai, CO June 96, p183-191

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An Energetics Approach to Sand Transport on Beaches, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Yolanda Foote and David Huntley, p829-840

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A Cost Effective Rehab Scheme for URM Structures, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p262-263

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Pavement Design Applying Allowable Frost Heave, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p890-898

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ASCE Regulated Riparian Code and Florida's Regulated Riparian Experience: The Role for Voluntary Reallocation, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Mark D. Farrell, p2927-2932 Santcioglu, Murat

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Wind Tunnel Modeling of Atmospheric Dispersion in the Vicinity of Buildings, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with H. Wu and T. Stathopoulos, pl 131-1134

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Operational Satellite Remote Sensing for Mineral Exploration, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p237-244

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Welded Steel Moment Frame Joint Testing Programs, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Michael D. Engelhardt, p1228-1235

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VARIA - Variable Message Sign Control Based on OD-Estimation in a Motorway Network, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Hubert Schmid, p383-387

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Biaxial Mechanical Behavior of Bovine Pericardium as a Bioprosthetic Material, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p200-203

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n Integrated Lunar/Martian-Engineered Closed/ Controlled Ecosystem, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1083-1089

unar Base Development Stages, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), with Marvin E. Criswell, p912-919

1996), With Marvin E. Criswell, p912-919
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Database Preparation for Pavement Modeling—Virginia's Experience, with Thomas E. Freeman and Michael J. Demetsky, TE Nov./Dec. 96, p454-461

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Environmental Engineering Forum, with Vivek P. Utgikar and Sarwan S. Sandhu, EE Sept. 96, p779-784

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disc. (of Residential Construction Failures Caused by Hur-ricane Andrew, by Wimal Suaris and Mohammed S. Khan, CF Feb. 95, p24-33), CF Aug. 96, p137

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On Estimating the Effect of Passivating Inhibitors on the Time for Corrosion Initiation of Steel in Concrete, (Ma-terials for the New Millennium, Ken P. Chong, ed., 1996), with S. C. Kranc and R. G. Powers, p1522-1530

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Enhanced Trichloroethene Desorption from Long-Term
Contaminated Soil Using Triton X-100 and pH Increases,
(North American Water and Environment Congress &
Destructive Water, Chenchayya Bathala, ed., 1996), with
James A. Smith, Thomas E. Imbrigiotta and Heather M.
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see Podell, Leonard N., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2766-2774

Sajjadi, S. G.

Sediment Transport Mechanism Over Rippled Sand Beds, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with J. N. Aldridge and D. J. Nicholas, p669-680

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Wave Overtopping and Pressure Dependent on Crest Eleva-tion, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p209-220

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High-Temperature Properties of Stainless Steel for Build-ing Structures, with T. Nakazato and A. Matsuzaki, ST Apr. 96, p399-406

Fundamental Thermal Mechanical Modeling of Gas-Filled Porous Composites, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Ramnath Ganesan, p52-55

SAMS: Software for Simulating Streamflow Series, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with N. Saa-da, D. Frevert and W. Lane, p3387-3392

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see Maji, Arup K., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1122-1126

Salazar, Guillermo F.

Computer-Based Undergraduate Integrated Civil Engineering Curricula at WPI, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Leonard D. Albano, Roberto Pietroforte and P. Jayachandran, p140-146

see Bowen, Michael, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p656-662

see Harrington, Thomas F., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p649-655

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Artificial Intelligence (AI) Supported Process Planning System for Construction, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p510-518

Scour Around Exposed Pile Foundations, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with J. Sterling Jones, p2202-2211

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Two Social Concerns of an ASCE Subcommittee, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p30-34

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Fluid Management in Space-Based Systems, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p521-526

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Calibration of Sediment Transport Model for the Upper End of Elephant Butte Reservoir, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Drew C. Baird and Frank P. Montoya, p2288-2293

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see Redondo, J. M., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p709-719

ánchez-Arcilla, A.

Wave Induced Nearshore Circulation in the Ebro Delta, wave induced Nearshore Circulation in the Ebro Delta, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with F. Collado, M. G. Coussirat and A. Rodriguez, p437-448 see Rodriguez, A., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p305-316

Sancho, F. E. Longshore Nonuniformities of Nearshore Currents, (Coast-Longshore Nonunitorinties of Nearshore Currents, (Coasial Dynamics' 95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with I. A. Svendsen, A. R. Van Dongeren and U. Putrevu, p425-436
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Sandhu, Nicky

Application of Artificial Neural Networks to the Sacramen-

Application of Artificial Neural Networks to the Sacramento-San Joaquin Delta, (Estuarine and Coastal Modeling,
Malcolm L. Spaulding and Ralph T. Cheng, 1996), with
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Emulation of DWRDSM using Artificial Neural Networks
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(North American Water and Environment Congress &
Destructive Water, Chenchayya Bathala, ed., 1996), with
Ralph Finch, p4335-4340
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Bathala, ed., 1996), p3551-3556
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Sandhu, Sarwan S.

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Organizing a Local Water Resources Technical Group, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2254-225

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Sankarasubramanian, A.
Evaluation of Sampling Properties of General Extreme
Value (GEV) Distribution-L-Moments Vs Conventional
Moments, (North American Water and Environment
Congress & Destructive Water, Chenchayya Bathala,
ed., 1996), with K. Srinivasan, p152-158

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Immobilization of Metals and Solids Transported in Urban Pavement Runoff, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Steven Buchberger and Joseph Koran, p3115-3120

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Wave Propagation in Shallow Waters: Modelling and Real Data, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with José M. de la Peña, pi28-139

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Surfactant-Enhanced Extraction and Biodegradation of a Non-Aqueous Phase Contaminant in Soil, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Larry Eugene Erickson and Liang-tseng Fan, p419-430

Santi, Paul M.

Predicting the Mode, Susceptibility, and Rate of Weathering of Shales, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), with Engin C. Koncagül, p12-26

Santora, S.

Sam Megoda, Jay N., (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996),

Santorini, F.

see Camus, R., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p418-422

disc. (of Collapse of Saturated Soil Due to Reduction in Confinement, by Scott A. Anderson and Michael F. Riemer, GT Feb. 95, p216-220) with Willy A. Lacerda and Mauricio Ehrlich, GT June 96, p505-506

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Saquino, Najmus

Saquino, Najmus

Eastern San Joaquin County Groundwater Resource Planning Model Development and Calibration, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Young Yoon and Mike Cornelius, p3509-3514

Festers San Joaquin County Groundwater Resource Plan.

Eastern San Joaquin County Groundwater Resource Plan-ning Alternative Analysis, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Alex Chen, Umesh Lalwani, Mike Cornelius, Jeff Kishel, Gary Nuss and Mark Williamson, p3515-3520

Saraf, Vijay K.

Proof Load Testing of Bridges, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Andrzej S. Nowak and Roger Till, p526-529

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Getting to Know ArcView by Environmental Systems Re-search Institute, TE Sept./Oct. 96, p409

Challenges in the Construction of a Lunar Base, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Keith Hampson, p881-888

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Mean Stress Effects in Fatigue of Welded Steel Joints, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with David P. Kihl, p50-53

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Sarkar, Partha P.

Identification of Aerodynamic Indicial Functions, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Mehmet Metin Kose, p1127-1130 see Gupta, Himanshu, EM Nov. 96, p1031-1037

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The Development of New Structural Systems in the After-math of the Kobe Earthquake, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p334-943

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Sarwan Analysis of the Nonlinear Hysteretic Response of an RC Building, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Apostolos S. Papageorgiou, p1099-1106

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Loss of Capacity of Concrete Shear Walls, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Richard Ranous, p80-81

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Status of Thermal Loading Evaluations for a Potential Repository, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p442-444

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Development of a Solidification Method for Pulverized Concrete Waste by Hydrothermal Hot-Pressing and Fiber Reinforcement, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Toshiyuki Hashida, Hideaki Takahashi and Nakamichi Yamasaki, p684-693

Numerical Simulation of 1993 Southwest Hokkaido Earthquake Tsunami around Okushiri Island, WW Sept./Oct. 96, p209-215

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Self Deployable Mechanism for Large Disk Antenna Using Centrifugal Force, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Shinji Matsumoto, Haruyuki Namba, Kenji Takagi, Hisashi Tadokoro, Hiroshi Yamakawa, Takao Oura, Kenji Nozaki and Nobuyuki Kaya, p1155-1161

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Analytical Approaches for the Design of Base-Isolated Structures, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with Mason T. Walters, p224-235

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Sause, Richard
Barriers to the Use of High Performance Steel in I-Girder Highway Bridges, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p108-115
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Precasting Long Spans for the Northumberland Strait Crossing, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Joe Showers, p141-146

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Successful Free Product Removal of NAPLs, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Jeffrey L. Pintenich, p233-244

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Lin and T. C. Su, 1996), p43
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Geophysical Characterization of Florida Limestone-An Investigative Case History, (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), with R. M. Dickinson and A. Saxena, p73-85

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The Highway Safety Expert System: A New Approach to Safety Programs, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Frank Navin, p346-362

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Washington State's Stormwater Management Program, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

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Research Relevance: Communication is Key, CE Aug. 96, p6

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The Use of Xypex Admixture to Concrete as an Inhibitor to Reinforcement Steel Corrosion, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1276-1280

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Evaluation of Reliability of an Existing Concrete Bridge: A Case Study, (Probabilistic Mechanics & Structural Reli-ability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p522-525

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Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2341-2346
see Ritter, W. F., (North American Water and Environment
Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3904-3909

Scarlatos, Panagiotis D.

Experiments on Resuspension of Fluid Mud Using an Os-cillating-Grid Tank, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p808-811

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see Mirfendereski, D., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997).

Scémama, Gérard

see Gaudin, Etienne, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p470-474

Schaarup-Jensen, K.

see Sørensen, J. Dalsgaard, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p898-901

Drilled Shaft Load Testing Los Angeles Coliseum, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Barry J. Meyer, p574-581

Schade, Trent G.

see Wu, Lin, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3464-3469

Schaefer, Vernon R.

Artificial Recharge of a Buried Glacial Aquifer in South Dakota, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), with Delvin E. DeBoer, p742-747

Schaffranek, Raymond W.

Friction-Term Response to Boundary-Condition Type in Flow Models, with Chintu Lai, HY Feb. 96, p73-81

chales, T. Scott

Hollyhills Drain Relief for 1920's Drainage System, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Glen Drogin, p4251-4256

Schall, J. D.

Instrumentation for Field Measurement of Abutment Scour, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with G. R. Price and G. A. Fisher, p931-939

Scour Monitoring at Johns Pass and Nassau Sound, Florida, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with G. A. Fisher and G. R. Price, p1990-1998

Schauer, Jeffrey

see Wolff, Thomas F., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p636-650

Scheeres, D. J.

Issues of Landing on Near Earth Asteroids, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with S. J. Ostro and R. S. Hudson,

Scheffey, J. L.

see Hunt, S. P., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p365-372

see Mark, D.J., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p168-179

Scheffner, Norman W.

Empirical Simulation Technique Based Storm Surge Fre-quency Analyses, with Leon E. Borgman and David J. Mark, WW Mar/Apr. 96, p93-101

Storm Surge Frequency Computations for Long Island, NY: A Comparison of Methodologies, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with H. Lee Butler, p80-91

Systematic Analysis of Long-Term Fate of Disposed Dredged Material, WW May/June 96, p127-133

see Mark, David J., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p343-344

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see Lampton, Robert D., Jr., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1209-1218

Schemmann, Armin G.

Vibration Control of Cable-Stayed Bridges: Analytical Development, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with H. Allison Smith, p898-901

Environmental-Induced Longitudinal Cracking in Cold Reons Pavements, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p899-910

Temporary Snow and Ice Pavement Structures, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p87-120

Scherer, Steven D.

Chicago's Micropile Debut, with William H. Walton and Ron Johnson, CE Aug. 96, p51-53

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Florida Department of Transportation Aviation Office Statewide Pavement Maintenance Management Program, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p263-272

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see Walker, Kenneth K., CO Sept. 96, p223-230

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Quality Control in Seismic Design and Construction, CF Aug. 96, p90-95

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see Murphy, S., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p765-770

see Rosowsky, D. V., (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p334-337

Schiff, Scott D.

see Philbrick, Terrence W., Jr., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p199-206

Schilling, Charles G.

Yield-Interaction Relationships for Curved I-Girders, BE Feb. 96, p26-33

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see Richter, Lutz. (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p283-289

Schimke, Gerald R.

Developments in Effective Emergency Management: A Means of Natural Disaster Cost Reduction, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p37-38

Schirmer, Howard, Jr.

Global Expansion: A Growing Dilemma, ME Sept./Oct. 96,

Schlief, Dirk

see Steele, John P. H., (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p262-275

Schmalz, Richard A., Jr.

Southern Boundary Experimental Forecasts with the

NOAA East Coast Ocean Model, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p442-453

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see Sachse, Thomas, (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p383-387

Schmidlin, Thomas W.

The Car as a Wind Shelter for Mobile Home Residents, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Paul S. King, p137-138

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Design of the Santa Ana River Wash Crossing of the Inland Feeder, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Roy Cook, p373-378

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Schmucker, D. G.
Reliability of Jackets: Beyond-Static-Capacity, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with C. A. Cornell, p578-581

Schnagl, Rudy

see Westcot, Dennis W., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p875-880

see Yu, H. S., GT Aug. 96, p623-632

Schnaid, Fernando

disc. (of Cone Penetration in Very Weakly Cemented Sand, by Anand J. Puppala, Yalcin B. Acar and Mehmet T. Tumay, GT Aug. 95, p589-600) with Nilo C. Consoli, GT Nov. 96, p948

Schneider, Philip J.

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Schneider, Stephen P. Lateral Strength of Brick Cladded Frames, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Stephen J. Favieri, p112-122

Schnier, Thorsten see Gero, John S., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p84-

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see Lacy, Jessica R., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3357-3362

en, Kathleen

see Haimann, Richard, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p431-441

see Haimann, nimann, Richard, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p719-730

Schoephoerster, R. T.

u, L., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p330-333 see Niu, L., (Engineeri

Schoephoerster, Richard T.

see Ding, Tong, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p322-325

Scholl, Roger E.

see Rojahn, Christopher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p7-8

Scholtis, A.

see Vomvoris, S., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p133-

Schonberg, William P.

Space Station Module Wall Hole Size and Crack Length Following Orbital Debris Penetration at 6.5 km/s, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Joel E. Williamsen, p1-7

see Ayars, J. E., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2130-2135

Schonfeld, Paul

see Ting, Ching-Jung, WW Jan./Feb. 96, p16-26

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disc: Robert M. Dickey, GT Nov. 96, p961
clo: GT Nov. 96, p961-962

Schorling, York

Stability Analysis of a Geometrically Imperfect Structure Using a Random Field Model, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Christian Bucher, p604-607

Schraeder, Robert L.

Route Location/Siting: A Review of Practices, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), with Charles H. Riddle and Willard H. Slater, p23-56

The Viscoelastic-Large Deformation Response of the Taylor Impact Cylinder, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with D. Sulsky, p250-253

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see Cremer, Michael, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p330-334

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see Reising, A. R., EE July 96, p599-604

Schroeder, Herbert P.

Concrete/Reinforcing Steel Bond Strength of Low-Temperature Concrete, with Thomas B. Wood, CR June 96, p93-117

see Mason, Michael R., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p185-195

see Ritz, Paul, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p816-827

Schroeder, S. L.

see Dozzi, S. P., CO June 96, p119-124

Schroeder, Thomas A.

Central Pacific Hurricanes-What Do We Know?, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p291-292

Schrunk, David G.

Concept for a Permanent Lunar Utilities System, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Bonnie L. Cooper and Burt L. Sharpe, p935-941

Schubel, Jerry R.
see Orlob, Gerald T., (North American Water and Environment Congress & Destructive Water, Chenchayya
Bathala, ed., 1996), p4101-4106

Schweiter, G. J., Method of Non-Linear Stochastic Dynamics - A Comparative Discussion, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with H. J. Pradlwarter, p966-969

Reliability Procedures as a Design Tool for Structures and Mechanical Components, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with M. Gasser, J. Hartl and

G. Lener, p800-803 see Gasser, M., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p531-534

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Schueller, Wolfgang
The Art of the Structural Engineer by Bill Addis, AE Dec. 96, p145-146

Schuepfer, Frederick E. Significance of Lateral Elevation Gradients in Tidally Affected Tributaries, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Guy A. Apicella and Vincent J. DeSantis, p229-239

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Schuler, Randy P.

Schutzer, Randy F. Utilizing Coordinated Billing and Metering Systems Analysis to Enhance Utility Revenue on a Shared Revenue Basis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4275-4281

Schuller, D. J.

A GIS Sewer Database for a University Campus, (North American Water, Chenchayya Bathala, ed., 1996), with D. I. Pusey and A. R. Rao, p1765-1770

Schuller, Michael P.

see Mehrabi, Armin B., ST Mar. 96, p228-237

Schulte, Dennis

see Bowling, Sandra, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2230-2235

Schultz, A. E.

Worldwide Advances in Structural Concrete and Masonry, with S. L. McCabe, ed., 1996, 0-7844-0164-0, 580pp.

Schultz, Arturo E.

Seismic Resistance of Partially-Grouted Masonry Shear Walls, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p211-222

Schultz, B. Cameron see Grivas, Dimitri A., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p426-433

Schultz, Steve C

see Sportiello, Michael G., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p378-384

Schumann, C. A. W. disc. (of Benchmarking: Performance-Improvement To-wards Competitive Advantage, by N. M. Lema and A. D. F. Price, ME Jan/Feb. 95, p28-37), ME Jan/Feb. 96, p59-60

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Schwab, David J.

Numerical Simulation of Internal Kelvin Waves with Z-level and Sigma Level Models, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Dmitry Beletsky, William P. O'Connor and David E. Dietrich, p298-312
see Kelley, John G. W., (Estuarine and Coastal Modeling,

Malcolm L. Spaulding and Ralph T. Cheng, 1996),

p367-378

Schwandt, George see Broten, Margaret, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p273-283

Schwartz, Franklin W.

see Hussein, Maged, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p515-521

see Schwartz, Milton, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1027-1031

Schwartz, John A.

see Inverso, George A., (Pipeline Crossings 1996, Law-rence F. Catalano, ed., 1996), p469-476

Schwartz, M. I. see Bruen, Michael P., CE May 96, p60-63

Schwartz, Milton

Innovative Radiation Shields for Lunar Surface Operations, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Raymond S. Leon-

ard, p349-354 Lunar Neighborhoods: Architecture for Extreme Environments, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Jeffrey Schwartz, John Bergquist, Carsten Keller, Preston Kel-

sey and Todd Stringer, p1027-1031
see Johnson, Stewart W., (Engineering, Construction, and
Operations in Space, Stewart W. Johnson, ed.,
1996), p871-880

Schwensen, Shawn M. see Darwin, David, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p482-491

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see Cosulich, G., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p558-562

see Ianniello, C., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p54-58

see Mazzucchelli, M., (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p44-48

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Sclavo, M.

see Liberatore, G., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p355-365

Scolforo, Matthew J.

Proposed Prestressed Masonry Design Provisions, (World-wide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p355-364

Scordelis, Alex C.

Analysis and Design of the Ponce Coliseum in 1969 and 1996, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Pere Roca and Antonio R. Mari, p278-286

Scott, John F.

An Environmental Ethic for ASCE, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3265-3270

Interruptible Option Contracts, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3569-3573

Scott, Jon P.

Engineering Models of Combined Chemical and Biological Processes, with David F. Ollis, EE Dec. 96, p1110-1114

Emerging High-Tech Areas of Civil Engineering Attract Women, with Walter Boles, El Jan. 96, p42-43

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Structural Dynamic and Viscoelastic Analysis via Electric Analogy, with Renato Vitaliani, ST Sept. 96, p1118-1121

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Seagren, Eric A.

Innovative Evaluaton Methods for Bioremediation, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with David J. Hollander, David A. Stahl and Bruce E. Rittmann, p381-392

eal, Rebecca

Hydraulic Effects of Habitat Structures in Flood Control Channels, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1519-1524

Seals, Roger K.

see Foxworthy, Paul T., TE July/Aug. 96, p300-307 see Roy, Amitava, MT Feb. 96, p11-18

see Gordus, Andrew G., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p518-523

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see Gibby, Reed, TE May/June 96, p215-217

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Sechi, Giovanni M.

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World-Wide Command and Control: Operating the International Space Station, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Seed, H. Bolton

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Seed, Raymond B. see Bray, Jonathan D., GT Mar. 94, p543-561

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Seelos, Alan G.

See McDonald, Blair J., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p287-296

Seely, Bruce E.

State Engineers as Policymakers: Apolitical Experts in a Federalist System, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p123-135

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(NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p139-150 see Pierdinock, Michael J., (Non-Aqueous Phase Liquids

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Earthquake Response of Structure-Elevator System, with A. Rutenberg and R. Levy, ST June 96, p607-616

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Optimal Estimation of Storage-Release Alternatives for Storm-Water Detention Systems, with Mohammad El Basha-Rivera, WR Nov./Dec. 96, p428-436

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see Gao, W., (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996),

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Design Guidelines for Spillway Gates, HY Mar. 96, p155-

Seible, Frieder

Advanced Composites Build on Success, with Vistasp Karbhari, CE Aug. 96, p44-47

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of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p845-852

Seifert, Tim D.

see Steele, John P. H., (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p262-275

Seim, Charles

San Francisco Bay's Jeweled Necklace (Available only in Focus on Structures Special Edition), CE Jan. 96, p14A-

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see Bittnar, Zdeněk, Numerical Methods in Structural Mechanics

Sek. M. A.

see Rouillard, V., TE May/June 96, p241-245

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see Mori, Yasuhiro, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p696-699

Dynamic Behaviour of Masonry Church Bell Towers, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with John M. Wilson, p188-199

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see Li, Dingqing, GT Dec. 96, p1006-1013

Sellar, R. Glenn

see Otten, Leonard John, III, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p224-230

Selleck, Scott F.

NDE of Distributed Cracking in Concrete, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Eric N. Landis, Michael L. Peterson and Surendra P. Shah, p604-607

Sellers, H. William

Water Based Land Use Regulations Using GIS Water Budgeting Model, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3962-3968

Selvadurai, A. P. S.

see Nguyen, T. S., (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), p60-63

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Comparison of Flow Around Circular Cylinder Using FE and FD Procedures, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1021-1028

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Construction Claims and Disputes: Causes and Cost/Time Overruns, with Francis T. Hartman and George Jergeas, CO Dec. 94, p785-795

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Sen. Rajan

Strengthening Steel Composite Beams with CFRP Lam-inates, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Larry Liby, Gray Mullins and Ken Spillett, p1601-1607

see Engebretson, Dan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1592-1600

Sen, Zekai
Volumetric Leaky-Aquifer Theory and Type Straight Lines,
HY May 96, p272-280

see Darwin, David, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p482-491

Seneviratne, Prianka
Meeting the Challenge: Rebuilding Inner City Airports,
1996, 0-7844-0179-9, 300pp.

see Bergener, John, (Meeting the Challenge: Rebuilding In-ner City Airports, Prianka Seneviratne, ed., 1996),

Sengupta, Amlan K. see Belarbi, Abdeldjelil, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p743-746

Senior, Bolivar A.

Electrical Construction Foreman Task Scheduling, CO Dec. 96, p363-369

Senior, C. L.

see Nakamura, T., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p783-790

enouci, Ahmed B.

Dynamic Programming Approach to Scheduling of Non-serial Linear Project, with Neil N. Eldin, CP Apr. 96,

Senseny, Paul E. see Gran, James K., EM July 96, p660-668

Seo, Dong Jun

see Smith, Michael, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p140-145

Seo, Il Won

Derivation of New Disperison Coefficient Equation for Natural Streams, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Kil Seong Lee and Tae Sung Cheong, p4263–4268

Sepehrnoori, Kamy see de Blanc, Phillip C., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p478-489

Sergenian, Timothy J. see Chini, S. Abdol, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p154-162

Serrano, Sergio E. Hydrologic Theory of Dispersion in Heterogeneous Aqui-fers, HE Oct. 96, p144-151

Serres, C.

see Baudoin, P., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p168-

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see Playán, E., IR Nov./Dec. 96, p339-347

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Shear Resistance of Gypsum-Sheathed Light-Gauge Steel Stud Walls, with Kehinde Ogunfunmi, ST Apr. 96, p383-389

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Seshadri, V.

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Seshan, Arathi T.

Effect of Reservoir Hedging on Crop Yield Under Deficit Irrigation Conditions, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with K. Srinivasan, p4226-4232

Setoguchi, Shinichi

see Ito, Kenji, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p49-

'A Comprehensive Strategy for Mitigation', (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p13-14

see Welch, Richard, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p129-135

Sevougian, David

see Vallikat, Vinod, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p293-294

Sevougian, S. David

Total System Performance Predictions (TSPA-1995) for the Potential High-Level Waste Repository at Yucca Mountain, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Robert W. Andrews and Jerry A. McNeish, p295-297
see Atkine 1901. F. (High Level Reflicative Waste Men.

see Alkins, Joel E., (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), p291-292

Seya, Hitoshi

Statistical Aspects of Damages Due to the Great Hanshin Earthquake, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Michio Sugimoto, p186-189

see Kitahara, Takeshi, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p530-533

Effects of Spatial Data Resolution and Subarea Size on a Distributed Runoff Model, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Chin Y. Kuo, p2701-2706

Wave Climate Variability in Southern California, WW July/Aug. 96, p182-186

Seymour, Richard J.
disc. (of Effects of Southern California Kelp Beds on Waves, by M. Hany S. Elwany, William C. O'Reilly, Robert T. Guza and Reinhard E. Flick, WW Mar/Apr. 95, p143-150), WW July/Aug. 96, p207-208

Repair of Main Pass 69 Waterflood Platform, with T. E. Webster and N. M. Hennegan, WW July/Aug. 96, p165-

see Chevalier, Lizette R., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p357-368

Shabman, Leonard

Reflections on the Regulatory Reform Debate, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p1-9

Shackelford, Charles D.

Critical Concepts for Column Testing, GT Oct. 94, p1804-1828

disc: D. A. Barry and S. J. Anderson, GT Jan. 96,

p84 GT Jan. 96, p84-85 clo:

Solute Breakthrough Curves for Processed Kaolin at Low Flow Rates, with Patrick L. Redmond, GT Jan. 95, p17-

disc: D. A. Barry and S. J. Anderson, GT Sept. 96, p781-782 clo: GT Sept. 96, p782-785

Uncertainty in the Geologic Environment: from Theory to Practice, 2 vols., Geotechnical Special Publication No. 58, with Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996, 0-7844-0188-8, 1460pp.

Shafai-Bajestan, M.

disc. (of Pipe Plunge Pool Energy Dissipator, by Fred W. Blaisdell and Clayton L. Anderson, HY Mar. 91, p303-323) with M. L. Albertson, HY Oct. 92, p1449-1452

Shafiq, A. B.

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see Issa, Mohsen A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1038-1041

Shafiro, Boris

see Kachanov, Mark, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p487-490

Accidental Pollution Simulation System and Pollutant Transboundary Transport Problems for Tura River, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996),

see Zhu, J., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1159-1162

Shah, Jay B.

Innovative Design/Build Approach: Ambassador Bridge Project, ME July/Aug. 96, p58-61

Tensile Response of Reinforced High Strength Concrete Members, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with C. Ouyang, p431-442

see Lange, D. A., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p281-287 see Ouyang, C., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p861-864

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see Choi, Sokhwan, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p967-970
see the New Millennium.

see Landis, Eric N., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p130-1336 see Selleck, Scott F., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p604-607

see Shao, Yixin, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p251-260

see Tang, Tianxi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p584-587

see Yang, Wei, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p564-573

hahalam, A. B.

Parametric Sensitivity of Comprehensive Model of Aerobic Fluidized-Bed Biofilm Process, with R. El-Samra, G. M. Ayoub and A. Acra, EE Dec. 96, p1085-1093

Shahawy, M.

see Arockiasamy, M., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p776-779
see Arockiasamy, M., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1050-1053

Shahawy, Mohsen
Hybrid Columns of FRP and Concrete, (Materials for the
New Millennium, Ken P. Chong, ed., 1996), with Amir
Mirmiran and Michel Samaan, p73-82
see Huang, Dongzhou, ST Sept. 95, p1330-1337
see Wang, Ton-Lo, BE May 96, p67-75

Shahawy, Mohsen A. Analytical and Measured Strains in Sunshine Skyway

Bridge, II, with M. Arockiasamy, BE May 96, p87-97 Field Instrumentation to Study the Time-Dependent Behavior in Sunshine Skyway Bridge. I, with M. Arockiasamy, BE May 96, p76-86

Shahi, Shiv

see Everett, Jess W., EE Feb. 96, p107-114 see Everett, Jess W., EE Feb. 96, p115-121

see Froese, Thomas, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p572-578

Shakeri, C.

Smart Materials and Structures: A Review, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with M. N. Noori and Z. Hou, p863-876

see Aghdam, M. M., EM July 96, p679-682

Shalaby, Ahmed see Easa, Said M., TE Sept./Oct. 96, p374-380

Spheres of Influence: Federalism, Politics, and Engineering Design, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p136-143

Shami, Manar

see Kanafani, Adib, (Meeting the Challenge: Rebuilding In-ner City Airports, Prianka Seneviratne, ed., 1996), p234-245

Shamir, Uri

see Ostfeld, Avi, WR Sept./Oct. 96, p322-333

Shamma, John e.

see Burton, James C., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p691-696

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Storm-Water Management Implementation through Model-ing and GIS, WR Mar/Apr. 96, p114-127

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see Meegoda, Jay N., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p614-620

Shan, M. Y.

Bending and Shear Behavior of Web Elements with Openings, with R. A. LaBoube and W. W. Yu, ST Aug. 96, p854-859

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Project Object, with Edith A. Zagona, Dave McIntosh, Terrance J. Fulp and H. Morgan Goranflo, CE Jan. 96, p61-

Polarization and Conduction of Clay-Water-Electrolyte Systems, with K. Y. Lo and I. I. Inculet, GT Mar. 95,

disc: K. Klein and J. C. Santamarina, GT Nov. 96, p954-955

Shang, Julie Q. Improvement of Soft Clays by High-Voltage Electrokinetics, with Wayne A. Dunlap, GT Apr. 96, p274-280 see Yeung, Albert T., (disc), GT May 94, p797-815

Shani, U.

Soil-Limiting Flow from Subsurface Emitters. I: Pressure Measurements, with S. Xue, R. Gordin-Katz and A. W. Warrick, IR Sept./Oct. 96, p291-295

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Shao, Lisheng

see Borden, Roy H., GT Oct. 96, p813-821

Shao, Shaowen

Approach to Failure Mode Analysis of Large Structures, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Yoshisada Murotsu, p704-707

see Kogiso, Nozomu, (Building an International Communi-ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p627-634

High Performance Fiber-Cement Composites by Extrusion Processing, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Surendra P. Shah, p251-260

Culture of Using Mobile Cranes for Building Construction, with Jay D. Glascock, CO Dec. 96, p298-307

Shapiro, Alvin

see Zavaljevski, Nela, (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Shapiro, D.

see Reaveley, L. D., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1123-1130

Shapiro, Daniel

see Rojahn, Christopher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p276-277

Shapiro, J.

see Baecher, G. B., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p56-

Shapiro, Jerry

see Hall, Peter, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p577-581

Shapiro, Phillip S.

Planning for Intermodal Access at American Airports, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p78-88

Sharma, Devraj

see Benson, Richard C., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p91-103

see Yuhr, Lynn, (Uncertainty in the Geologic Environ from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p195-209

Sharma, K. D.

Flash Floods and Their Control in the Indian Arid Zone, (North American Water and Environment Congress of Destructive Water, Chenchayya Bathala, ed., 1996),

Sharma, Mohan

see Bouzina, Khalid I., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p19-20

Sharma, Satish C.

Statewide Traffic Volume Studies and Precision of AADT Estimates, with Brij M. Gulati and Samantha N. Rizak, TE Nov/Dec. 96, p430-439

Sharma, Sunil

disc. (of Unified Formulation for Analysis of Slopes with General Slip Surface, by R. D. Espinoza, P. L. Bourdeau and B. Muhunthan, GT July 94, p1185-1204), GT Feb. 96, p160

Sharma, V.

see Maragakis, E., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p183-190

harma, Vinaya

Program for Estimating the Remaining Fatigue Life of Steel Railway Bridges, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with John Choros, p223-229

see Prucz, Zolan, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p191-198

Sharp, James J.

Selective Withdrawal through Intake Fitted with a Collar, with T. M. Parchure and Z. R. Guo, HY Dec. 96, p683-

see Guo, Zhen-Ren, HY Feb. 96, p82-89 see Guo, Zhen-Ren, HY Sept. 96, p495-502

Sharp, John M., Jr.

see Hibbs, Barry J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1323-1330

Sharp, Maurice L.

Hot-Spot Fatigue Design of Aluminum Joints, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Glenn E. Nordmark and Craig C. Menzemer, p1027-

Sharpe, Burt L. see Schrunk, David G., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p935-941

Sharpe, Lonnie, Jr. see Shen, Ji Y., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1148-1154

nawi, Muh

Shatanawi, Muhammad R. see Kassem, Ahmed, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1924-1929

see Harvey, J., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p701-710

A Procedure for Evaluating Reflective Cracking, (Materials for the New Millennium, Ken P. Chong, ed., 1996),

Innovative Development of Prestressed Masonry, (World-wide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p13-24

Shaw, Harry

Discussion of Environmental Engineering Forum:
Backflow Prevention and Water Quality in Residential
Sprinkler Systems (September/October 1993, Vol. 119,
No. 5, by Thomas M. Walski (Environmental Engineering Forum)), EE Jan. 96, p79-80

see Russell, Gordon, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996),

see Hancock, Bryan, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p719-728

Shea, Conor C.

Reduction of Downstream Impacts Through Use of Varia-ble Detention Basin Volume Requirements, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1838-1863 Two Dimensional Modeling of the Mobile River Delta and

the Mobile Bay System, (North American Water Letta and the Mobile Bay System, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Charles D. Powell and Michael A. Ports, p3662-3667

Sheahan, Thomas C.

Measuring and Modeling Time Dependent Soil Behavior, Geotechnical Special Publication No. 61, with Victor N. Kaliakin, ed., 1996, 0-7844-0205-1, 288pp.

Rate-Dependent Undrained Shear Behavior of Saturated Clay, with Charles C. Ladd and John T. Germaine, GT Feb. 96, p99-108

Sheen, Der-Liang

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see Lin, Chiang-Tsai, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3170-3175

Shefelbine, Wendy

Solar Power Satellites as an Alternative Energy Source, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1307-1310

Sheikh-Ibrahim, Firas

Bolted Field Splices for Steel Bridges, (Building an Inter-national Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Karl H. Frank, p290-297

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see Raman, Mahadev, CE June 96, p43-45

Shelley, Stuart J.

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see Stokes, Grant, (Engineering, Construction, and Opera tions in Space, Stewart W. Johnson, ed., 1996), p46-53

Shelton, John M.

Westlake Farms Demonstration Wetlands A Cooperative Effort, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p388-393

Shelton, S.

see Rael, J., EE May 95, p411-415

Shen, Bing

see Lee, Kwang K., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2456-2461

Shen, C. L.

An Advanced Comprehensive Model for the Statistical Analysis of S-N Data, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with P. H. Wirsching and G. T. Cashman, p462-465

Statistical Analysis of S-N Fatigue Data; Design Curve Based on Tolerance, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with P. H. Wirsching and G. T.

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see Zhao, D. H., HY July 94, p863-883 see Zhao, D. H., HY Dec. 96, p692-702

Shen, Hayley H.

see Aidanpää, Jan-Olov, EM Mar. 96, p187-196

Shen, Hung Tao

Dynamics of River Ice Jam Release, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Shunan Lu, p594-605

Under Cover Transport and Accumulation of Frazil Granules, with De Sheng Wang, HY Feb. 95, p184-195 disc: Qizhong Guo, HY Aug. 96, p473 clo: HY Aug. 96, p473-474

Inverse Estimation of Parameters for an Estuarine Eutrophi-cation Model, with A. Y. Kuo, EE Nov. 96, p1031-1040 see Kuo, A. Y., WW Mar./Apr. 96, p75-83

Shen, Ji Y.

A Finite Element Model for the Aeroelasticity Analysis of Hypersonic Panels, Part II: Determination of Flutter Boundary, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Lonnie Sharpe, Jr., p1148-1154

Design of Energy Dissipation Devices Based on Concept of Damage Control, with T. T. Soong, ST Jan. 96, p76-82

Shen, Lidno

see Jaffé, Rudolf, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p4389-4394

Shen, Livin

Application of BOT System for Infrastructure Projects in China, with Rowson K. H. Lee and Zhihui Zhang, CO Dec. 96, p319-323

Shen, Mu

Dam Construction in Northern Environment: A Numerical Study, (Cold Regions Engineering: The Cold Regions In-frastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with J.-M. Konrad, p736-744

Shen, Pao-Anne

see Wu, Chih-Ping, TE Sept./Oct. 96, p367-373

see Kirkner, David J., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p430-433

Shen, Y.

see Hannah, C. G., (Estuarine and Coastal Modeling, Mal-colm L. Spaulding and Ralph T. Cheng, 1996), p454-465

Shen, Yung-Ching Decision-Support System for Infrastructure Preservation, with Dimitri A. Grivas, CP Jan. 96, p40-49 Uncertainty Modeling for Preliminary Design of Structures, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Larry J. Feeser, p565-

disc. (of Design Rationale for Computer-Supported Conflict Mitigation, by Feniosky Peña-Mora, Duvvuru Sriram and Robert Logcher, CP Jan. 95, p57-72) with Larry J. Feeser, CP Oct. 96, p328

Sheng, Daichao

see Eigenbrod, K. Dieter, CR June 96, p77-92

Application of GIS in Site Selection for Nuclear Waste Disposal Facility, (High Level Radioactive Waste Manageent, Technical Program Committee, 1996), with Isaac

N. Luginaah and John Sorrell, p95-97

Survey of University Students' Knowledge and Views on Nuclear Waste Disposal and the Alternative Dispute Resolution Process, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Lenore Deffner and Sonja Fiorini, p510-512 see Cronhjort, Bjorn, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996),

Sheng, Y. Peter

Sheng, Y. Peter
Modeling the Effect of Reduced Nitrogen Loading on Water Quality, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Eduardo A. Yassuda and Changlu Yang, p644-658
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Shenk, Gary W.

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henton, Harry W., III

Criteria for Initiation of Slide, Rock, and Slide-Rock

Rigid-Body Modes, EM July 96, p690-693 Guidelines and Benchmarks for Analysis of Isolated Build-ings, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with Andrew W. Taylor, p236-245

Water-Supply System Operations: Critiquing Expert-System Approach, with Leonard Ortolano, WR Sept./ Oct. 96, p348-355

Sheppard, Marsha I.

Biosphere Model for Assessing Doses from Nuclear Waste Disposal, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with R. Zach, S. C. Sheppard, B. D. Amiro, G. A. Bird, J. A. K. Reid and J. G. Szekely, p240-243

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see Sheppard, Marsha I., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p240-243

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3D Simulation of End-Plate Bolted Connections, with Mohammed R. Bahaari, ST Nov. 94, p3122-3136 disc: N. Krishnamurthy, ST June 96, p713-714 see Bahaari, Mohammed R., ST Aug. 96, p926-935

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Sherk, George William

Transboundary Diversions, Water Law and Property Rights, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3224-3229

Sherman, Matthew R.

see McDonald, David B., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1266-1275

Government Actions to Enable Space Business Parks, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Charles J. Lauer and Joseph P. Hopkins, Jr., p186-193
Pathfinder: Commercial Payload Service on the Russian

Mir Space Station, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), with Thomas J. Walmsley, p170-176

Shestopalov, V. M.

Modeling of Possible Outflow of Radionuclides from Deep Burials into Biosphere, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with B. D. Stetsenko and A. S. Boguslawski, p176-177

Shestopalova, Olga V. Evaluation of Geological Formations of West Ukraine from the Standpoint of Raw Disposal, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p79-80

Sheu, Hwey-Lin

Dry Deposition of Polycyclic Aromatic Hydrocarbons in Ambient Air, with Wen-Jhy Lee, Chun-Ching Su, How-Ran Chao and Yi-Chin Fan, EE Dec. 96, p1101-1109

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Shi, Changxing

Estimate the Hazards of Bank Burst in the Lower Yellow River, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Qingchao Ye, p920

Shi, Chenggang

see Wilson, John L., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p544-550

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Modeling for Moment-Rotation Characteristics for End-Plate Connections, with S. L. Chan and Y. L. Wong, ST Nov. 96, p1300-1306

Shiah, Y. C.

Interaction between the Crack Tips of a Circular Arc Crack, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Y. M. Tsai, p592-595

Shibuya, Satoru

Shibuya, Satoru Strain Rate Effects on Stress-Strain Behaviour of Clay as Observed in Monotonic and Cyclic Triaxial Tests, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), with Toshiyuki Mitachi, Akihiko Hosomi and Seong Chun Hwang, p214-227

Shieh, Tung-Ying

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Buckling of Laminated Composite Beams, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Tim Morey, p1010-1013

Shield, Carol K.

see Ahlborn, Theresa M., (Worldwide Advances in Struc-tural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p141-152

Shield, Caroline M.

see Bell, Michael G. H., (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p695-699

Shields, F. D., Jr.

Channel Restoration of Incising, Mixed Grain Size Streams: Lessons Learned, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with M. W. Doyle, S. S. Knight and C. M. Cooper, p3363-3368

Shields, F. Douglas, Jr.
Prediction of Effects of Woody Debris Removal on Flow Resistance, with Christopher J. Gippel, HY Apr. 95, p341-354

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clo: HY Aug. 96, p471-472

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New Applications for Gypsum Products, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Chris-tian Meyer, p1687-1693

Shin, Howard

Another Times Square Attraction (Available only in Struc-tures Special Issue), CE May 96, p12A-13A

Uncertainty Analysis of Reservoir Sedimentation, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Jose D. Salas, p2294-2299

Shin, Young Ho

see Yoo, Seung Ick, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p379-381

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Development and Application of Urban Information Strategies, (Applications of Advanced Technologies in Trans-portation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with M. McDonald and A. Richards, p310-314

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Recent Developments in Stochastic Mechanics Relevant to Earthquake Engineering, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p1-1

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Limit State Design Method of Structural System Using Reliability-Based Optimization and Efficient Monte-Carlo Simulation Technique, (Building an International Com-munity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p635-642

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Design and Construction of a Bonded Fiber Concrete Overlay of CRCP, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Masood Rasoulian and Bill King, p1647-1658

Shiu, Frank J. Y.

Recover Inorganic Solids from Obsolete Propellants, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with

Destructive Water, Chenchayya Baunana, cu., 1970, with Iris C. Y. Yang and T. F. Yen, p1373-1378 see Kwon, Sung-Hyun, (North American Water and Envi-ronmen: Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p794-799

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see Mansheid, Christopher M., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p135-139
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Exterior Cladding Methods: A Technoeconomic Analysis, with Alexander Laufer, CO Sept. 96, p242-247

disc. (of Design of Sediment-Transporting Pipeline, by Pra-bhata K. Swamee, HY Jan. 95, p72-76) with K. C. Wil-son, HY Apr. 96, p225-226

Shoureshi, Rahmat A.
Vibration Control of Cable-Stayed Bridges: Control System Development and Experimental Results, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Mark J. Bell, p902-905

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see Ayars, J. E., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2130-2135

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see Gracie, James W., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3539-3544

Shrestha, Bijaya P.

Shrestin, Bugay.

Forcing Function and Climate Change, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Lucien Duckstein and Eugene Z. Stakhiv, p2151-2156

and Eugene Z. Stakhiv, p2151-2156
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Multiphase Distribution of Cohesive Sediments and Heavy Metals in Estuarine Systems, with Gerald T. Orlob, EE Aug. 96, p730-740

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see Liao, H. J., GT July 96, p526-533

Shubin, O. N.

Nuclear Explosion Near Surface of Asteroids and Comets-II. General Description of the Phenomenon, (Engineer-ing, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with V. Z. Nechai, V. N. Nogin, D. V. Petrov and V. A. Simonenko, p74-80

see Petrov, D. V., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p68-73

Optimized Boundary Conditions for Coastal Modeling, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with James K. Lewis, p268-282

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Closed-Form Back-Calculation of Rigid-Pavement Parameters, with T. F. Fwa and K. H. Tan, TE Jan./Feb. 96, p5-

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Biotransformation of Trichloroethylene by a Phenol-Induced Mixed Culture, with Gene F. Parkin, Lenly J. Weathers and David T. Gibson, EE July 96, p581-589

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On a Conceptual Model for Turbulent Skin Friction, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Manhar Dhanak, p293-296

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see Reid, John D., TE Sept./Oct. 96, p399-405

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Earthquake-Induced Ground Settlements of Bridge Abut-ment Fills. (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), with Mahmoud El-Gamal, p100-123

Siddiqui, Muhammad Z.

Landfill Siting Using Geographic Information Systems: A Demonstration, with Jess W. Everett and Baxter E. Vieux, EE June 96, p515-523

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see O'Connor, Kevin M., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p710-726

Sienkiewicz, Z.

Eigenproperties of Massive Rigid Body on Elastic Half-Space, GT June 96, p488-491

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see Muszynski, L. C., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p648-656

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A Space Systems Testbed for Situated Agent Observability and Interaction, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Gary Nutt, p122-128

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Applications of Soil Nailing in Residual Soil, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), p57-65

Sigurdsson, O.

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Sikkema, David A.

see Tsihrintzis, Vassilios A., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p274-279

Silcock, J. P.
SCOOT Control of a Simulated Road Network, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), with D. A. Crosta, p583-587 Sillan, R. K.

see Annable, M. D., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Reme-diation, Lakshmi N. Reddi, ed., 1996), p212-220

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Drained Creep Behavior of Marine Clays, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), with Horst G. Brandes, p228-242

see Brandes, Horst G., (Measuring and Modeling Time De-pendent Soil Behavior, Thomas C. Shcahan, ed. and Victor N. Kaliakin, ed., 1996), p96-108

Border Environment Cooperation Commission: 1995 Year End Status Report, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1819-1821

Silva, Rodolfo

see Maza, J. Antonio, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p375-389

Silva, W. J.

see Robice, C. J., (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1113-1133

see Kim, Duk Hyun, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1408-1417

Simila, Gerry
The 1994 California State University, Northridge Earthquake Experience - A Case Study, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p45

Extreme Wind Distribution Tails: A "Peaks over Threshold" Approach, with N. A. Heckert, ST May 96, p539-

Melnikov Processes and Noise-Induced Exits from a Well, with Michael R. Frey, EM Mar. 96, p263-270

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Dynamic Processes on a Ridge and Runnel Beach, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with George Voulgaris and David Huntley, p868-878

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Modeling 3D Free Surface Flow in Compound Channels: A Validation Case Study, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Sam S.-Y. Wang, p2719-2724

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On Exploration and Usage of Near-Earth-Missing Objects, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p61-67

see Petrov, D. V., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p68-73

see Shubin, O. N., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p74-80

Simonini, P.

Analysis of Behavior of Sand Surrounding Pile Tips, GT Nov. 96, p897-905

Simonovic, Slobodan P.

see Bender, Michael J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4148-4153

see Kroeger, Heidelore I., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1531-1536

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Simons, Richard R.
Evaluation of the UK Coastal Research Facility, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Richard J. S. Whitehouse, Ruairi D. MacIver, Jonathan Pearson, Paul B. Sayers, Yingdao Zhao and Adrian R. Channell, p161-172

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Modeling Contaminated Sediments, with Daryl B. Simons,
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see Keynton, Robert S., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p196-199

Sinclair, J. R.

Applications of CFD Flow Modelling in Building Design, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with P. A. Irwin, K. M. Matsui, M. Vanderheyden and F. Kriksic, p997-1004

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see Roseboom, D. P., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2879-2884

Sindel, Roger
FORM/SORM Search Algorithms in the Presence of Inadmissible Domains, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Rüdiger Rackwitz, p570-573

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see Farell, César, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1245-1251

Sivakugan, Nagaratnam Probabilistic Solutions to Geotechnical Problems, (Prob. bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Ali Al-Harthy, p938-941

Sivakumaran, K.

A Combined Physical and Mathematical Modeling Scheme for Kapichira Hydropower Project, Malawi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with E. Cole, p3806-3811

Sivakumaran, K. S.

Finite Element Computer Models for Analysis of Cold-Formed Steel Members, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Nabil Abdel-Rahman, p690-696

Sivapullaiah, Puvvadi V.

Permeability of Clay Liners with Contaminants, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Asuri Sridharan, p506-511

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Skaar, Steven B.

see Gonzalez-Galvan, Emilio, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p57-63

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Risk-Based Planning and Management of Maintenance Dredging, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with David A. Moser, p2403-2408

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Laura A. Demsetz, ed., 1996), p71-78

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Reclaiming Denver's Central South Platte River, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Leo Eisel, Brian Kolstad and Ben Urbonas, p3527-3532

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Bearing Capacity of a Prestressed Cracked Plate, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with John P. Dempsey, p989-992

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Time-Dependent Fluid Fracture Interaction in Concrete, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Victor E. Saouma, p865-868

Sludge Treatment, Utilization, Reclamation and Disposal Committee, ASCE
Conveyance of Water and Wastewater Residuals, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p994-996

Stuys, L. J.
Embedded Localization Band Elements for Mode-1 and
Mode-II Failure, (Engineering Mechanics, Y. K. Lin and
T. C. Su, 1996), with A. H. Berends, p1181-1184

In-Situ Corrosion Testing of Selected HLW Container Materials, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p462-463

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Vulnerability Assessment within BMS, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Steven B. Chase, p446-449

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Wetland Restoration in Southern North Sea Coastal Areas: The Experience of Britain and The Netherlands, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with John S. Pethick, p3740-3745

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Dally, ed. and Ryszard B. Zeidler, ed., 1996),
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Smith, Christine M.

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see McMillen, Morton D., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1129-1134

Smith, D. L.

Shallow and Surfacing Ground Water in an Arid Urban Environment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with J. C. Guitjens, p1495-1500

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see Gao, W., (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p60-70

mith, Daniel W.

Smith, Daniel W. Cold Regions Utilities Monograph, 3rd edition, 1996, 0-7844-0192-6, 780pp.
Drinking Water Quality in Small Northern Communities, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Stephen J. Stanley and Dennis S. Prince, p570-581
Remote Monitoring and Technical Support for Drinking Water Systems in Remote Communities, (Cold Regions Engineering: The Cold Regions Infrastructure—An In-

Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Stephen J. Stanley and Dennis S. Prince, p545-557

Smith, David R.

Development of Worker Safety in the Environmental Field in the Past 25 Years, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p42-54

Selection of Sediment Transport Relations: Part II, Ranges of Dimensionless Numbers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with David T. Williams, p2837-2842

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Smith, Douglas A.

An Overview of Field Experiments on a Low-Rise Building, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Kishor C. Mehta and Praveen Sandri, p1029-1036

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George W. Housner, ed. and Riley M. Chung, ed., 1997), p315-316
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Smith, G.

Sediment Transport Fluxes as Determined from Wave Breaker Induced Suspended Sediment and Flow Fields, (Coastal Dynamics '95, William R. Dally, ed. and (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with G. Mocke and L. Engelbrecht, p783-794

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Space Habitat Environmental Health Risk Assessment and Management, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), with George W. Morgenthaler, p1008-1019

Smith, Gordon S.

Smith, Gordon S.
see Wagner, Robin M., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p78-79

Smith, Graham M.

Biosphere FEP List Development Specific to Yucca Mountain, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Barbara M. Watkins and Richard Little, p244-246

Critical Groups for Geological Disposal Performance As-sessments, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with John Kessler, p234-236

Smith, H. Allis

Smitta, B. Allson Comparison of LQR and H. Algorithms for Vibration Control of Structures in Seismic Zones, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with J. Geoffrey Chase, p1164-1171

Model to Incorporate Architectural Walls in Structural Analyses, with Vicki L. Vance, ST Apr. 96, p431-438

Vibration Control of Structures Utilizing Architectural Walls, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Luciana R. Barroso and Vicki L. Vance, p495-498

see Chase, J. Geoffrey, EM Oct. 96, p976-983

see Chase, J. Geoffrey, EM Oct. 96, p984-993

see Schemmann, Armin G., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p898-901

see Vance, Vicki L., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1106-1109

see Duran, C., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1095-1101

Smith, James A.

see Sahoo, Dipak, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1215-1220

see Rojahn, Christopher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p276-277

Smith, Jane M.

see Rosati, Julie D., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p771-782

Smith, Jane McKee

Modeling Time- and Depth-Varying Currents at Supertank, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Ib A. Svendsen, p245-256

Smith, Jeffrey L.

see Darwin, David, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p482-491

see Walson, Chester C., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p286-291

Smith, Kelly Helm

see Hayes, Michael J., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p371-372

Smith, M. J.

see Clegg, R., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p568-572

Smith, Marcia

Analyzing Water Balances and Ranking Maryland's Water-sheds Related to Growth, Development and Loss of Hab-itat, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with David Bleil and James Ahl, p4365-4370

Smith, Michael

Distributed Parameter Hydrologic Modeling and NEX-RAD for River Forecasting: Scale Issues Facing the Na-tional Weather Service, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Dong Jun Seo, Bryce Finnerty and Victor Koren, pdf. 145. and Victor Koren, p140-145

Smith, Ricardo A.

see Mesa, Oscar J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1477-1482

Smith, Richard P.

see Coppersmith, Kevin J., (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Nonstructural Evaluation of Competing Bridge Materials, with Robert J. Bush, MT May 96, p88-93

Water Control Structure Choice for Wetland Restoration/ Creation, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p268-273

Smith, Spence S.

see Pierdinock, Michael J., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p139-150

Smith, Stephen T.

see Kasper, John R., (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Smith, Steven P.

Scour in Erodible Rock II: Erosive Power at Bridge Piers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with George W. Annandale, p1349-1357

see Annandale, George W., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1342-1348 see Annandale, George W., CE July 96, p58-60

see Majer, E., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p151-154

Smith, Tara A.

Three Dimensional Particle Tracking Model for the Sacramento-San Joaquin Delta, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Gilbert V. Bogle, p4329-4334

Smith, Timothy

see Rouphail, Nagui M., (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996). Stephaneo p325-329

see Ososkova, T., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2533

Smoltczyk, U.

disc. (of Arching in Piled Embankments, by B. K. Low, S. K. Tang and V. Choa, GT Nov. 94, p1917-1938), GT Apr. 96, p318

Smoot, James C.

see Feldman, Sandra C., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p231-236

Smullen, James T.
see Burgess. Edward H., (North American Water and Enviroment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1230-1235

Smyth, D. J. A.

see Cherry, J. A., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remedia-tion, Lakshmi N. Reddi, ed., 1996), p3-24

Building Large Space Bases in Low Earth Orbit, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p367-377

Space Infrastructure Planning, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p360-366

Snelgrove, Patrick

see Hartman, Francis, CO Sept. 96, p291-296

Snip, D. Wino

Visser, Paul J., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996),

Snow, Michael S.

see Kroschel, Max, CE May 96, p64-66

Snow, Russ

see Beieler, Roger, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p282-289

Snyder, B.

Dense Organic Liquids Reduce GA-4 Reactivity Margin, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p333-335

Snyder, Mark B.

Accelerated Evaluation of New Materials in Transportation Applications Using Advanced Technologies, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p505-509

Snyder, Michael

see Hansen, Paul, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p327-338

Snyder, R. L.

Irrigation Methods Used in California: Grower Survey, with M. A. Plas and J. I. Grieshop, IR July/Aug. 96, p259-262

An Update on Surface Renewal Estimation of Evapotranspiration, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), with D. Spano, P. Duce and K. T. Paw U., p430-435

see Gallardo, M., IR Nov./Dec. 96, p354-359

Snyder, Russell D., P.E. Computer-Developed Structural Calculations, SC Nov. 96, p122-125

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Soares Marques, Maria Esther

see Leroueil, Serge, (Measuring and Modeling Time De-pendent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p1-60

Modelling of Randomly Meandering Fatigue Crack Growth, (Probabilistic Mechanics & Structural Reliabili-ty, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Jerzy Trębicki, p478-481

Sobierajski, Eugeniusz see Wilde, Piotr, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p69-80

edarmono, Diah R.

Using Virtual Reality to Avoid Construction Falls, (Com puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Fabian C. Hadipriono and Richard E. Larew, p899-905

Soemantri, Dadi S.

Soemantri, Dani S. see Niedzwecki, John M., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p586-587

Soga, Kenichi Rate-dependent Deformation of Structured Natural Clays, (Measuring and Modeling Time Dependent Soil Behav ior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), with James K. Mitchell, p243-257

see Nakagawa, Koichi, GT Apr. 96, p302-308

Soh, Chee Klong
Fuzzy Controlled Genetic Algorithm Search for Shape Optimization, with Jiaping Yang, CP Apr. 96, p143-150

Soball M.

disc. (of Analysis of Client-Satisfaction Factors in Con-struction Industry, by Syed M. Ahmed and Roozbeh Kangari, ME Mar/Apr. 95, p36-44), ME May/June 96, p57

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GPS High Accuracy Geodetic Networks in Mexico, with Gabriel Álvarez-García, Antonio Hernández-Navarro and Richard H. Foote, SU May 96, p80-94

Soliman, M. M. see Elnashai, A. S., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997),

omatine, D. P. Object Orientation in Hydraulic Modeling Architectures. CP Apr. 96, p125-135

Son, Jacho

Integration of CAD Drawings and Construction Robot Mo-tion Controllers, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), with Miroslaw J. Skibniewski, p71-78

ong, Bo

Comprehensive Evaluation Method on Earthquake Damage Using Fuzzy Theory, with S. Hao, Suminao Murakami and Satoru Sadohara, UP Mar. 96, p1-17

Consistent Infinitesimal Finite-Element Cell Method - A Boundary Finite-Element Procedure, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with John P. Wolf, p176-179

Consistent Infinitesimal Finite-Element Cell Method for an Anisotropic Unbounded Medium, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with John P. Wolf, p306-309

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Velocity and Turbulence Distribution in Unsteady Open-Channel Flows, with W. H. Graf, HY Mar. 96, p141-154

onger, Anthony D.

Field Inspection Data Collection using Personal Digital As-Frield Inspection Data Collection using Personal Digital Assistants and Digital Cameras, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Eddy M. Rojas, p1047-1051 Selecting Design-Build: Public and Private Sector Owner Attitudes, with Keith R. Molenaar, ME Nov./Dec. 96,

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see Rojas, Eddy M., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p1027-1033

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see Liu, Jinglian J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3668-3673

"Banding" Timber Crossties Using Composite Fabrics for Improving Their Performance, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with H. V. S. GangaRao, p1449-1457

see Auchard, B., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p4004-4009

ng, David

see Ray, Chittaranjan, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1575-1580

Soong, Su-Tzai

see Chen, ZhiQiang, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1093-1098

Soong, T. T.

Basic Concepts and Applications of Structural Control, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),

Design and Implementation of Nonlinear Control Strategies, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Z. Wu, p1147-1154 see Ben-Haim, Yakov, EM Apr. 96, p325-333

see Chen, Genda, EM Nov. 96, p1093-1100

see Dyke, S. J., EM Sept. 96, p907-918

see Fujino, Y., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1277-1287

see Grigoriu, M., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p422-425

see Shen, K. L., ST Jan. 96, p76-82 see Wu, Z., EM Aug. 96, p771-777

Soong, Ta Wei

Stong, a Vet Distributions of Return Flow in Navigable Waterways, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Renjie Xia and Nani Bhowmik, p2855-2860

see DePue, P. Michael, II, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3639-3644

Soong, Ta-Wei David

see Bhowmik, Nani G., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2849-2854

Sophocleous, Marios

Hydrologic Impact of Great Flood of 1993 in South-Central Kansas, with A. J. Stern and S. P. Perkins, IR July/Aug. 96, p203-210

Modeling Impact of Small Kansas Landfills on Underlying Aquifers, with Nicholas G. Stadnyk and Miles Stotts, EE Dec. 96, p1067-1077

Parameter Models for Estimating In-Situ Tensile Force in Tie-Rods, EM Sept. 96, p818-825

Sørensen, J. Dalsgaard

Stochastic Modelling of River Geometry, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with K. Schaarup-Jensen, p898-901

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see Engelund, Svend, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p664-667 Sørensen, Torben

History of Coastal Engineering in Denmark, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1990), with Jørgen Fredsøe and Per Roed Jakobsen, p103-141

Sorge, L. L.

see Brueneman, D. J., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p769-775

orge, Les L.

Sorge, Les L.
Standpipe Solids Transfer Behavior in a Lunar Gravity Fluidized Bed, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with David J. Brueneman, J. Dale Ortego, Jr., Michael A. Gibson, Christian W. Knudsen, Hiroshi Kanamori and B. Kent Joosten, p776-782

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see Wang, Xiaozhi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p146-149

Soriano, Carlos J.

see Kuprenas, John A., SC May 96, p74-78

Soroushian, Parviz

Cellulose Fiber Reinforced Concrete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p809-818

see Sheng, Grant, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p95-97

Sortet, Arthur J., III

Protecting an American Folklore Legend, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Harry B. Thomas, p274-275

Spatial Spring Runoff Modeling in a River Basin for Purpose of Forecasting, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with V. Manukalo, p247-248

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see Ramesh, G., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1238-1245

Sotiropoulos, Sotiris

Evaluation of FRP Composites Bolted and Adhesive Joints, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Hota V. S. GangaRao and Roberto Lopez-Anido, p233-242

Soulages, Jeffrey R.

A Comparison of Seismic Design Using ASD and LRFD, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Jon A. Heintz and James O. Malley, p542-549

Souleyrette, Reginald R. see Kamyab, Alireza, TE Nov./Dec. 96, p421-429

Design of a Floodplain Road Crossing Using Two Dimen-sional Modeling, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with Andrzej J. Kosicki and Michael A. Ports, p4300-4305

Southgate, H. N.

see Peck, T. M., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1024-1034

Southgate, Howard N.

Time Series Analysis of Long-Term Beach Level Data from Lincolnshire, UK, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Luisa M. Beltran, p1006-1017

see Karambas, Theofanis V., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p841-849

Sovich, Timothy

see McGillicuddy, Kevin, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4078-4083

Sowers, George Building on Sinkholes: Design and Construction of Founda-tions in Karst Terrain, 1996, 0-7844-0176-4, 208pp.

see Rosson, Barry T., (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p223-232

Seconomical Long-Span Spliced Bridges, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p147-

Spainhour, Lisa K.
Entity-Relationship Modeling of Composite Materials Data, with William J. Rasdorf, CP July 96, p226-235

see Ceplecha, Z., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p95-101

Spangler, M. V.
see Vance, R. E., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1183-1189

Spanhoff, R.

see Roelvink, J. A., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p818-828

Spano, D.

see Snyder, R. L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p430-435

Spanos, P. D.
Generalized Random Decrement Method for System Identification, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with B. A. Zeldin, p850-853

see Zeldin, B. A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p168-171

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see Vannucci, Marina, (*Probabilistic Mechanics & Struc-*tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p672-675

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see Huang, Wenrui, HY Apr. 95, p300-311 see Huang, Wenrui, HY June 96, p349-352 see Muin, Muslim, HY Sept. 96, p512-521

Spaulding, Malcolm L. Estuarine and Coastal Modeling, with Ralph T. Cheng, 1996, 0-7844-0165-9, 730pp. see Opishinski, Thomas, (North American Water and Envi-

see Opisinissa, Tionias, (vorin American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2528-2532
see Pornpinatepong, Somboon, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p92-105

Speece, R. E.

see Tang, Ning H., EE Feb. 95, p196-199

Speidel, David

Spetiate, Davin Seismic Hazard Analysis Without the Gutenberg-Richter Relationship, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Peter Mattson and Bon Sy, p129-130

Speirer, Robert A.

see Kane, William F., GT Aug. 96, p674-681

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Spelt, Jan K.

see Ackerman, Josef Daniel, EE Feb. 96, p141-148 see Dormon, Jane M., EE Apr. 96, p276-283

Spence, Mary K.

Improving the Speed of Double Lockages, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2867-2872

Navigation Lock Improvements, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3129-3134

Spencer, B. F., Jr.

Dynamical Model of a Magnetorheological Damper, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with S. J. Dyke, M. K. Sain and J. D. Carlson, p361-370

with S. J. Dyke, M. K. Sain and J. D. Cartson, p301-30. Nonlinear Identification of Semi-Active Control Devices, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with S. J. Dyke, M. K. Sain and J. D. Cartson, p164-167 Stochastic Response of Systems with Linear Hysteretic Damping, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with L. A. Bergman, p677-680

see Deoskar, H. S., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p426-429

see Dyke, S. J., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p886-889 see Dyke, S. J., EM Sept. 96, p907-918

see Fujino, Y., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1277-1287

see Kandarpa, S., EM Aug. 96, p788-795

see Kirkner, David J., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p354-337
see Tomasula, D. P., EM Mar. 96, p218-229

see Yi, W., (Probabilistic Mechanics & Structural Reliabil-ity, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p10-13

see Yi, W., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p685-688

Spencer, Colleen S.

Detection of Outliers in Pearson Type III Data, with Richard H. McCuen, HE Jan. 96, p2-10

see Balch, A. H., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p155-156

see Peterman, Z. E., (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Sperfslage, J. A.

see Georgakakos, K. P., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1147

Sperfslage, Jason A.

see Georgakakos, Konstantine P., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2360-2365

Spiegler, Peter

A Radiological Disadvantage for Siting a Repository at Yucca Mountain, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), p178-

Spiess, Jill M.

see McCuen, Richard H., HY Mar. 95, p256-266

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see Karatzas, George P., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p129-134

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see Sen, Rajan, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1601-1607

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see Adams, C. D., EE June 96, p477-483

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see Winkel, J. J., (High Level Radioactive Waste Manage ment, Technical Program Committee, 1996), p360Sportiello, Michael G.

High Frequency Access to Low Gravity Experimentation in ign rrequency Access to Low Gravity Experimentation in Organic Crystal Growth from Solutions, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Paul Todd, Ching-Yuan Lee, Craig E. Kundrot, Steve C. Schultz, Louis S. Stodieck and John M. Cassanto, p378-384

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Aerial Pipeline Crossings - Inspection and Rehabilitation, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p298-305

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Spring, Gary S.

Validating Expert Systems in Transportation Practice, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p985-991

EcoBlocks: Nontraditional Use for Mixed Wastepaper, with Marc Rose and Rich Ryu, EE May 96, p437-444

ise, J. Jake

see Murphy, Robin R., (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p22-28

Sreekrishnan, T. R.

Modeling Bacterial Decay Coefficient During SSDML Process, with R. D. Tyagi, J. F. Blais, N. Meunier and P. G. C. Cambell, EE Nov. 96, p995-1002 see Du, Y. G., EE July 95, p527-535

Sridharan, A.

Retention of Multiple Heavy Metal Ions by Fly Ash, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with N. S. Pandian and C. Rajasekhar, p1608-1613

Sridharan, Asuri

see Sivapullaiah, Puvvadi V., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p506-511

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Srinivasan, K.

see Sankarasubramanian, A., (North American Water and Environment Congress & Destructive Water, Chea-chayya Bathala, ed., 1996), p152-158

see Seshan, Arathi T., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4226-4232

see Sudhir, K., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2951-2957

Sripathy, Gopi

see Iyer, Srinivasa L., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p375-385

Sriram, Duvvuru

see Peña-Mora, Feniosky, CP Jan. 95, p57-72

Sritharan, Subramania I.

Effect of Recharge Duration on Water-Table Response, with Henry R. Gee, IR July/Aug. 96, p228-234

Srivastava, R. C.

Design of Runoff Recycling Irrigation System for Rice Cultivation, IR Nov/Dec. 96, p331-335

Methodology for Optimizing Design of Integrated Tank Irrigation System, WR Nov./Dec. 96, p394-402

Function, IR Nov./Dec. 95, p459-462 disc: Prabhata K. Swamee and Chandra Shekhar P. Ojha, IR Nov./Dec. 96, p364 clo: IR Nov./Dec. 96, p364-365

Srivastava, Ravindra M.

disc. (of Hydraulic Residence Time of CSTRs under Unsteady-State Condition, by Jian Peng, EE Nov./Dec. 94, p1446-1458), EE Jan. 96, p87-88

Stache, Jan E.

see O'Connor, Kevin M., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p710-726

Stadler, Alan T.

see Wu, Tien H., GT June 96, p445-453

Stadnyk, Nicholas G.

see Sophocleous, Marios, EE Dec. 96, p1067-1077

Organizing and Managing a Finance-Design-Build Project in Turkey: Fourth Roebling Lecture, 1995, CO Sept. 96, p199-204

Stahl, David A.

see Seagren, Eric A., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p381-392

Stahl, Frank L.

Cable Corrosion in Bridges and Other Structures, with Christopher Paul Gagnon, 1996, 0-7844-0014-8, 225pp. disc. (of Safety Analysis of Suspension-Bridge Cables: Williamsburg Bridge, by John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211), ST

July 96, p837

Stahl, R. P. see Biggar, K. W., CR Sept. 96, p149-162

Stair, Julia O.

see Ringelberg, David B., (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Stakhiv, Eugene Z.
see Haimes, Yacov Y., (Risk-Based Decision Making in
Water Resources VII, Yacov Y. Haimes, ed., David
A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p422-434

see Haimes, Yacov Y., ed., Risk-Based Decision Making in Water Resources VII see Shrestha, Bijaya P., (North American Water and Envi-

ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2151-2156

see Shrestha, Bijaya P., WR July/Aug. 96, p262-269

Stallard, W. M.

Two-Dimensional Hydraulics of Recirculating Ground-Water Remediation Wells in Unconfined Aquifers, with K. C. Wu, N. Shi and M. Yavuz Corapcioglu, EE Aug. 96, p692-699

Stallings, Eugene A.

Benefits and Costs Associated with Flood Mitigation in the United States, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p153-154

International Technology Transfer of Hydrologic Components, (*Natural Disaster Reduction*, George W. Housner, ed. and Riley M. Chung, ed., 1997), p325-326

Stallings, J. Michael

see Cousins, Thomas E., CF May 96, p79-86

see Tedesco, Joseph W., (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p631-637

Stamatopoulos, A. C.

Earth Slide on Geomembrane, with P. C. Kotzias, GT May 96, p408-411

Stamatopoulos, Constantine A.

disc. (of Dynamic Modeling and Response of Soil-Wall Systems, by Anestis S. Veletsos and Adel H. Younan, GT Dec. 94, p2155-2179), GT July 96, p603-604

Stamey, T. C.

Stating, 1. Conference of the Conference of t

Stamper, William

see Godiwalla, Adil, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996). p170-186

Stanfel, Larry E.

Survey Distance Units: A Better Way, SU Aug. 94, p130-

disc: Gunther Greulich, SU Feb. 96, p41-42 disc: Thomas G. Davis, SU Feb. 96, p42 clo: SU Feb. 96, p42-44

Stang, Henrik HPFRCC - Extruded Pipes, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), with Carsten Pedersen,

Stanley, Stephen J. see Smith. Daniel W., (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p545-557

see Smith, Daniel W., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p570-581

Hybrid Moment Resisting Precast Beam-Column Connections, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p266-277

Stanton, John F.

see Wood, Sharon L., (Building an International Communi ty of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1221-1227

Stanton, T.

see Garcez Faria, A. F., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p389-400

Stanton, T. P.

see Thornton, E. B., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p449-459

Stanton, Timothy P.

see Kohanowich, Karen M., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p739-748

Stark, Lloyd R.

see Williams, Frederick M., EE Jan. 96, p84-85

Stark, Timothy D.

HDPE Geomembrane/Geotextile Interface Shear Strength, with Thomas A. Williamson and Hisham T. Eid, GT Mar. 96, p197-203

Starkey, Deb

see Murakami, Linda K., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p480-482

Starodoumov, Valeri M.

see Khrushchov, Dmitri P., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p25-26

Starossek, Uwe

Cable-Stayed Bridge Concept for Longer Spans, BE Aug. 96, p99-103

Staroszczyk, R.

Plane Waves and Pore Pressure in a Saturated Sand, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with L. W. Morland, p943-946

Starr, Gregory

see Wilson, David G., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1225-1229

Starratt, F. Weston, P.E. see Hoffman, Norm, P.E., CE Aug. 96, p28-29

Starrett, Shelli K.

see Starrett, Steven K., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1693-1698 Starrett, Steven K.

Neural Networks Predict Pesticide Leaching, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Shelli K. Starrett, Yacoub M. Najjar and Judy C. Hill, p1693-1698

Stathopoulos, T.
see Saathoff, P., (Engineering Mechanics, Y. K. Lin and T.
C. Su, 1996), p1131-1134

Steacy, Robert E.

A Proponent of Choice, CE Feb. 96, p28

Stearman, Brian J.

see Tao, Zongwei, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p442-445

Steckley, Andrew
Use of GIS Mapping to Illustrate the Sensitivity of Wind
Hazard Insurance Loss Estimation to Modeling Parameters, (Natural Disaster Reduction, George W. Housner,
ed. and Riley M. Chung, ed., 1997), with Lawrence A.
Twisdale and Peter J. Vickery, p201-202

Steckley, Andrew C.

see Twisdale, Lawrence A., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p256-257 see Vickery, Peter J., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997),

p139-140

Steedman, R. S.

Rotation of Large Gravity Walls on Rigid Foundations under Seismic Loading, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), with X. Zeng, p38-56

Steele, John P. H.

Intelligent On-Line Monitoring of Machine Health for Robots in Critical Environments, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Michelle Archuleta, Galen D. Brown, Tom Drouillard, Dirk Schlief and Tim D. Seifert, p262-275

Steete, Aen Steete, Aen Steete, Aen Steete, Aen Steete, Aen Diego County Water Authority's Emergency Storage Project: A Major Planning Achievement, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Lee Judd, Richard Pyle and Uli Kappus, p2815-2819

Steele, Kenneth A. see Zhou, James, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2958-2963

Steenhuis, Tammo S. SCS Runoff Equation Revisited for Variable-Source Runoff Areas, with Michael Winchell, Jane Rossing, James A. Zollweg and Michael F. Walter, IR May/June 95, p234-

disc: Richard H. Hawkins, IR Sept./Oct. 96, p319 clo: IR Sept./Oct. 96, p319-320

Steetzel, Henk J.

Visser, Paul J., (Coastal Dynamics '95, William R. ed. and Ryszard B. Zeidler, ed., 1996), p583-594

Stefan, Heinz G.

see Hondzo, Midhat, WR Sept./Oct. 96, p364-373

Steffler, P. M.

see Hicks, F. E., (disc), HY Dec. 94, p1385-1400

Steffler, Peter M.

see Khan, Abdul A., HY Jan. 96, p3-9

see Khan, Abdul A., HY July 96, p397-402

see Khan, Abdul A., HY Oct. 96, p540-548

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Swimming in Style, CE Aug. 96, p36-39

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see Karakouzian, Moses, MT May 96, pi01-107

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see Young, Ken, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2775-2780 see Young, Ken, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3393-3398

Steinberg, Laura J.

Bayesian Model for Fate and Transport of Polychlorinated Biphenyl in Upper Hudson River, with Kenneth H. Reck-how and Robert L. Wolpert, EE May 96, p341-349

Steiner, Robert

see Parsa, Jafar, EE Oct. 96, p935-940

Steinmanis, J. E.

Soil Thermal Properties for the Design of Underground Structures in Cold Regions, (Cold Regions Engineering: The Cold Regions Infrastructure-An International In perative for the 21st Century, Robert F. Carlson, ed., 1996), with D. Parmar, H. S. Radhakrishna and A. S. Judge, p471-482

Stellavato, Nick

Borehole UE-25 ONC #1 Drilling at Yucca Mountain, Nevada, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p166-167

Westbay/MOSDAX Instrumentation of UE-25 ONC #1 and USW NRG-4 at Yucca Mountain, Nevada, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p163-165

see Cox, Dave O., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p160-

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see Montazer, Parviz, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p92-94

see Montazer, Parviz, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p423-425

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see Casulli, Vincenzo, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p1-12

Stenback, Greg A.

The Use of Direct Push Technologies in Expedited Site Characterization, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Bruce H. Kjartanson, Al Bevolo and David Wonder, p180-194

Stensel, H. David

see Hinton, Steven W., EE Sept./Oct. 94, p1284-1297

Stenstrom, Michael K.

see Babcock, Roger w., Jr., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p788-793

see Yin, Mark T., EE Mar. 96, p205-211

see Yin, Mark T., EE June 96, p484-492

Stephan, Dean E.

Design-Build Origins in Question, with Jeffrey L. Beard and Michael Charles, CE Aug. 96, p26,28

Stephanedes, Yorgos

see Benson, Lowell A., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. ephanedes, ed. and Francesco Filippi, ed., 1996), p525-534

Stephanedes, Yorgos J.
Applications of Advanced Technologies in Transportation Engineering, with Francesco Filippi, ed., 1996, 0-7844-0146-2, 730pp.

Charalambos N., (Applications of Adsee Antoniades, vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p218-221

see Vasilakis, George M., (Applications of Advanced Tech-nologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p292-295

Stephens, Tamar J.

see Tumeo, Mark A., EE Jan. 96, p55-57

Stephenson, Richard W.

see Dirnberger, Morris M., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p826-847

Stephl, Matt

see Merrill, Kelly S., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p518-532

Stepp, J. C.

see Elgamal, A.-W., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p335-338

Stepp, J. Carl

see Coppersmith, Kevin J., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p53-55

Steputat, Christian C.

Damage Assessment of Reinforced Concrete Structures through Acoustic Emission Monitoring, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Sashi K. Kunnath, p837-844

Sterley, David

see Johnson, Eric, (Cold Regions Engineering: The Cold Regions Infrastructure-An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p676-687

Stern, A. J.

see Sophocleous, Marios, IR July/Aug. 96, p203-210

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see Shestopalov, V. M., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p176-177

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Probability Distributions Used in 100-Year Return Period of Air-Freezing Index, CR Mar. 96, p25-35

see McAnally, W. H., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p204-214

Stevens, H. D.

The Limitations of Independent Controller Design for a Multiple-link Flexible Macro-manipulator Carrying a Rigid Mini-manipulator, (Robotics for Challenging Envinents, Laura A. Demsetz, ed., 1996), with Jonathan How, p93-99

Stevens, James D.

Blueprint for Measuring Project Quality, ME Mar./Apr. 96,

Stevens, Karl K.

Deflection of Beams with Integral Elastic Supports, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p343-346

Stevens, Patrick L.

Indianapolis Uses New Radar Technology to Refine Hyetographs for CSO Model and SSES Studies, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1236-1241

Stevenson, John D.

Development of Natural and External Man Induced Design Code Requirements Applicable to Special Facilities, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p149-150

see Ghiocel, Dan M., (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p18-21

Uranium Dioxide Dissolution under Acidic Aqueous Conditions, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with E. T. Mones, p388-389

Stewart, Douglas I.

1051

disc. (of Impact of System Chemistry on Electroosmosis in Contaminated Soil, by Gerald R. Eykholk and David E. Daniel, GT May 94, p797-815) with L. Jared West, GT Mar. 96, p250-251

see Marandi, Seyed M., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p23-34

Stewart, Jonathan P.

see Harder, Leslie F., Jr., CF Aug. 96, p109-114

Stewart, Keith

see Whitmore, David W., (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1504-1511

Spent Nuclear Fuel Dry Transfer System, (High Level Ra-dioactive Waste Management, Technical Program Com-mittee, 1996), with Stephen Agace, p471-473

Stewart, M. G.

see Khor, E. H., (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p238-241

Stewart, Mark G.

Proof Loads, Construction Error and the Reliability of Service Proven Structures, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), p226-229

Serviceability Reliability Analysis of Reinforced Concrete Structures, ST July 96, p794-803

see Epaarachchi, Deepthi, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p230-233

see Vick, Steven G., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p586-603

Stewart, Traci

see Wildermuth, Mark J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3300-3313

Stickel, Victor

see Omurtag, Ahmet C., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p450-453

see Tam, C. K., CF May 96, p47-56 see Tam, C. K., CF May 96, p57-66

Stillwell, Katherine A.

see Hajjar, Jerome F., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p43-54

Stinnette, P.

see Thilakasiri, S., (disc), GT Aug. 94, p1394-1412

Stinson, Timothy M.

Utilizing Directional Drilling Techniques to Install Underwater Watermain, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p180-185

Stive, Marcel J. F.

Behaviour-Oriented Models of Shoreface Evolution, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with thuib J. De Vriend, Peter J. Cowell and Alan Wm. Niedoroda, p998-1005

Stockholm, Neil P.

see Evanoff, James D., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p186-193

stockstill, Richard L.

Filling and Emptying System Model Study for the Innova-tive Lock Design, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3141-3146

Stoddard, Robert

see Johansen, Kevin, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1105-1110

see Borda, Charles, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4036-4041

Stodieck, Louis S.

see Sportiello, Michael G., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p378-384

see Wilson, David G., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1225-1229

Stokes, Frank E.

Stocks, Frank E., See Kaczinski, Mark R., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p329-336

Stokes, G. H.

see Darrah, J., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p32-45

Stokes, Grant
Air Force Planetary Defense System: Initial Field Test Rear Force Franciscopy Detentse System: Initial Field Test Results, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Robert Weber, Frank Shelly, David Beatty, Herbert Viggh, Eugene Rork and Byron Hays, p46-53

Stolldorf, Dennis W., P.E.

Bridge Rehabilitation Permits Higher Live Loads, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Thomas A. Holm, P.E., p1082-1090

Stone, William C.

see Kunnath, Sashi K., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p381-382

er, James W.

see Bhatti, M. Asghar, TE Jan./Feb. 96, p12-21

Stonestreet, Scott E.
Application of GIS Technology to Floodplain & Habitat
Analyses, (North American Water and Environment
Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1393-1398

Stochastic Determination of Wave Heights for Flood Control Channels, (North American Water and Environme Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4058-4063

Stong, James B. Mixing Influences on Cement-Based Waste Forms, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with James R. Weber and Kevin J. Hull, p1597-1601

Storey, Michelle L., see Gelda, Rakesh K., EE Apr. 96, p269-275

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see Sophocleous, Marios, EE Dec. 96, p1067-1077

see Collins, Frank X., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2044-2049

Stout, Larry J. see Navin, Stephen J., CE Feb. 96, p64-67

Stout, R. D.

see Magee, A. B., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1561-1570

see Einziger, Robert, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p432-434

Stout, Ray B.

Nonequilibrium Thermodynamical Model for Spent Fuel Dissolution Rate, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p393-395

Stoyanov, Tosho

Seismotectonic and Seismic Hazard in Southern Bulgaria, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p175-176

1052

Prefabricated Concrete Walls. Influence of Prestressload on Vertical Joints, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p147-153

Strand, D.

Construction Applications of Polyolefin Fiber Reinforced Concrete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with C. N. MacDonald, V. Ramakrishnan and V. N. Rajpathak, p103-112

Strasky, Jiri
see Redfield, Charles, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p153-160

Tenneco's Risk Management Approach to Pipeline Crossings, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with J. C. Bowles, p14-21

see Harik, I. E., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p464-471

Street, Robert L.

Environmental Fluid Mechanics -- A Review of Some Recent Results, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p30-32

Strelkoff, T. S.

Strelkoff, T. S.
Managing Border Irrigation for Near-Zero Discharge, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with A. J. Clemmens, p1711-1715
see Bautista, E., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-Congress & Destructive Water, Chenchayya Batha-

la, ed., 1996), p1887-1892

Stricklan, Kimberly K.

Innovative Bioventing System Construction/Operation in Cold Regions, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Randall L. Mattzela, p351-359

Stringer, Todd

see Schwartz, Milton, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1027-1031

Striz, Alfred G.

see Kang, Kijun, ST June 96, p657-662

Stroes-Gascoyne, Simcha Microbial Studies in the Canadian Nuclear Fuel Waste Management Program, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p4-

Stromatt, Rebecca F. see Bracci, Joseph M., ST Nov. 96, p1357-1363

Strong, James Donald Any New Address Stress?, CE Nov. 96, p36

Struble, Leslie

Rheology of Fresh Concrete, (Materials for the New Milm, Ken P. Chong, ed., 1996), with Richard Szecsy, p1121-1128

Struss, Mark W.

see Donnelly, Gerald, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p37-47

Stuart, Paul R.

see Lagacé, Pascale, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p99-104

Stubbs, N.

A Damage Simulation Model for Buildings and Contents in a Hurricane Environment, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with D. C. Perry, p989-996

Stubchaer, James M.

"California Border Environment Activities Since Passage of NAFTA", (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Bart Christensen and Susan Phillips, p1807-1812 see Lawrance, Charles H., WR July/Aug. 94, p458-475

Stuckless, John S.
Current Status of Paleohydrologic Studies at Yucca Mountain and Vicinity, Nevada, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p98-101

Stumpf, A. L. see Liu, L. Y., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p15-

Stumpf, Annette L.

Object-Oriented Model for Integrating Construction Product and Process Information, with Rajaram Ganeshan Sangyoon Chin and Liang Y. Liu, CP July 96, p204-212

see Brucker, Beth A., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p732-738

see Chin, Sangyoon, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p786-792

Sture, Stein

see Costes, Nicholas C., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p516-520

see Jeremić, Boris, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p555-558

see Klosky, J. Ledlie, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996),

p680-688 see Klosky, J. Ledlie, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996),

p903-911 see Zhang, Runing, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p723-726

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California State Route 91 Variable Toll Express Lanes: Operational Aspects and Impact Assessment, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Jerry C. Porter, p547-551

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The NEA International FEP Database: Outcome of the Working Group, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p317-

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Roof Sheathing Uplift Resistance for Hurricanes, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Kallem Muralidhar and Timothy Reinhold, p974-981

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Overcoming Soil Uncertainty in Prediction of Construction and Industrial Vibrations, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S.

Snackerlord, e.g., Priscular P. Nerson, ed. and Mary J. S. Roth, ed., 1996), pl178-1194 disc. (of Impact of Weight Falling onto the Ground, by Jose M. Roesset, Eduardo Kausel, Vicente Cuellar, Jose L. Monte and Julian Valerio, GT Aug. 94, p1394-1412), GT

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The Debris Management Cycle: An Overview, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p171-172

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Medium Span Gravity Sewer Aerial Crossings, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Glenn E. Hermanson, p457-468

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The History of Coastal Engineering in South Africa, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p429-464

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Flexible Water Deliveries: One District's Experience, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p679-684

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A Marine Geophysical Investigation to Determine the Cause for Failure of the Yaquina Bay Jetty, Newport, Or-egon, (Case Histories of Geophysics Applied to Civil En-gineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), with Jon L. Dasler and Terry C. Sullivan, p42-55 Symans, M. D.

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Heat and Moisture Absorption Effects in Composites; The-ory and Experiments, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), with R. A. Heller, p63-72

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In Situ Groundwater Treatment by Granular Zero-Valent Iron Design, Construction and Operation of an In Situ Treatment Wall, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remedia-tion, Lakshmi N. Reddi, ed., 1996), with John D. Gal-linatti, Scott D. Warner, Carol L. Yamane, Deborah A. Hankins and John L. Vogan, p245-256

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2D Velocity Distributions in Nearshore Currents, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p366-376

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Urbanization and Hydrologic Consequences in Simi Valley, California, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with James M. Evensen, Jr., Don D. Adelman and Steve Elliott, p3332-3337

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M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p712-715

Resistance Factors for High Strength Blind Bolts, (Proba-bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p784-787

Safety of Concrete Members Designed by ACI 318 Chapter 9 and Appendix C Load Combinations, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p218-221

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Tadros, Maher K.
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ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p881-886

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Drop Structures in the Real World: Guidelines for Drop Structures in Grass Lined and Wetlands Channels, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with William G. DeGroot, Katherine J. Chase and Peter L. Nelson, p594-599

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Hydraulic and Engineering Considerations in Designing Constructed Treatment Wetlands for a Lake Restoration, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Donthamsetti V. Rao and Jonathan Polinkas, p257-262

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see Sato, Takanori, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p1155-1161

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see Kato, Shoichiro, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3440-3445

Takahashi, Hideaki

see Hashida, Toshiyuki, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p674-683

see Hosoi, Kazuyuki, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p694-700

see Sato, Kazuhiko, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p684-693

Editorial, EY Dec. 96, p75-77

Project Blue Revolution, EY Dec. 96, p114-124

Takaichi, Lynn M.

Water Quality Improvement Program in Ventura County at Port Hueneme, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Sachiko Itagaki and Dennis D. Wolfe, p412-417

Takase, H.

How Can Coupled Systems Evolve? A Scenario Simulation Methodology, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with P. Grindrod and S. P. Crompton, p258-260

see Grindrod, P., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p499-

Takayama, Makoto

Experiments for Ultimate Strength of Reinforced Concrete Cylindrical Panels under Lateral Loading and Comparison with FEM Analysis, (Worldwide Advances in Struntural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Kazuhiko Mashita, Shiro Kato, Venaki, Masoni Yasuhiko Hangai and Haruo Kunieda, p310-321

Hybrid Inverse Mode Problems for FEM-Shear Models, with Tsuneyoshi Nakamura, EM Aug. 95, p873-880 err: EM Feb. 96, p185

Takyi, Andrews K.

Chebyshev Model for Water-Quality Management, with Barbara J. Lence, WR Jan./Feb. 96, p40-48

see Freeman, Delma C., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p385-391

Talipova, Tatjana

Wind Wave Simulation in Coastal Zone, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Efim Pelinovsky and Eliezer Kit, p105-

Talskikh, V.

see Ososkova, T., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2533

Bridge Corrosion Cost Model Implementation and Coating Maintenance Model Using Dynamic Programming, with S. F. Stiemer, CF May 96, p57-66

Development of Bridge Corrosion Cost Model for Coating Maintenance, with S. F. Stiemer, CF May 96, p47-56

see Nakamura, Yuji, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p173-184

Tamagnini, Claudio

see Borja, Ronaldo I., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p148-151

Tameroğlu, S. Sacit

Vibrations of Clamped Rectangular Plates on Elastic Foun-dations Subjected to Uniform Compressive Forces, EM Aug. 96, p714-718

Tamura, Yukio

Design of Vibration Control System for High-Rise Residential Buildings in Consideration of Wind-Induced Response, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Moham-madi, ed., 1996), with Kiyoshi Uesu and Takeshi Ohku-ma, p1244-1251

Wind-Induced Failure of Buildings and Structures Caused by Typhoons in Japan, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p62-65

Tan, C. Y.

see Fwa, T. F., TE May/June 96, p246-253

Tan, Chee P.

see Aoki, Tomoyuki, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1086-1089

see Moulford, W. E. F. L., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p762-768

Tan, Hanchen

Dam-Foundation Rock Interaction Effects in Earthquake Response of Arch Dams, with Anil K. Chopra, ST May 96, p528-538

Tan. K. H.

see Fung, T. C., ST Aug. 96, p958-966 see Shuo, Li, TE Jan./Feb. 96, p5-11

see Chen, ZhiQiang, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1093-1098

see Fwa, T. F., TE Mar./Apr. 96, p146-154 see Fwa, T. F., TE July/Aug. 96, p323-328

Tan, T. N.

Simple and Efficient Traffic Vision Algorithms, (Applications of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), p129-133

Tan, W. Y.

see Zhao, D. H., HY July 94, p863-883

Tanabe, Tada-aki

see Farahat, Ahmed M., MT May 95, p87-95

Tanaka, Hitoshi Geometry of Sand Ripples due to Combined Wave-Current Flows, with Van To Dang, WW Nov./Dec. 96, p298-300

Tanal, Vahan Marine Borers are Back, with Alex Matlin, CE Oct. 96, p71-73

Tang, H. T.

see Elgamal, A.-W., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p335-338

Tang. H.-T.

see Chang, C.-Y., GT Aug. 96, p657-665

Tang, J. S.

see Pope, R. B., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p369-

see Forsberg, Charles W., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p366-368

Tang, Kai-Wah

see Karney, Bryan W., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p4107-4112

Tang, Line

Effect of Divergent Flow on Mass Conservation in Eulerian-Lagrangian Transport Schemes, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with E. Eric Adams, p106-115

Tang, Ming Xi

Integration of a Design Concept Learning Scheme Within a Knowledge-Based Design Support System, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), p852-858

Tang, Ning H.

Weir Aeration: Models and Unit Energy Consumption, with N. Nirmalakhandan and R. E. Speece, EE Feb. 95, p196-199

err:

err: EE Aug. 95, p605 disc: Hubert Chanson, EE Apr. 96, p332-333 clo: EE Apr. 96, p333

Tang, S. K.

see Low, B. K., GT Nov. 94, p1917-1938

Tang, Tianxi

Peak-Load Method for Fracture Parameters of Two Parameter Fracture Model, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Chengsheng Ouyang and Surendra P. Shah, p584-587

see Gurjar, Ashok, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1398-1407

Tang, Walter Z.

1058

Pump-and-Treat Facilities, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Dean F. Radeloff and Vassilios A. Tsihrintzis, p1273-1278

Tang, Wilson H.

hydronan Liquetaction Resistance Analysis, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Mauricio Angulo, p1195-1209 Bayesian Liquefaction Resistance Analysis, (Uncertainty in

see Angulo, Mauricio, (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p797-812

Tang, Yu

Heuristic-Based Algorithm for Active Control, EM Aug. 96, p801-803

Laterally Excited Flexible Tanks with Nonuniform Density Liquid, EM Oct. 96, p948-956

New Algorithm for Active Structural Control, ST Sept. 96, p1081-1088

Seismic Active Control by a Heuristic-Based Algorithm, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p232-235

Tani, Kazuo

Sain, Nazuoo disc. (of Earthquake Fault Rupture Propagation Through Soil, by Jonathan D. Bray, Raymond B. Seed, Lloyd S. Cluff and H. Bolton Seed, GT Mar. 94, p543-561) with Keiichi Ueta and Nobuhiro Onizuka, GT Jan. 96, p80-82

Tani, Shigeru

Creating of a Data Base of Small Earth Dam for Natural Disaster Reduction, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Kenichi Ushikubo and Souji Harima, p72-73

Tanji, Kenneth K.

see Avars, James E., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p905-910

Tannehill, Crystal C.
Evaluation of Nitrate Treatment Methods Under Uncertain-Destructive Water, Chenchayya Bathala, ed., 1996), with M. F. Dahab and W. E. Woldt, p1003-1008

Tanner, Wavne W.

see Leenknecht, David A., (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p704-710

Tao, S.

see Ehsani, M. R., ST Mar. 96, p247-254

Tao, Zongwei

Reliability Concept and Application in Bridge Management System, (Probabilistic Mechanics & Structural Reliabili-ty, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Brian J. Stearman, p442-445

Tappeta, R. V. see Deoskar, H. S., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p426-429

Tarantino, Angelo Marcello

see Dezi, Luigino, ST Apr. 96, p423-430

Tarboton, David G.

see Rajagopalan, Balaji, HE Jan. 96, p33-40

Tarhini, K. M.

Effect of Sidewalks and Railings on Wheel Load Distribution in Steel Girder Bridges, (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with M. Mabsout and M. Kobrosly, p881-886

Finite Element Analysis of Precast Concrete Box Culverts, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with G. R. Frederick and M. Mabsout, p677-682

Tarn, Jiann-Quo see Wu, Chih-Ping, EM May 96, p391-401

Tarp-Johansen, Niels Jacob see Ditlevsen, Ove, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p820-837

Tart, Rupert G., Jr.

Pavement Distress Caused by Deep Heave in Anchorage, Alaska, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Mark R. Musial and Michael E. Krueger, p923-934

see Thompson, Steven R., Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996, p254-265

Tascione, Tony

Concurrent Engineering and Electronic Data Interchange, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p397-406

Tashiro, Hisami

see Nonaka, Michio, EE Apr. 96, p306-313

Task Committee on Fasteners of the Committee on Wood of the Structural Division of the American So-ciety of Civil Engineers, (Lawrence A. Soltis, chmn.) Mechanical Connections in Wood Structures (M&R No. 84), 1996, 0-7844-0110-1, 245pp.

Task Committee on Hazardous Waste Site Assessment Manual of the Environmental Engineering Division of the American Society of Civil Engineers, (Yee K. Cho, chmn.)

Environmental Site Investigation Guidance Manual (M&R No. 83), 1996, 0-7844-0096-2, 141pp.

Task Committee on Hydrology Handbook of Manage-ment Group D of the American Society of Civil Engi-

Hydrology Handbook, Second edition (M&R No. 28), 1996, 0-7844-0138-1, 800pp.

Task Committee on Pipeline Crossings of the Technical Committee on Pipeline Crossings of the Pipeline Divi-sion of the American Society of Civil Engineers, (Randy Robertson, chmn.)

Pipeline Crossings (M&R No. 89), 1996, 0-7844-0183-7, 140pp.

Task Committee on Pumped Storage of the Committee on Hydropower of the Energy Division of the American Society of Civil Engineers, (A. Hassan Makarechian, chmn.)

Hydroelectric Pumped Storage Technology: International Experience, 1996, 0-7844-0144-6, 390pp.

Task Committee on Revision of Manual No. 45 of the Committee on Standards of Practice of the American Society of Civil Engineers, (David F. Garber, chmn.)

Consulting Engineering: A Guide for the Engagement of Engineering Services, rev. ed. (M&R No. 45), 1996, 0-7844-0152-7, 50pp.

Task Committee on Structural Design for Physical Se-curity, (Paul F. Mlakar, FASCE, Chair, chmn.)

Structural Design for Vehicular Bombs, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1269-1276

Task Committee on Tensioned Fabric Structures of the Technical Committee on Special Structures of the Technical Administrative Committee on Metals of the Structural Division of the A.S.C.E., (R.E. Shaeffer,

Tensioned Fabric Structures: A Practical Introduction, 1996, 0-7844-0156-X, 80pp.

see Rizos, D. C., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p480-486

Tassoulas, John L. see Karamanos, Spyros A., EM Jan. 96, p64-71 see Karamanos, Spyros A., EM Jan. 96, p72-78 see Nogueira, André C., EM Sept. 94, p1931-1944

Tate, Carol

see Beieler, Roger, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p282-289

Tateyama, Masaru

see Tatsuoka, Fumio, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p258-272

Prestressed Geosynthetic-Reinforced Soil Retaining Walls, (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed., and Victor N. Kaliakin, ed., 1996), with Taro Uchimura, Masaru Tateyama and Katsumi Muramoto, p258-272

see Hoque, Eqramul, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p547-550

see Ling, Hoe L., (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p151-165

Tattegrain-Veste, H.

see Bellet, T., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p363-367

Tatum, C. B.

see Hansen, Karen Lee, ME Jan./Feb. 96, p40-48

Tauchert, Theodore R.

see Ashida, Fumihiro, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p784-787

Tavakoli, Amir

Commentary on MBE and FBE Participation in the Con-struction Industry, ME July/Aug. 96, p6-7

Tavakoli, Behrooz

Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Mohsen Ghafory Ashtiany, p301-302

Tawfiq, Kamal, P.E.

Friction Characteristics of Cohesionless Soil Penetrated by Polymer and Mineral Slurries, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Hubert Lee Broughton, III, p1170-1178

Tawresey, John G.

Professional Liability — An Approach that Works, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1288-1295

Tay, Joo-Hwa

Effects of Media Characteristics on Performance of Upflow Anaerobic Packed-Bed Reactors, with Kuan-Yeow Show and S. Jeyaseelan, EE June 96, p469-476 see Yan, Yue-Gen, EE June 96, p550-553

Tavebali, Akhtarhusein A.

see Vallerga, Bernard A., (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1288-1297

Tayem, A.

Design of Round Reinforced-Concrete Columns, with A. Najmi, ST Sept. 96, p1062-1071

Taylor, Andrew W.

see Kunnath, Sashi K., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p381-382

see Shenton, Harry W., III, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p236-245

Taylor, Catherine

see McNeil, Joe, HY June 96, p316-324

Taylor, Charles R., Jr.

Secondary Containment Design Practices, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p547-552

Taylor, Dong-Hwa S.

see Taylor, Lawrence A., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p741-755

Taylor, Edward C.

see Rickertsen, Larry D., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p303-304

Taylor, Jennifer

see Kieft, Thomas L., (High Level Radioactive Waste Management, Technical Program Committee, 1996).

Taylor, Kevin A.

A Concept in Networking, ME Nov./Dec. 96, p9-10

Taylor, Lawrence A.

Location of a Lunar Base: A Site Selection Strategy, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Dong-Hwa S. Taylor, p741-755

Taylor, Monte

see McCoy, Marisa, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996). p854-860

Taylor, Robert M.

see Davidson, Shayla E., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p847-853

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Teal, Martin J.

Estimation of Mean Flow Velocity in Ice-Covered Char nels, with Robert Etterna and John F. Walker, HY Dec. 94, p1385-1400

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p475-476 HY Aug. 96, p476-477 cla:

Grade Control Structures for Pipeline Crossings in the Arid Southwest, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala,

ed., 1996), p830-835
Selection of Sediment Transport Relations: Part I, Review of Sediment Transport Retations: Part I, Review of Sediment Transport Comparisons, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with David T. Williams, p2831-2836

see Turpin, James A., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1663-1668

Teatini, Pietro

see Gambolati, Giuseppe, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p483-486

Technical Program Committee, (Holly A. Dockery,

High Level Radioactive Waste Management, Sponsored by ASCE and the American Nuclear Society, 1996, 0-7844-0169-1, 520pp.

Tedaldi, Dante J., P.E.
To Allay Brownfields "Misperceptions", CE Oct. 96, p37

Tedesco, Joseph W.

Rehabilitation of a Concrete Bridge Using FRP Laminates, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with J. Michael Stallings, Mahmoud El-Mihilmy and Michael W. McCauley, p631-637

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see Wong, K. S., GT June 95, p457-465

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see Arnold, James Andrew, (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p438-444

see Arnold, James Andrew, (Computing in Civil Engineer-ing, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p586-592

see Jin, Yan, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), p642-648

Teicholz, Paul M.

see Fergusson, Kelly Jean, ME Jan./Feb. 96, p49-56

Teien, Elizabeth

see Itagaki, Sachiko, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2964-2969

Telionis, D. P.

see Plaut, R. H., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p264-265

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Temperville, A. see Lewis A. W., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p686-697

Temple, Darrel M.

Earth Spillway Design Using SITES Software, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p1930-1935

Temple, William H.

see Puppala, Anand J., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p347-350

Ten Eyck, Gary P.

Practitioners' Forum, AE Mar. 96, p1-2

Tena-Colunga, Arturo

Seismic Behavior of Structures with Flexible Diaphragms, with Daniel P. Abrams, ST Apr. 96, p439-445 Stiffness Formulation for Nonprismatic Beam Elements, ST

Dec. 96, p1484-1489

TenBroek, Mark

Preparation of Notification Models Using Continuous Mod-eling Techniques, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2474-2479

Tener, Robert K.

Industry-University Partnerships for Construction Engineering Education, El Oct. 96, p156-162

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see Torabi, Hans H., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p340-347 Tennat, Harold B.

see Torabi, Hans H., CE Jan. 96, p44-47

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see Chang, T. J., CP Jan. 96, p20-24

ter Steeg, Rob

Computational Modeling of Early Age HPC, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Jan Rots and Ton van den Boogaard, p542-553

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see Hashida, Toshiyuki, (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p674-683

Terasawa, Tomohiko

Numerical Modeling on the Ofunato Bay Ecosystem Including the Oyster Farming. (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Kisaburo Nakata and Koichi Taguchi, p530-

Tercelli, Davide

see Ukovich, Walter, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p166-170 Terrebonne, R. Peter

see Cummings, Ronald G., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2921-2926

Terrill, Scott B.

see Gordus, Andrew G., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p518-523

Terry, Philip C.

nication Breakdowns, SC Nov. 96, p108-112

Teskey, W. F.

Deformation, Alignment, and Vibration in Large Turbine-Generator Set, with J. W. Lovse and N. N. Al-Hanbali, SU May 96, p65-79

Tetior, Alexandr

Biopositive City as Means for Natural Disaster Reduction,

Biopositive City as Means for Natural Disaster Reduction, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p329-330
New Educational Course "Sustainable Development Eco-City", (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p31-32

Tétreault, Michel

see Reynolds, David A., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996),

Thacker, Ben H.

Probabilistic Cervical Spine Injury Analysis Methods, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Y.-T. (Justin) Wu, Daniel P. Nicolella and Ronald C. Anderson, p270-273

Thandavamoorthy, T. S.
Offshore Platform's Failure and Repair - Case Studies,
(Natural Disaster Reduction, George W. Housner, ed.
and Riley M. Chung, ed., 1997), with A. R. Santhakumar, p181-182

Thangavadivelu, S. see Reddi, Lakshmi N., GT Nov. 96, p906-913

Thangavadivelu, Suri

Random Network Modeling for Determination of Repreandom Network Modeling for Determination of Repre-sentative Specimen Size of Compacted Clays, (Uncer-tainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), with Lakshmi N. Reddi and Sunil Menon, p1303-1317

agement of the Hanford Engineer Works in World War II, 1996, 0-7844-0160-8, 225pp.

Thayne, Harold G., Jr.

Electronic Modeling of Underground Piping Systems, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Joseph A. Bohinsky, p825-831

Theis, Thomas L. Editorial, EE June 96, p451

Editor's Note, EE Jan. 96, p3

see Marsteiner, Edward L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2421-2426

see O'Carroll, Denis M., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2492-2497 see Wiesner, Mark R., EE Feb. 96, p89-90 see Zander, Amy K., EE Aug. 96, p758-760

Theis, Thomas T.

Trends in Engineering: Education and Practice, CE Nov. 96, p6

Theisen, Marc S.

see Austin, Deron N., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3121-3128

Theiss, John C.

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Utilities and Systems for the New U.S. South Pole Station, Amundsen-Scott Station, Antarctica, (Cold Regions En-gineering: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carl-son, ed., 1996), with Dick Armstrong, p424-435

Thevanayagam, S.

Residual Strength, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with C. C. Wang and K. Ravishankar, p1210-1224 Determination of Post-Liquefaction Strength: Steady State

Deterministic and Probabilistic Analyses of Preload Design at a Hydraulic Fill Site, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with E. Kavazanjian, Jr., A. Jacob and S. Nesarajah, p1417-1431

Thewalt, Christopher

see Archer, Graham, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996),

Thibault, Nelson L.

Case History - Outfall Pipeline Failure - Burlington, VT, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Eugene J. Forbes, p487-493

Thibodeaux, L. J.

see Valsaraj, K. T., EE Aug. 96, p722-729

disc. (of Impact of Weight Falling onto the Ground, by Jose M. Roesset, Eduardo Kausel, Vicente Cuellar, Jose L. Monte and Julian Valerio, GT Aug. 94, p1394-1412) with G. Mullins, P. Stinnette and M. Gunaratne, GT May 96, p415-416

Thoft-Christensen, P.

Re-Assessment of Concrete Bridges, (Building an Interna-tional Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p613-620

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Thomas, Carl O.

see DePaoli, David W., EE May 96, p399-406

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see Roeder, Charles W., ST Apr. 96, p365-373

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see Beavers, James E., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p345-346

Thomas, Gary G.

see Ghiocel, Dan M., (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p18-21

see Ghiocel, Dan M., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p620-623

Thomas, Harry B.

see Oliver, Clifford E., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p337-338

see Sortet, Arthur J., III, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p274-275

Thomas, Howard

see Kinney, Thomas C., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996, p196-202

Thomas, Howard P.

see Hansen, Henriette Molberg, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p769-779

Thomas, Hywel Rhys

Thomas, Hywel Rhys Two-Dimensional Parallel Computing Solution of Coupled Heat and Moisture Flow in Unsaturated Soil, with Chi Leung Welkin Li, CP July 96, p236-247

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Thomas, Jay Externally Bonded Carbon Fiber for Strengthening Con-crete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Thomas Kline, Peter Emmons and Howard Kliger, p924-931

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see Doeing, B. J., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3375-3380

Thomas, Wilbert O., Jr.
Development of a Multivariate Vulnerability Indicator, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Betty Bonn and Albert V. Romano, p303-304

Thomey, Mark A. Reader Urges End to 'Liberal' Thinking, CE Apr. 96, p32

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Thompson, Curtis A. see Markus, Michael R., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p736-741

Thompson, E. T.
A Hybrid Approach to Integration in Construction, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with J. H. M. Tah and R. Howes, p417-423

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Practical Modeling of Hurricane Surface Wind Fields, with
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Thompson, Kurt P. Aluminum Has History, CE Sept. 96, p36,38

Thompson, P. M.

see Kuzyk, G. W., (High Level Radioactive Waste Man ment, Technical Program Committee, 1996), p404-

Thompson, Paul

Mitigating Losses in Bangladesh's Active Floodplains, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with lan Tod, p23-24 Response to Floods and Mitigation Measures in Bangladesh, (Natural Disaster Reduction, George W. Housner, ed., and Billey M. Chem. 1907).

ed. and Riley M. Chung, ed., 1997), with Mustafa Alam,

Thompson, Phillip L.
see Abt, Steven R., (North American Water and Environment Congress & Destructive Water, Chenchayya
Bathala, ed., 1996), p3927-3931

on, Steven R.

Inompson, seeven B. Driven Pile Capacities in Warm Permafrost in Komi Republic, Russia, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Rupert G. Tart, Jr., p254-265

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Thomsen, Jan

A Computational Organizational Approach to Modeling an Engineering Design Team. (Computing in Civil Engi-neering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Yul J. Kwon, John C. Kunz and Raymond E. Levitt, p275-280

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see Foreman, M. G. G., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p180-191

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Thornton, Charles H.

Hornton, Charles H. Wind Tunnel and Water Flume Testing in the Design of High Rise and Long Span Structures, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Leonard M. Joseph and Thomas Z. Scarangello, p944-

see Garcez Faria, A. F., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p389-400

Thornton, E. B.

Vertical Profiles of Longshore Currents and Bed Shear Stress, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with C. M. C. V. Soares and T. P. Stanton, p449-459
see Lippmann, T. C., (Coastal Dynamics '95, William R.
Dally, ed. and Ryszard B. Zeidler, ed., 1996),
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Thornton, Earl A.

see Johnston, John D., (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p1134-1140

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Building Collapse Rescue Engineering, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p41-42

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see Cheng, F. Y., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p322-338
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Integrated Facility Information Systems: Total Information Access, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Cal Leckington, p4119-4124

Tiedeman, John C.

Posign and Implementation of On-Farm Surface Drainage Projects in the Humid Tropics of Mexico, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Rodolfo Namuche Vargas, p2480-2485

Tieleman, H. W.

The Aerodynamic Forces on Low-Rise Structures: The Effects of Incident Turbulence, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with M. R. Hajj and T. A. Reinhold, p975-978

Wind Hazards for Low-Rise Structures and Single Family Dwellings: A Possible Mitigation, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with T. A. Reinhold and M. R. Haii, p389-

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1111, Roger
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Approximate Theory for Radial Filtration/Consolidation, with J. M. Kirby and H. L. Nguyen, GT Oct. 96, p797-

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see Van Zyl, Dirk, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p563-585

Timashev, Sviatoslav A.

Expert System for Assessing Main Pipeline Reliability and Residual Lifetime, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with Inessa L. Yablonskikh, p322-325

Timerson, Benjamin J.

Laser Induced Fluorescence and Cone Penetrometer Test-ing for Delineation of Hydrocarbons, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: As-sessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Donald M. Moran, pl 15-126

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Effects of Tow Sequencing on Capacity and Delay at a Wa-terway Lock, with Paul Schonfeld, WW Jan./Feb. 96, p16-26

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see Jermeland, Dennis N., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3521-3526

Tingley, Dan A.

disc. (of Creep Behavior of FRP-Reinforced Wood Members, by Nikolaos Plevris and Thanasis C. Triantafillou, ST Feb. 95, p174-186), ST Aug. 96, p980-981

Tingley, Daniel A

New Compression Based Design Principals for Reinforced Glulams, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Stephen Cegelka, p1479-1491

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Evaluation of the Performance of Sprayed Zinc Anodes for Protecting Reinforcing Bars, (Materials for the New Mil-lennium, Ken P. Chong, ed., 1996), with R. P. Brown, p1531-1539

Tiong, Robert L. K.

CSFs in Competitive Tendering and Negotiation Model for BOT Projects, CO Sept. 96, p205-211

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see Moskowitz, Joel, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p322-331

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Object-Oriented Analysis of South Florida Hydrologic Systems, CP Oct. 96, p318-326

Tistarelli, Massimo Vision-Based Automated Overtaking Control, (Applica-tions of Advanced Technologies in Transportation Engi-neering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p705-710

Titmarsh, G. W.

Calibration Procedures for Rational and USSCS Design Flood Methods, with I. Cordery and D. H. Pilgrim, HY Jan. 95, p61-70

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Tiwari, Sanjay On-Line Motion Planning for the Three-Link Revolute Arm in an Unknown Three-Dimensional Environment, (Ro-botics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Brandon Kroupa, pl-7 Visual Mosaicking of the Ocean Floor and its Relation to

Three-Dimensional Occlusions, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p29-35

Tjavaras, A. A. Shock Waves in Curved Synthetic Cables, with M. S. Tri-antafyllou, EM Apr. 96, p308-315

To, C. W. S.

To, C. W. S. First Passage Time of Nonlinear Ship Rolling in Nonstationary Random Seas, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Z. Chen, p250-253
Random Responses of Discretized Structures with Energy Dissipation Devices, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with M. L. Liu and J. M. Kelly, app. 1892-1892.

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pocy+oci Reduction of Structural Response by Energy Dissipation Devices Modelled on Shape Memory Materials, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), with J. M. Kelly, p491-494

Tobias, Daniel H.

Loading Spectra for Railway Bridges under Current Operating Conditions, with Douglas A. Foutch and John Choros, BE Nov. 96, p127-134

Railway Bridge Loads Under Current Operating Condi-tions, (Building an International Community of Structur-al Engineers, S. K. Ghosh, ed. and Jamshid Mohamma-di, ed., 1996), with Douglas A. Foutch and John Choros, p215-222

Tobiasson, Wayne
Snow Guards for Metal Roofs, (Cold Regions Engineering:
The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed.,
1996), with James Buska and Alan Greatorex, p398-409

Tod, I. C.

Efficiencies of Drainage Systems and Improved Water Management, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with M. E. Grismer, p.2136-2144

see Thompson, Paul, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997),

Todd, Malcolm J. 21st Century Leadership and Technology, ME July/Aug. 96, p40-49

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Soil-Structure Interaction for Base-Isolated Buildings, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p172-175

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Tognarelli, M. A.

Tognaren, M. A. An Overview of Techniques for Analyzing a System Modelled as a Duffing Oscillator Driven by Deterministic and Stochastic Excitations, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with A. Kareem, p728-731

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Nonlinear Control Strategies for Limiting Dynamic Re-sponse Extremes, with B. F. Spencer, Jr. and M. K. Sain, EM Mar. 96, p218-229

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Seismic Behavior of Masonry Walls: Experimental Simula-tion, with Marjana Lutman and Ljubo Petković, ST Sept. 96, p1040-1047

Seismic Behavior of Masonry Walls: Modeling of Hysteret-ic Rules, with Marjana Lutman, ST Sept. 96, p1048-1054

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see Riley, David R., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p718-724

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see Jones, George V., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p487-493

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Rehab by Helicopter, with Harold B. Tennat, A. John Bur-nell and Thomas C. Benson, Jr., CE Jan. 96, p44-47

San Diego's Historic Dulzura Conduit: New Solutions, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with Harold B. Tennant, p340-347

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Settling and Erosion Characteristics of Mud/Sand Mixtures, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Helen Williamson and Heidi Huysentruyt, p749-758

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see Khalessi, M. R., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p648-651

see Roblee, C. J., (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1113-1133

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Density and Conditioning Characteristics of Motorway Vehicular Traffic Flow, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with D. Gattuso, G. Musolino and A. Vitetta, p198-202

Toth, Douglas M.

Route Assessment Using Comparative Risk Factors Inte-grated through a GIS, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with William J. O'Connell, p363-365

Touhei, Terumi

Normal Modes of a Poroelastic Soil Layer on a Rigid Bed Rock, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Nimal Rajapakse, p475-478

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Analysis of Exceptional Meteorological Conditions on July
and August in Conakry, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), pl 144

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1996), p450-457

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Smooth Modelling of Oblique Contact with Friction of Turbine Blades: Behaviour Analysis Under Random Excitation, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Sergio Bellizzi and Béatrice Costa, p760-763 Townsend, T. G.

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Pennsylvania, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3975-3980

A Study into Effectiveness of Urban Best Management Practises, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p1852-1857

see Lewis, Roy R., III, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p759-763

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US Space Policy and the Use of Excess US Ballistic Missile Assets, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p206-213

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Pseudo Three-Dimensional Finite Element, with James A.

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Three Year Evaluation of a Metal-Plate Connected Wood Truss Bridge, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Michael A. Ritter, p276-281

Nonlinear Soil Response—1994 Northridge, California, Earthquake, with M. I. Todorovska, GT Sept. 96, p725-

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see Palmer, Rendel, ed., (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p214-

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Hydrological Analysis of High Flows and Floods in the Sava River Near Zagreb (Croatia), (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Lidija Tadic and Zdenko Tadic, p918

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see Ribeiro, J., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p2354-2359

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Tryon, Robert G.
Application of a Reliability-Based Fatigue Life Model to a Gas Turbine Engine Structure, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Thomas A. Cruse and Sankaran Mahadevan, p636-639

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2 am., 1 P-Chang Reducing Uncertainty in Environmental Site Characteriza-tion, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with J. David Frost, p1019-1033

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Virtual Reality Modeling for Bridge Construction, (Com puting in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Fabian C. Hadipriono and Richard E. Larew, p63-69

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Tsiatas, George E.

Fatigue Evaluation of Bridges, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mir-cea D. Grigoriu, ed., 1996), with Shane M. Palmquist,

Tsihrintzis, Vassilios A.

Discharge Measurements and Predictions in Wetlands, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with David A. Sikkema, Marcia Levinson and Jose L. Oliveros, p274-279

see Fuentes, Hector R., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p559-564

see Fuentes, Hector R., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p960-965

see Jaffé, Rudolf, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4389-4394 see Tang, Walter Z., (North American Water and Environ-

ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1273-1278

Tsoi, David

A New Strategic Management of Pumping Station in Sewer Systems, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Tsun-Hou Kuan, p2486-2491

Tsuji, Masaaki

see Nakamura, Tsuneyoshi, ST June 96, p617-625

see Chang, Howard H., HY July 96, p381-388

Tu, Shih-Chieh

see Williams, Mark, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1009-1014

Tuan, Christopher Y. Mechanical Properties of Vitrified Soils, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with William C. Dass, p731-740

On New Materials, Thanks All Around, with Lawrence C. Muszynski, CE Feb. 96, p31

Tubbesing, Susan K.

Improving the Effectiveness of Post Earthquake Investigations, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p327-328

Tucker, Brian

see Hoefer, Geoffrey, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p283-284

Tucker, David

see Bruinsma, Dan, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1614-1619

Tucker, Michael S.
Crossing Bridges with Ductile Iron Pipe—Update 1995,
(Pipeline Crossings 1996, Lawrence F. Catalano, ed.,
1996), p120-129

Tulenko, J. S.

see Youk, G. U., (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p248-254

Tulsiani, Vijay
Reliability of the Navigation Channel of the Upper Mississippi River, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with James H. Lambert, Yacov Y. Haimes and S. K. Nanda, p142-153

Tumay, Mehmet T. see Puppala, Anand J., GT Aug. 95, p589-600 see Voyiadjis, George Z., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p543-546

see Zhang, Zhongjie, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p383-408

Tumeo, Mark A.

Oxygen Transfer Efficiency in Small Diffusers, with Tamar J. Stephens, EE Jan. 96, p55-57 see Ogunsola, Olubunmi M., (Non-Aqueous Phase Liquids

(NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p281-291

Tumidajski, P. J.

Boltzmann-Matano Analysis of Chloride Diffusion into Blended Cement Concrete, with G. W. Chan, MT Nov. 96, p195-200

Consolidation of Elastic Porous Media Saturated by Two Immiscible Fluids, with M. Yavuz Corapcioglu, EM Nov. 96, p1077-1085

Tuomi, Karen E.

Reliability of the SASW Method for Determination of the Shear Modulus of Soils, (Oncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Dennis R. Hiltunen, pl 225-1238

Turkiyyah, George Parallel Performance of a Meshless Method for Wind Engineering Simulations, (Analysis and Computation, Frank-lin Y. Cheng, ed., 1996), with Dorothy Reed, Cecile Viozat and Calvin Lin, p177-187

The World's Oldest Civil Engineering Professor, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p13-22

Turner, James P.

see Wang, Kelvin C. P., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p490-499

Turner, Kent C.

see Chauhan, Sanjay, CE May 96, p26

Turner, Thomas M. Fundamentals of Hydraulic Dredging, 2nd ed., 1996, 0-7844-0147-0, 258pp.

Turpin, James A.

Application of Regime Theory in Practice: A Case Study,

(North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Martin J. Teal, p1663-1668

1066

see Ambrosino, G., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p515-519

Turvey, G. J.

disc. (of Compression Strength of Pultruded Flat Sheet Ma-terial, by J. T. Mottram, MT May 94, p185-200), MT Feb. 96, p58-60

Tuthill, A.

see Lever, J. H., (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p617-628

Tuthill, Andrew M.

Probability Distributions for Peak Stage on Rivers Affected by Ice Jams, with James L. Wuebben, Steven F. Daly and Kathleen D. White, CR Mar. 96, p36-57

Optimum Risk Management with Uncertain Hazard and Vulnerability Information, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Peter J. Vickery, p88-89

Toward Risk-Consistent Wind Hazard Design/Mitigation

Criteria Using Probabilistic Methods (Matural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Peter J. Vickery and Andrew C. Steckley, p256-257

see Steckley, Andrew, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997),

p201-202

see Vickery, Peter J., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p139-140

see Vickery, Peter J., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p245-246

Tyagi, Aditya

see Swamee, Prabhata K., EE Jan. 96, p71-73

Tyagi, Avdhesh K.

Tyag, Avanesh K.
CHEMFLO Modeling of Aquifer Bioremediation in Va-dose Zone, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2516-2521

Tyagi, R. D.

see Du, Y. G., EE July 95, p527-535 see Sreekrishnan, T. R., EE Nov. 96, p995-1002

Tzan, Shyh-Rong

Annealing Strategy for Optimal Structural Design, with Chris P. Pantelides, ST July 96, p815-827

Convex Models for Impulsive Response of Structures, with Chris P. Pantelides, EM June 96, p521-529

see Pantelides, Chris P., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1252-1258

Uber, James G.

see Zhen, Changqing, WR July/Aug. 96, p253-261

Uchimura, Taro

see Tatsuoka, Fumio, (Measuring and Modeling Time De-pendent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p258-272

Uchiyama, Noburu see Horiuchi, Sumio, MT Aug. 96, p138-146

Uddin, Nasim

see Gazetas, George, GT Nov. 94, p2041-2061

Three-Dimensional Finite-Element Simulation of FWD Loading on Pavement Systems, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), with R. M. Hackett, P. Noppakunwijai and Z. Pan, see Plaxico, C. A., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p761-770

Ude, T. C.

see Bazzurro, P., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p202-205

Ude, Todd C.

see Winterstein, Steven R., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p592-595

see Kumar, R., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p751-755

Udwadia, Firdaus

see Hosseini, Mohammad, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p438-441

Udwadia, Firdaus E.

Equations of Motion for Mechanical Systems, with Robert E. Kalaba, AS July 96, p64-69

see Ito, Kenji, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p49-

Ueng, Charles E. S.

Property Deterioration of Composites, (Engineering Me-chanics, Y. K. Lin and T. C. Su, 1996), p416-419

see Okumura, Mikiya, (Engineering, Construction, and Op-erations in Space, Stewart W. Johnson, ed., 1996), p889-895

Uesu, Kiyoshi

see Tamura, Yukio, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1244-1251

Ueta, Keiichi

see Tani, Kazuo, (disc), GT Mar. 94, p543-561

Ukovich, Walter

A General Framework for Approaching Mobility Problems in Urban Areas, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Davide Ter-celli, Nicola Campanella and Marco Crasnich, p166-170

Ukritchon, Boonchai

see Whittle, Andrew J., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p132-135

Ulm, Franz-Josef

Strength Growth as Chemo-Plastic Hardening in Early Age Concrete, with Olivier Coussy, EM Dec. 96, p1123-1132 see Rossi, Pierre, EM Nov. 96, p1038-1043

Ulrich, Peter

see Boissonnade, Auguste, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p199-200

Ulukaya, Matt

see Markus, Michael R., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p736-741

Umeki, Hiroyuki

see Ohi, Takao, (High Level Radioactive Waste Manag ment, Technical Program Committee, 1996), p274-275

Umrigar, D.

see Wang, K. H., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3835-3840

see Vipulanandan, C., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p851-862

Unal, Cemal

see Liu, Shiping, HY Feb. 96, p97-103

Underwood, Mark

see Haimann, Richard, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p431-441

Unjoh, Shigeki

see Kawashima, Kazuhiko, ST Sept. 94, p2583-2601

Uno, Nobuhiro

see lida, Yasunori, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p604-608

Spatial Variability of Soil Parameters, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p341-352

Urama, Richard I.

see Mariñas, Benito J., EE Apr. 96, p292-298

see Pandya, J., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p1172-1179

Urbonas, Ben

see Guo, James C. Y., WR Jan./Feb. 96, p33-39

see Skifalides, Nick, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3527-3532

Urbonas, Ben R.

South Platte River Restoration Through Maintenance, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Bryan W. Kohlenberg, p3533-3538

U.S. Army Corps of Engineers
Design of Sheet Pile Walls, 1996, 0-7844-0135-7, 75pp. Monitor Well Design, Installation, and Documentation at Hazardous and/or Toxic Waste Sites, 1996, 0-7844-0150-0, 51pp.

Photogrammetric Mapping, 1996, 0-7844-0143-8, 332pp. River Hydraulics, 1996, 0-7844-0159-4, 145pp. Rock Foundations, 1996, 0-7844-0136-5, 130pp.

Usami, Tsutomu

Damage Evaluation in Steel Box Columns by Pseudody-namic Tests, with Satish Kumar, ST June 96, p635-642 see Ge, Hanbin, ST May 96, p573-578

see Ge, Hanbin, ST Oct. 96, p1169-1177

see Kumar, Satish, ST June 96, p626-634

Ushikubo, Kenichi

see Tani, Shigeru, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p72-

Utgikar, Vivek P.

see Safferman, Steven I., EE Sept. 96, p779-784

Uzarski, Joseph

see Angel, Richard, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p101-111

Vaccari, David A.

see Meegoda, Jay N., (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p31-46

Vagliasindi, Federico G. A.

- ngansundt, rederico G. A.
Critical Issues in the Monitoring and Control of Toxic Air Contaminants at POTWs, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Vincenzo Belgiorno, p81-86

Rational Design and Operation of Packed Bed Adsorption Reactors, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), with David W. Hendricks, p553-558

Venice, Italy: an Integrated Approach to Solve the Environ-mental Problems of Its Unique Collection System, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Vincenzo Belgiorno, Rodolfo M. A. Napoli and Giorgio Conti, p1801-1806

Vaicaitis, Rimas

see Wang, Chen-Ying, (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p842-845

Vaid, V. P.

Liquefaction and Postliquefaction Behavior of Sand, with J. Thomas, GT Feb. 95, p163-173

disc: Beena Sukumaran, Gerald A. Leonards and Pa-trick J. Fox, GT June 96, p502-503

GT June 96, p503-504 clor

Vaith, Kartik

Comparison of Commonly Used Odor Control Technolo-gies, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Mike Cannon, Darrell Milligan and James Heydorn, p64-74

Valdés, Juan B.

see Awwad, Haitham M., WR Sept./Oct. 94, p651-673

gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p92-98 see Pellegrini, P. F., (Applications of Advanced Technolo-

Valerio, Julian

see Roesset, Jose M., GT Aug. 94, p1394-1412

Valette-Silver, Nathalie

see Mathur, Tej. (Natural Disaster Reduction, George W Housner, ed. and Riley M. Chung, ed., 1997), p82-

Valeur, Jens R.

Particle Dynamics in the Sound Between Denmark and Sweden, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Morten Pejrup and Anders Jensen, p951-962

Valimohamed, Karim

see Zokaie, Toorak, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p453-463

see Kadûnas, Valentinas, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p83-85

Vallejo, L. E.

see Latona, M. C., (Engineered Contaminated Soils and In-teraction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p57-69

Vallejo, Luis E.

Evaluating the Variability of Engineering Properties of Soil Deposits Using Fractals, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p353-367

Interaction Between Geomembranes and Granular Materials, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), with Yun Zhou, p82-96

see Boward, Joseph F., (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p97-113

see Meegoda, Jay N., ed., Engineered Contaminated Soils and Interaction of Soil Geomembranes

see Zhou, Yun, (Engineered Contaminated Soils and Inter-action of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), pl 14-129

Vallerga, Bernard A.

Mechanical Properties Characterization of Asphalt Concrete Barrier for Radioactive Nuclear Waste Vaults, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Akhtarhusein A. Tayebali, Shmuel L. Weissman and Carl L. Monismith, p1288-1297

Vallikat, Vinod

Testing of Abstractions for Total System Performance Assessment, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Srikanta Mishra, Yanyong Xiang and David Sevougian, p293-294

Valsaraj, K. T.

Diffusive Transport of Organic Colloids from Sediment Beds, with S. Verma, I. Sojitra, D. D. Reible and L. J. Thibodeaux, EE Aug. 96, p722-729

van de Graaf, J.

see Prinos, P., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p571-582

van de Graaff, Jan

see Boers, Marien, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p257-268

see Visser, Paul J., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p583-594

van de Lindt, J. W.

van de Lindi, J. W.
Inflated Contour Approach for Deepwater Tendon Design, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with J. M. Niedzwecki, p582-585

van den Boogaard, Ton

see ter Steeg, Rob, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p542-553

van den Bunt, B. P.
see Frijters, M. P. C., (Natural Disaster Reduction, George
W. Housner, ed. and Riley M. Chung, ed., 1997), p62-63

van der Veen, C.

Thermal Cracking in a Cantilever Bridge made of HSC, Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with E. A. B. Koenders and N. Kaptijn, p892-898

van der Weijde, Pieter J. Blast Wall Bravura, with Paul H. L. Groenenboom, CE Dec. 96, p62-65

Van Dien, James P.

Van Deen, James F. Fatigue Testing of Anchor Bolts, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Mark R. Kaczinski and Robert J. Dexter, p337-344

Van Dongeren, A. R.

van Dongeren, A. R.
Application of the Q-3D SHORECIRC Model to Surfbeat, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with I. A. Svendsen and F. E. Sancho, p233-244
see Sancho, F. E., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p425-436

Van Dorp, Frits

see Klos, Richard A., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p237-239

Van Haun, James A.

Cooperative Approaches in Achieving Additional Water Conservation at Prado Dam, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2352-2353

Gravity Current of Fluid Mud on Sloping Bed, with C. Kranenburg, HY Dec. 96, p710-717

Van Konynenburg, Richard A.

Corrosion Test on Candidate Waste Package Basket Materials for the Yucca Mountain Project, (High Level Radioactive Waste Management, Technical Program Commit-tee, 1996), with Paul G. Curtis, p464-467

Van Lank, Paul see Elgamal, Ahmed-W., GT Oct. 96, p849-858

Van Lonkhuyzen, R. A.

see Yin, S. C. L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1911-1917

van Loosdrecht, M. C. M. see Geerdink, M. J., EE Nov. 96, p975-982

Van Mullem, J. A.

Van National, 2016.

Olisc. (of Calibration Procedures for Rational and USSCS Design Flood Methods, by G. W. Titmarsh, I. Cordery and D. H. Pilgrim, HY Jan. 95, p61-70) with D. E. Woodward, HY Mar. 96, p176-177

Van Mullem, Joseph A.
Identifying Trends from Streamflow Records--A Case
Study, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed.,
1996), p1675-1680

van Riin, L. C.

see Wijnberg, K. M., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p341-354

Van Rijn, Leo C.

Transport of Fine Sands by Currents and Waves. II, with Fred J. Havinga, WW Mar/Apr. 95, p123-133 disc: Zai-Jin You, WW Sept./Oct. 96, p265-266

van Schilfgnarde, Jan Use of the Metric System in Water Resources, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3690-3695

Van Vliet, Dirck

see Liu, Ronghui, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p444-448

Van Wilson, K., Jr.

Measurements of Bridge-Scour Depths in Mississippi, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3023-3032

van Wingerde, A. M. New Guidelines for Fatigue Design of HSS Connections, with J. A. Packer and J. Wardenier, ST Feb. 96, p125-

Van Zyl, Dirk

Probabilistic Risk Assessment for Tailings Impoundment Founded on Paleokarst, (Uncertainty in the Geologic En-vironment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Ian Miller, Victor Milligan and W. James Tilson, p563-585

Vanapalli, S. K.

disc. (of Winter Effects on Hydraulic Conductivity of Compacted Clay, by C. H. Benson, T. H. Abichou, M. A. Olson and P. J. Bosscher, GT Jan. 95, p69-79) with S. L. Barbour, GT Jan. 96, p86-87

VanArsdale, Roy B.

see VanArsdale, Stephanie K., (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p97-98

VanArsdale, Stephanie K. The New Madrid Earthquake: Preparing Nurses, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Roy B. VanArsdale, p97-98

VanAuker, Michael D.

VanAuker, Michael D.

Mechanical Stress in Pediatric Heart Disease: Computational Modeling of Associated Defects in Subaortic Stenosis, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Pedro del Nido, Theresa A. Tacy, Gunnlaugur Sigfusson and Edward G. Cape, p470

On-Board Neural Network Control of Kinetic Energy Projectiles for NEO Exploration, (Engineering, Construc-tion, and Operations in Space, Stewart W. Johnson, ed., 1996), with M. V. Spangler, Z. Qian, C. Cho and K. A. Prisbrey, p1183-1189

Vance, Vicki L.

Vance, Vicki L. 'Super-Element' to Represent the Behavior of Architectural Stud Partition Walls, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with H. Allison Smith and Luciana R. Barroso, p1106-1109 see Smith, H. Allison, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p495-498
see Smith, H. Allison, ST Apr. 96, p431-438

Vanderheyden, M.
see Sinclair, J. R., (Building an International Community of
Structural Engineers, S. K. Ghosh, ed. and Jamshid
Mohammadi, ed., 1996), p997-1004

VanderMarck, Paul

see Gunturi, Surya K., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p15-16

Vanderschuren, Luc see Forristall, George Z., WW Sept./Oct. 96, p216-225

Vandewalle, Lucie

Influence of the Yield Strength of Steel Fibres on the Toughness of Fibre Reinforced High Strength Concrete, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p496-505

Vaneaton, Anne see Roeder, Charles W., ST Apr. 96, p365-373

Vanecek, Michai

Practical Experiences with Sealing Technology in the Czech Republic, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), p415-416

Vanegas, Jorge

Computing in Civil Engineering, with Paul Chinowsky, ed., 1996, 0-7844-0182-9, 1090pp.

see Hastak, Makarand, CO Sept. 96, p254-264

Vangool, William J.

Foundations for Permafrost and Other Problem Soils, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p303-314

Vanik, Michael W.

see Beck, James L., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p152-155

Multi-Hazard Risk Assessment of Lifelines: Methodologies and Research Needs, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Ricardo Palma, p359-360

Vannoorenberghe, P.
Pedestrian Flow Estimation in Urban Environment by Image Processing, (Applications of Advanced Technolo-gies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with C. Motamed, J.-M. Blosseville and J.-G. Postaire, p119-

Vannucchi, Giovanni

see Crespellani, Teresa, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), p124-133

Vannucci, Marina

Wavelets in Random Processes Representation, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Antonio Moro and Pol D. Spanos, p672-675

Varde, Anurag

Model Uncertainty in Anchorage Design for Anchored
Bulkheads, (Uncertainty in the Geologic Environment:
from Theory to Practice, Charles D. Shackelford, ed.,
Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996),
with Thomas C. Sandford and Habib J. Dagher, p727-

Vargas, Rodolfo Namuche see Tiedeman, John C., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2480-2485

Vargas, X. Debris Flow Events at Mountainous Creeks near Santiago, Chile-Hydrologic Analysis, (North American Water & Environment Congress & Destructive Water, Ch chayya Bathala, ed., 1996), with P. Lara, p1550-1551

Vasan, R. M.

see Ranjan, Gopal, GT June 96, p419-426

Vasilakis, George M.
Automated On-Scene Management of Traffic Accidents,
(Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Yorgos J. Stephanedes, p292-295

see Zografos, Konstantinos G., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p480-484

Vasiljeva, T.

see Berg, P., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1338-1339

Vasylenko, Oleksiy H. see Kazakevych, Mykhaylo L, EM June 96, p555-558

Vaterlaus, Hans-Peter

Maste of Water is Costly. Why Not Use an Accurate Flow Monitoring System?, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3617-3622

Vaught-Alexander, Karen see Kuhn, Matthew R., El Oct. 94, p392-400

Vaugn, Frank
3D & 4D CAD Modeling on Commercial Design-Build Projects, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p390-396

Vaynman, Semyon

Copper Precipitation Hardened, High Strength, Weldable Steel, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Morris E. Fine, Gautam Ghosh and Shri-kant P. Bhat, p1551-1560

Vecchietti, Michael J.

Electronic Signatures Are Revolutionizing Highway Pro-grams, with Lawrence I. Neff, CP Oct. 96, p264-266

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disc. (of Analytical Model for Shear Critical Reinforced-Concrete Members, by W. Chung and S. H. Ahmad, ST June 95, p1023-1029) with M. P. Collins, ST Sept. 96, p1123-1124

See Ho, C. L., (Measuring and Modeling Time Dependent Soil Behavior, Thomas C. Sheahan, ed. and Victor N. Kaliakin, ed., 1996), p122-136

Velásquez, Juan D.
see Mesa, Oscar J., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1477-1482

Dynamic Response of Cantilever Retaining Walls, (Analysis and Design of Retaining Structures Against Earth-quakes, Shamsher Prakash, ed., 1996), with A. H. Younan, p19-20

see Younan, A. H., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p310-313

Veletsos, Anestis S.

Vetetion, Anesias 5.

Dynamic Modeling and Response of Soil-Wall Systems, with Adel H. Younan, GT Dec. 94, p2155-2179 disc: Constantine A. Starnatopoulos, GT July 96, p603-604 clo: GT July 96, p604-605

see Bolonkin, Alexander A., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1230-1236

Velinsky, S. A.
see Mueller, K. J., (Robotics for Challenging Environments,
Laura A. Demsetz, ed., 1996), p178-184

Vellathottam, George

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Velleux, Mark

Screening-Level Approach for Estimating Contaminant Ex-port from Tributaries, with Joseph Gailani and Doug En-dicott, EE June 96, p503-514

Vemulakonda, S. Rao

merical Simulation of Temperature in the New York Bight, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p66-79

Venkataraman, S. T.

Control of Legged Robots, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed., 1996), p100-106

Venkatesha, C. R.

see Develay, Daniel, HY Oct. 96, p565-572

Venkatraman, Sankar N.

Fracturing for In-situ Bioremediation (Available only in R. Schuring, Thomas M. Boland and David S. Kosson, CE Mar. 96, p14A-16A

Ventresca, J. J.

Mixed Convection Heat Transfer Coefficients for Horizonmusea convection Heat Transfer Coefficients for Horizon-tally Emplaced Waste Packages, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with W. G. Culbreth and C. Lawson, p451-453 see Culbreth, W. G., (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), p435-437

Ventsel, Eduard S.

The Boundary Integral Equation Method for Plates, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1005-1009

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Verma, V. K. disc. (of Thin-Walled Curved Beams. I: Formulation of Nonlinear Equations, by Young J. Kang and Chai H. Yoo, EM Oct. 94, p2072-2101), EM May 96, p483

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see Ford, Keith B., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p29-30

Vernazza, T.

Vetta, E., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p243-247

Vernick, Arnold S.

see Kessel, Stephen A., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p541-546

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see Negro, P., ST Dec. 96, p1409-1417

Veshosky, David

Veshosky, David
Comparative Analysis of Bridge Superstructure Deterioration, with Carl R. Beidleman, Gerald W. Buetow and
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disc: Bojidar S. Yanev, ST June 96, p709-710
clo: ST June 96, p710-711

Viani, Brian E.

see Roberts, Sarah K., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p48-49

Vicente, Claudino M. see Costa, F. Vasco, (History and Heritage of Coastal En-gineering, Nicholas C. Kraus, ed., 1996), p413-428

Vick, Steven G.

Risk Analysis in Dam Safety Practice, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with R. A. Stewart, p586-603

see Dushnisky, Kelvin, (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p848-865

Vickery, Peter J.

Reducing the Vulnerability of Transmission Lines in Hurri-cane Regions by Choosing Minimum Life Cycle Cost Designs, (Natural Disaster Reduction, George W. Hous-

ner, ed. and Riley M. Chung, ed., 1997), with Lawrence A. Twisdale, p245-246
Wind Hazards in the United States, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Lawrence A. Twisdale and Andrew C.

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see Steckley, Andrew, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997). p201-202

see Twisdale, Lawrence A., (Natural Disaster Reduction George W. Housner, ed. and Riley M. Chung, ed., 1997), p88-89

see Twisdale, Lawrence A., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p256-257

Vidal, C.

see Losada, M. A., (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), p465-499

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see Siddiqui, Muhammad Z., EE June 96, p515-523

Viggh, Herbert

see Stokes, Grant, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p46-53

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Vignet, Stephan N.

see Edge, Billy L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1720-1729

A Unified Limit State Approach Using Deformability Factors in Concrete Beams Reinforced with GFRP Bars, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with H. V. S. GangaRao, p657-665

Vijgen, Hendrik

see Feuser, Walter, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p477-479

Villalobos, Ruth B.

NA River Project Environmental Compliance with the Na-tional Environmental Policy Act (NEPA), (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Buthala, ed., 1996), p2347-2349

Villaverde, Roberto

Simplified Response-Spectrum Seismic Analysis of Nonlin-ear Structures, EM Mar. 96, p282-285 see Martin, Scott C., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p370-373

see Vomvoris, S., (High Level Radioactive Waste Mana, ment, Technical Program Committee, 1996), p133-

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Writing Persuasive Proposals, with Nancy Horlick Vincler, ME Sept./Oct. 96, p20-24

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see Sun, Yi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p96-99

see Sun, Yi, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p265-268

Vinson, Ted S.

Vinson, 1ed S.

Low Temperature Cracking and Rutting in Asphalt Concrete Pavements, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), with R. Gary Hicks and Vincent C. Janoo, p203-248

Mechanistic Design of Asphalt Concrete Pavements in Cold Regions, (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), with James W. Rooney, p151-202

Roads and Airfields in Cold Regions, Technical Council on Cold Regions Monograph, with James W. Rooney, ed. and Wilbur H. Haas, ed., 1996, 0-7844-0191-8, 330pp.

see Hemstreet, David A., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p447-458

see Kliewer, Julie E., CR Sept. 96, p134-148

see Rooney, James W., (Roads and Airfields in Cold Regions, Ted S. Vinson, ed., James W. Rooney, ed. and Wilbur H. Haas, ed., 1996), p1-22

see Turkiyyah, George, (Analysis and Computation, Frank-lin Y. Cheng, ed., 1996), p177-187

Behavior of Fiber Reinforced Polymer Concrete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with S. K. Mantrala, p1160-1169

Development and Characterization of Cellular Grouts for Sliplining, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with V. Jasti, p829-839

Evaluating Coatings for Concrete Wastewater Facilities, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with H. Ponnekanti, Dara N. Umrigar and A. D. Kidder, p851-862

see Basheer, M., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p593-602 see Jasti, V., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p840-850

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see Kapoor, Anoop, (disc), EE Nov./Dec. 94, p1470-1487 see Kapoor, Anoop, (disc), EE May 95, p411-415

A Large-Scale Experiment on Breaching in Sand-Dikes, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Arie W. Kraak, Wim T. Bakker, Marion J. Smit, D. Wino Snip, Henk J. Steetzel and Jan van de Graaff, p583-594

Surface Water Pretreatment Using Floating Media Filter, with D. R. I. B. Werellagama and R. Ben Aim, EE Jan. 96, p25-33

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see Cassidy, Michael, TE May/June 96, p235-540

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see Scotta, Roberto, ST Sept. 96, p1118-1121

Vitetta, A.

see Torrieri, V., (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p198-202

see Malenkov, M., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p559-565

Vlasity, John A.

see McGuire, Robin K., (High Level Radioactive Waste Management, Technical Program Committee, 1996),

Vo. T. V.

Vo, 1. V.
Reliability Analysis in Support of Risk Assessment for Non-Routine Closure/Shutdown of Hydroelectric Generating Stations, (Risk-Based Decision Making in Water Resources VII. Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with T. R. Blackburn, L. O. Casazza, P. G. Heasler, N. L. Mara, T. M. Mitts and H. K. Phan, p326-345

Voeller, John G.

Data-Centered Thinking, CP Jan. 96, p1-2

Vogan, John L.

see Szerdy, Frank S., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996),

Vogel, John L. California Probable Maximum Precipitation, (Natural Dis-aster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p55-56

Vogel, Richard M.

Probability Distribution of Annual Maximum, Mean, and Minimum Streamflows in the United States, with Ian Wilson, HE Apr. 96, p69-76

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see Cole, Lawrence W., (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p446-455

Volik, A. P. see Galetsky, L. S., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p81-82

Volta, E.

Analysis of Data Collected from Two Italian Freeways, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Fran-cesco Filippi, ed., 1996), with T. Vernazza, C. Ardemag-ni and S. Grosso, p243-247

Vomvoris, S.

Ensuring Consistency of Groundwater Modeling Results with Indirect Evidence, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with A. Scholtis and P. Vinard, p133-134

Von Thun, J. Lawrence

Risk Assessment of Nambe Falls Dam, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p604-635

Von Turkovich, Edward

see Fuhr, Peter L., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p39-

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see Swanson, J. Craig, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1537-1542

Vonderohe, Alan P.

see Wiegand, Nancy K., (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p179-185

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see Nivargikar, Rao, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p988-993

Voulgaris, George

see Simmonds, David, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p868-878

Voulgaris, P. G.

see Field, R. V., Jr., EM Oct. 96, p1012-1021
see Johnson, E. A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p156-159

Voyladjis, George Z. Analytical Study and Verification of a Coupled Theory of Mixtures for Application in Cone Penetration and Tunnel Boring in Soils, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Murad Y. Abu-Farsakh and Mehmet T. Tumay, p543-546

Vradis, George C.

see Gold, Vladimir M., EM Feb. 96, p145-152 see Gold, Vladimir M., EM Mar. 96, p230-238

Vrsalovich, John

see Perez, Antonio J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p697-701

Vukazich, Steven M.

Nonlinear Dynamic Response of Frames Using Lanczos Modal Analysis, with Kyran D. Mish and Karl M. Rom-stad, ST Dec. 96, p1418-1426

Vulcan, Brian S.

see Iyer, Srinivasa L., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p386-393

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see Deng, H., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1147-1150

Vuran Gunes, Burcu

see Wadia-Fascetti, Sara, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p211-212

Wachinski, Anthony M.

Protection of and from the Lunar Environment, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Tony Rachwal and Colin Waters, p668-672

Wachinski, Tony

see Rachwal, Tony, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996),

Waddill, Dan W.

SEAM2D: A Numerical Model for Two-Dimensional Sol-LAMALI: A Numerical Model for Two-Dimensional Solute Transport and Sequential Electron Acceptor-Based Bioremediation of LNAPL-Contaminated Aquifers, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Mark A. Widdowson and J. Steven Brauner, p466-477

Wade, Don J.

Concrete Space Station Construction in Lunar Orbit, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p578-584

Wadia-Fascetti, Sara

Considering Uncertainty in Earthquake Response Spectra, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Burcu Vuran Gunes, p211-212

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Wagner, Richard see Brink, Philip N., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2415-2420

Wagner, Robin M.

Risk Factors for Physical Injury During Earthquakes: Lessons from Previous Studies, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Nicholas P. Jones, Gordon S. Smith and Kir-sten O. Waller, p78-79

Wagner, Steven K.

see Meyer, John J., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p265-274

Wagner, William see Borovetz, Harvey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p35

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see Heckel, Greg, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p318-327

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Discharge Characteristics of Overshot Gates, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with John Replogle, p3604-3609

see Replogle, John, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2409-2414

see Grigoriu, M., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p262-265

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see Nakagawa, Shinji, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p594-598

Wakabayashi, Y.

see Matsue, T., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p533-539

Walch, Marc P.

Modeling SSO's Resulting from Peak Conditions, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Kath-leen S. Leo, Stephanie L. Ross and William M. Brant, p1777-1782

see Meegoda, Jay N., (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p31-46

Walder, Joseph S.

see Fountain, Andrew G., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2449

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A Process Unit Based Approach to Media-Integrated Waste Minimization: A Paint Manufacturing Case Study, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Isobel W. Heathcote and Gordon Hayward, p1632-1637

Walker, George R.

Insurance and Damage Mitigation - Incentive or Disincentive, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p195-196

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Methods for Measuring Discharge under Ice Cover, HY Nov. 94, p1327-1336 disc: Peter Engel and Y. Lam Lau, HY Jan. 96, p52-

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Methods and Procedural Considerations in Demolishing Tall Concrete Chimneys, with Cliff Schexnayder, Richard E. Mayo and Kenneth D. Walsh, CO Sept. 96, p223-230

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The Engineering Profession as a Major Role Player in the New South African Political Order, El Apr. 96, p73-77

Wallace, John W.

Behavior of Reinforced Concrete Buildings: Deformations & Deformation Compatibility, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p245-256

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see Gould, Timothy F., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Im-perative for the 21st Century, Robert F. Carlson, ed., 1996), p106-115

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Isotopic Systematics of Saline Waters at Aspö and Laxemar, Sweden, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), with Zell Peterman, p41-42

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The Great Lakes Storm Damage Reporting System, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with P. S. Chawla, p183-

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Riddle of the Riverbed, with Robert E. Schock and Steven A. Jimenez, CE June 96, p64-67 see Walker, Kenneth K., CO Sept. 96, p223-230

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Shakwak Highway Project—Construction Challenges, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Donaldson MacLeod and Dennis Cook, p640-651
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Walski, Thomas M.

Closure to Discussion of Environmental Engineering Forum: Backflow Prevention and Water Quality in Residential Sprinkler Systems, EE Jan. 96, p82

Closure to Disscussion of Environmental Engineering Forum: Long-Term Effects of Wetland Treatment of Mine Drainage (November/December 1993, Vol. 119, No. 6), EE Jan. 96, p85-86

Optimization and Pipe-Sizing Decisions, WR July/Aug. 95, p340-343

disc: Chengchao Xu and Ian C. Goulter, WR Nov. J Dec. 96, p444-445 clo: WR Nov. /Dec. 96, p445

disc. (of Design Heuristic for Globally Minimum Cost Water-Distribution Systems, by G. V. Loganathan, J. J. Greene and T. J. Ahn, WR Mar/Apr. 95, p182-192), WR July/Aug. 96, p313-314

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Walters, Mason T.

see Sattary, Vahid, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p224-235

Walther, Richard A.

Inspection of Fatigue Sensitive Bridge Members, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Michael J. Koob, p321-328

Walton, Raymond

Watton, Kaymoun
Analysis of Bank Stabilization in Steep Complex Streams
Using A Two-Dimensional Model, (North American
Water and Environment Congress & Destructive Water,
Chenchayya Bathala, ed., 1996), with Wilfredo A. Moneda and Jeffrey B. Bradley, p352-357

see Wang, Thomas S., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2861-2866

Walton, William H.

see Scherer, Steven D., CE Aug. 96, p51-53

Wammel, Kenneth L.

Approach Philosophy and Risk Considerations for Seismic Design and Evaluation of Railroad Bridges, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with James R. Beran and Zolan Prucz, p167-174

Wang, C. C.

see Thevanayagam, S., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1210-1224

Wang, C. M.

disc. (of Postbuckling of Moderately Thick Circular Plates With Edge Elastic Restraint, by G. Venkateswara Rao, N. Rajasekhara Naidu and K. Kanaka Raju, EM Oct. 94, p2232-2238), EM Feb. 96, p181-182

Wang, C. X.

disc. (of Structural Damage Identification from Dynamic-Test Data, by Juan R. Casas and Angel C. Aparicio, ST Aug. 94, p2437-2450) with W. J. Yi, ST Jan. 96, p113

Wang, Chainchye E.

Deformation Characteristics of Piedmont Residual Soils, with Roy H. Borden, GT Oct. 96, p822-830

Wang, Chen-Ying

Active Vibration Control of Double Wall Composite Shells to Random Inputs, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with Rimas Vaicaitis, p842-845

Wang, De Sheng

see Shen, Hung Tao, HY Feb. 95, p184-195

Wang, Deguan

see Han, Guoqi, HY May 96, p262-265

Wang, Dunchun

Study on Fuzzy ANN and its Application in Runoff Forecast, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Jiqun Zhang, p455

Wang, Guixian

see Duan, Guohong, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p213-218

Wang, H. V.

see Johnson, B. H., (Estuarine and Coastal Modeling, Mal-colm L. Spaulding and Ralph T. Cheng, 1996), p255-267

Wang, Harry V.

Application of Vertical Turbulence Closure Schemes in the Chesapeake Bay Circulation Model — A Comparative Study, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Raymond S. Chapman, p283-297

Wang, J.

see Gabr, M. A., GT Nov. 96, p914-919

Wang, Jie

Sectional Analysis for Nonlinear System Identification of Concrete Structures, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Manoj B. Chopra and Sashi K. Kunnath, p339-342

Wang, Jing see Boles, Walter W., El Jan. 96, p12-16

Wang, Jun

Santa Clara River Fluvial Analysis, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Ruh-Ming Li and Sree Kumar, p358-363

Wang, K. H.

Wang, N. H.
Physical Modeling to Determine Head Loss at Selected Surcharged Sewer Manholes, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with T. G. Cleveland, C. Towsley and D. Umrigar, p3835-3840

Wang, Kai-Ping

Sediment Transport in a Thermally Stratified Bay, (Estua-rine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Zenitha Chroneer and Wil-bert Lick, p466-477

Wang, Keh-Han

see Ren, Xugui, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p507-510

Wang, Kejin

see Yang, Wei, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p564-573

Wang, Kelvin C. P.

Multimedia Data Management in a Highway Information System, (Computing in Civil Engineering, Jorge Vane-gas, ed. and Paul Chinowsky, ed., 1996), with Xuyang Li, p607-612

Technologies for a Multimedia Based Highway Information System in the Gigabit Networking Environment, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with Robert P. Elliott and James P. Turner, p490-499

Hydrodynamic Flow Modeling at Confluence of Two Streams, with T. G. Cleveland, S. Fitzgerald and X. Ren, EM Oct. 96, p994-1002

Three-Dimensional Moving Contact Line for an Accelerat-ing Vertical Cylinder, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p848-851

Wang, Liping

An Economy and Risk Analysis of Installed Capacity Ex-pansion at the Three Gorges Power Plant, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Nianhua Xue and Changming Ji, p3874-3879 Wang, M. C.

disc. (of Bearing Capacity of Footings over Two-Layer Foundation Soils, by Radoslaw L. Michalowski and Lei Shi, GT May 95, p421-428), GT Aug. 96, p700-701

Wang, Maili

Optimal Well Locations for Groundwater Mound Control, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Kevin Lansey, p940-945

Wang, Menghua

A DEM Based Hydrologic and Sediment Transport Model, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Allen Hjelmfelt, p2695-2700

Wang, Qiaohong see Ni, Fusheng, HY June 96, p298-300

Wang, S. F.

see Chang, Ni-Bin, EE Feb. 96, p122-131 see Chang, Ni-Bin, EE July 96, p649-658

Wang, S. T.

see Gupta, Pratyoosh, ST July 96, p748-755

Wang, Sam S. Y.

see Dou, Xibing, (North American Water and Environ Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3716-3721

see Jia, Yafei, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3458-3463

Wang, Sam S.-Y.

see Simões, Fraincisco J. M., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2719-2724

Wang, Shi-kang

Simulation of Suspended Particles Transport in the Entrance Region of Tube Flow, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with N. H. C. Hwang, p462-465

Wang, Shusen

Non-Growing Season Water Budgets for a Shortgrass Steppe, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), with William J. Parton and Gigi A. Richard, p237-242

Wang, Thomas S.

Two-Dimensional Modeling of River Dynamics for the Expansion of Clover Island, Kennewick, Washington, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with David P. Simpson and Raymond Walton, p2861-2866

Wang, Ton-Lo

Dynamic Behavior of Continuous and Cantilever Thin-Walled Box Girder Bridges, with Dongzhou Huang and Mohsen Shahawy, BE May 96, p67-75 see Huang, Dongzhou, \$T Sept. 95, p1330-1337

Wang, Tsan-Wen see Lai, Chintu, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p1905-1910

see Wu, Y.-T., (Probabilistic Mechanics & Structural Reli-ability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p274-277

Wang, Xiaozhi

Ultimate Transverse Strength and Reliability Analysis of Offshore Production Ships, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Lars M. Sørhaug, p146-149

Wang, Xinwei

On Buckling Analysis of Beams and Frame Structures by the Differential Quadrature Element Method, (Engineer-ing Mechanics, Y. K. Lin and T. C. Su, 1996), with Huizhi Gu and Bin Liu, p382-385

Wang, Y.

Yaung, 1.
Random Response of Nonlinear System to PERPM Model, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Z. Hou, M. Dimentberg, M. Noori and Y. Zhou, p954-957

Sediment Control at Water Intakes, with A. Jacob Odgaard, Bruce W. Melville and Subhash C. Jain, HY June 96. p353-356

Wang, Yarlong
Ground Response of Circular Tunnel in Poorly Consolidated Rock, GT Sept. 96, p703-708

Wang, Youjiang
Concrete Reinforcement with Recycled Fibers from Carpet
Industrial Waste, (Materials for the New Millennium,
Ken P. Chong, ed., 1996), p792-798

Wang, Z.
see Harik, I. E., (Analysis and Computation, Franklin Y.
Cheng, ed., 1996), p464-471

Wangstrom, Per

see Hansen, Paul, (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p327-338

Wankum, Robin D.

A Discussion of Two SVE/Bioventing Pilot Studies, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environ-ment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p751-761

Wapman, Walter

see Drotning, William, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed., 1996), p241-247

Ward, W. A

see Meegoda, Jay N., (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p31-46

Wardenier, J. see van Wingerde, A. M., ST Feb. 96, p125-132

Wardlaw, Robert L.

The Response of Long Span Bridges to Wind Action, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p66-69

Wardrop, Ronald see Lashkari, Ben, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p307-308

Ware, R. E.

see Butler, G. J., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3476-3479

Wargadalam, Jayamurni see Julien, Pierre Y., HY Apr. 95, p312-325

Warnaar, Dirk B.

Performance Characteristics of a Smart Hinge for Solar Array Deployment, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Rodney G. Galloway, p1162-1168

Warner, J. The Timberlake Dam Failure: A Hydrometeorological Assessment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with G. V. Loganathan, R. J. Kane, M. Gillen, D. F. Kibler and K. Kostura, p2522-2527

Warner, James

disc. (of Performance of Repair Materials Exposed to Fluctuation of Temperature, by A. S. Al-Gahtani, Rasheeduz-zafar and A. A. Al-Mussallam, MT Feb. 95, p9-18), MT Aug. 96, p176-177

Warner, James, P.E. Article Should Be Required Reading, CE Nov. 96, p32

Warner, Robert F.

see Kawano, Akihiko, ST Mar. 96, p284-290

Warner, Scott D.

see Szerdy, Frank S., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p245-256

Warren, G. E.

see Malvar, L. J., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1179-1188

see Hoy, David, (Materials for the New Millennium, Ken P. Chong, ed., 1996), pl 189-1198

Extending the Limits—San Jose Runway, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p151-157

Warrick, A. W.

Soil-Limiting Flow from Subsurface Emitters. II: Effect on Uniformity, with U. Shani, IR Sept/Oct. 96, p296-300 see Khan, Akbar Ali, IR July/Aug. 96, p221-227

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Warszawski, A.

Economic Evaluation of Design Codes—Case of Seismic Design, with J. Gluck and D. Segal, ST Dec. 96, p1400-

Warszawski, Abraham

Autonomous Mapping System for an Interior Finishing Robot, with Yehiel Rosenfeld and Igal Shohet, CP Jan. 96, p67-77

Strategic Planning in Construction Companies, CO June 96, p133-140

Washington, David W.

Micromechanical Simulation of Geotechnical Problems using Massively Parallel Supercomputers, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Jay N. Meegoda, p717-721

Wassef, W. G.

see Fanous, F. S., ST Feb. 96, p210-216

Wassef, Wagdy G.

Bridges of the 21st Century with High Performance Steel, Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with John M. Kulicki and Philip A. Ritchie, p116-124

Performance of Bridges during the Hanshin-Awaji Earth-quake, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Kunitomo Sugiura, p926-933

Watanabe, Teiji

see Kattelmann, Richard, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p258-259

see Kattelmann, Richard, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1978

Waters, Colin

see Rachwal, Tony, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p663-667

see Wachinski, Anthony M., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p668-672

Waters, D. J.

see Grindrod, P., (High Level Radioactive Waste Manage ment, Technical Program Committee, 1996), p499-

Waters, Steve

see French, Richard H., WR Sept/Oct. 93, p588-598

Waterstone, Marvin

see Duckstein, Lucien, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p38-60

Wathugala, G. W.

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Improving Robustness of Algorithms to Implement HiSS models in FEM, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with S. Pal, p144-147

Watkins, Barbara M.
see Smith, Graham M., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p244-246

Watkins, D. W.

Use of Geographic Information Systems in Ground-Water Flow Modeling, with D. C. McKinney, D. R. Maidment and Min-Der Lin, WR Mar/Apr. 96, p88-96

see Chowdhury, Jahir U., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., George 1997), p213-214

Watkins, David W., Jr.

Comparison of Stochastic Programming and Robust Opti-mization Models for Groundwater Plume Containment, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Daene C. McKinney, p612-617

Watkins, Paul S.

Probabilistic Approach for Cancer Risk Assessment, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Timo-thy L. Jacobs, Rory B. Conolly and Warren T. Piver, p2366-2371

Watkins, S. E.

see Belarbi, A., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p788-791

see Liu, Ronghui, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p444-448

Watson, C. C. see Wittler, R. J., (North American Water and Environmen Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p105-110

Watson, Chester C.
Reduction of Sediment Loads in DEC Streams, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Tom Pokrefke and Daniel Gessler, p2885-2890 Siting of Grade Control Structures, (North American Water

and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with John Smith and David S. Biedenharn, p286-291

Watson, Ronald J. see Bradford, Paul F., (Building an International Communi-ry of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p41-47

Watson, S.
Simulated Seismic Load Tests on Reinforced Concrete Columns, with R. Park, ST June 94, p1825-1849
disc: J. P. Moehle, A. M. Rodríguez and D. E. Lehman, ST Feb. 96, p218-219
clo: ST Feb. 96, p219-220

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Watts, Brent A.

see Ogden, Fred L., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2909-2914

Watts, Randall W.

One-Dimensional Clarifier Model with Sludge Blanket Heights, with Spyros A. Svoronos and Ben Koopman, EE Dec. 96, p1094-1100

Watwood, Vernon B., P.E. Editors' Letters, SC Feb. 96, p1-2

Watzinger, A.

Investigation of Some Heavy Flood Hazards in Small Al-pine Catchments in Austria, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p715

Weathers, Lenly J.

see Shurtliff, Mathew M., EE July 96, p581-589

Weaver, David L.

Failure of a Stiffened Seat Bracket Connection, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Jason S. Yates and Randall W. Poston, p468-474

Analysis of the Gasoline Spill at East Patchogue, New York, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Joseph E. Haas and John T. Wilson, p707-718

Application of the Hydrocarbon Spill Screening Model to Field Sites, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p788-799

see Willson, Clinton S., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p407-418

Webb, Erik K.

An Iterative, Probabilistic Environmental Decision Analysis Approach, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with Stephen H. Conrad and Theresa J. Brown, p249-264

Webb, Robert

see Galeziewski, Thomas M., CE Jan. 96, p55-57

Webby, M. Grant

disc. (of Peak Outflow from Breached Embankment Dam, by David C. Froehlich, WR Jan./Feb. 95, p90-97), WR July/Aug. 96, p316-317

Weber, B. A.

see Pinchuk, L., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p192-195

Weber, James R.

see Stong, James B., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1597-1601

Weber, L. J.

see Allen, M. E., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1111-1116

see DenBleyker, J., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p893-898

Weber, Lan-Yin Li

Channel Scour Protection at Roadway Crossings, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p3278-3285

Santa Ana River Salt Marsh Restoration: Orange County, California, U.S.A., (North American Water and Environent Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p536-540

Stormwater Management for San Joaquin Hills Transporta-tion Corridor, Orange County, California, (North Ameri-can Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2826-2830

see Stokes, Grant, (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p46-53

Weber, Walter J., Jr.

see Mukherji, Suparna, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p575-582

see Prak, Dianne J. Luning, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996),

Weber-Shirk, Monroe

see Brunk, Brett, HY July 96, p373-380

Webster, Anthony

Architectural Anatomy: Interdisciplinary Multimedia Tools Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p753-759

Augmented Reality in Architectural Construction, Inspection, and Renovation, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Steven Feiner, Blair MacIntyre, William Massie and Theodore Krueger, p913-919

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Networked Multimedia Tools for Architectural Engineering, AE Mar. 96, p11-19

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Long-Term Leaching of Metals from Concrete Products, with Raymond C. Loehr, EE Aug. 96, p714-721 Recycling of Spent Abrasive Media in Nonstructural Con-

crete, with Raymond C. Loehr, EE Sept. 96, p840-849

Webster, T. E.

see Sgouros, G. E., WW July/Aug. 96, p165-171

Webster, Todd S.

Study of Biological Reactors for Control of Odor, VOC and Toxic Emissions from Wastewater Treatment Plants, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Joseph S. Devinny, Edward M. Torres and Shabbir S. Basrai, p571-576

Webster, William C.

see Donnelly, James R., CE May 96, p41-43

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Wee, T. H.

Stress-Strain Relationship of High-Strength Concrete in Compression, with M. S. Chin and M. A. Mansur, MT May 96, p70-76

Weghorst, Karen

The Reclamation Drought Index: Guidelines and Practical Applications, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p637-642

Wei, Wei

see Robinson, David N., EM Sept. 96, p855-860

Weichert, Dieter

see Raad, Lutfi, (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p203-214

Weidlinger, Paul

Passive Structural Control with Sequential Coupling, ST Sept. 96, p1072-1080

Weigand, C. see Hanson, B., IR May/June 96, p179-182

Weingardt, Richard G. New Orleans Rolls the Dice (Available only in *Structures* Special Issue), with John F. Davis, CE May 96, p3A-7A Partnering: Building a Stronger Design Team, AE June 96,

Re-engineering Cowboy Heaven (Available only in Focus on Structures Special Edition), with John F. Davis, CE Jan. 96, p10A-13A

Weinrib, Harry P.

see Harrison, Larry L., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2091-2096

Weinstock, Lawrence

The National Academy of Sciences Report and Environmental Radiation Standards for Yucca Mountain, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Raymond L. Clark, p267-268

Weiss, Peter T.

Bubbleless Fiber Aerator for Surface Waters, with Bryan T. Oakley, John S. Gulliver and Michael J. Semmens, EE July 96, p631-639

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see Harvey, J., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p701-710

Weissman, Shmuel L.

see Vallerga, Bernard A., (Materials for the New Millenni-um, Ken P. Chong, ed., 1996), p1288-1297

Weiwen, Luo

Assessment of Remaining Fatigue Life of Existing Railway Riveted Bridges, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), with Jamshid Mohammadi, p42-45

Welch, Richard

Acquisition of Subsurface Comet Samples, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with Donald Sevilla, Don Noon and Albert Delgadillo, p129-135

Welles, Edwin

A Verification System for Probabilistic Hydrograph Fore-casts, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Momcilo Markus, p223-224

see Ingram, John J., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p227-228

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see Buchberger, Steven G., WR Jan./Feb. 96, p11-19

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Impact of Commuter-Rail Services in Toronto Region, with Bruce G. Hutchinson, TE July/Aug. 96, p270-275

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see Kelley, John G. W., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p367-378

Weltz, M. A.

see Flerchinger, G. N., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p424-429

Wemheuer, Robert F.

see Hastings, Peter S., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p327-329

Wen, Ching-Gung

see Yu, Shaw L., (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p4208-4213

Wen, Xianyun

see Guo. Yakun, HY Nov. 96, p662-669

Wen. V. K.

see Elwood, K. J., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p796-799

Wen, Y.-K.

see Yao, Timothy H.-J., ST Feb. 96, p193-201

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Treatment of Metal Industrial Wastewater by Fly Ash and Cement Fixation, with C. P. Huang, EE Nov./Dec. 94, p1470-1487

disc: Anoop Kapoor and Thiruvenkatachari Viraraghavan, EE Mar. 96, p243 clo: EE Mar. 96, p243-244

Wenrick, LeRoy F.

Preliminary Overview of Radiological Data Validation: Problems Found in Laboratory Data, (High Level Radio-active Waste Management, Technical Program Commit-tee, 1996), p312-314

Werellagama, D. R. I. B.

see Visvanathan, C., EE Jan. 96, p25-33

see Arasan, V. Thamizh, TE Sept./Oct. 96, p342-349

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see Cohn, M. Z., (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p135-146

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see Nieves, Alvaro, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p483-485

Wescott, R. G.

agement, Technical Program Committee, 1996), p288-290 see Eisenberg, N. A., (High Level Radioactive Waste Man-

Wescott, Rex G.

see Coleman, Neil M., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p205-207

Wessman, E. W.

see Orlob, G. T., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p4257-4262

West, L. Jared

see Stewart, Douglas I., (disc), GT May 94, p797-815

Westcot, Dennis W.

Non-point Source Policies for Agricultural Drainage, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Joe Karkoski and Rudy Schnagl, p875-880

Westen, Egon B.

Civil Engineering and Disaster Responses in Developing Countries, El Apr. 96, p89-92

Westermann, Dale see Izadi, Behzad, IR Mar/Apr. 96, p90-96

Westhaver, David S.

1994 Alaska Flood Recovery Project Management of a Dis-aster Recovery by a General Contractor, (Natural Disas-ter Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Alison H. Boyce, p111-112

Westmacott, Jason R.

The Effect of Climatic Change on Hydrologic Variables, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Donald H. Burn, p1465-1470

Wetmore, French

Retrofitting for Flood Protection: A Status Report, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p278-279

Weyers, Richard E.

see Hoffman, Paul C., (*Probabilistic Mechanics & Struc-*tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p290-293

Whalen, Timothy M.

Dynamics of Multi-DOF Stochastic Nonlinear Systems, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p82-85

Wheeler, Sylvia

Great Tips from Client Feedback Programs, ME Nov./Dec. 96, p10

Whipple, Chris

Comments Regarding the NAS Report on Yucca Mountain Standards, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p261-262

Whipple, Chris G.

Recommendations from EPA's Review Committee on WIPP, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p226-227

Whipple, William, Jr.

Integration of Water Resources Planning and Environmen-tal Regulation, WR May/June 96, p189-196

disc. (of Developing Comprehensive State Ground-Water-Protection Programs, by R. Gregory Bourne, Sonja Massey, Elizabeth Rolle and Bruce Meighen, WR July/ Aug. 95, p294-301), WR Sept/Oct. 96, p386

Whitaker, Jared

see Benning, Christopher, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1334-1338

Whitaker, Rodney W.

see ReVelle, Douglas O., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p102-108

White, D. C

White, D. C.

Protecting Drinking Water: Rapid Detection of Human Fecal Contamination, Injured, and Non-Culturable Pathogenic Microbes in Water Systems, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with D. E. Nivens, A. A. Arrage, B. M. Appelgate, S. R. Reardon and G. S. Sayler, p1645-1650

White, Daniel M.
Oxygen Supplies for Bioremediation in Tundra Soils, (Cold Regions Engineering: The Cold Regions Infrastruc-ture—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Robert L. Irvine, p339-350

White, David C.

see Ringelberg, David B., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p33-35

White, Donald W. see Moni, Sheloney, CP Oct. 96, p276-285

see Moni, Sneioney, C.P. Oct. 96, p216-263
White, G. J.
Probability-Based Design Requirements for Longitudinally Stiffened Panels in Ship Structures, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with B. M. Ayyub, A. E. Mansour and P. H. Wirsching, p.110-113
see Wirsching, P. H., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p114-117

White, Gregory J. see Ayyub, Bilal M., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p102-105

see Mansour, Alaa E., (Probabilistic Mechanics & Struc-tural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p98-101

White, Kathleen D.
Predicting Breakup Ice Jams Using Logistic Regression, CR Dec. 96, p178-189

see Tuthill, Andrew M., CR Mar. 96, p36-57

White, R. E.

White, R. E. see Arora, Pankaj., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p203-212 see Coleman, D. H., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1281-1287 see Popova, S. N., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p988-996 see Ramasubramanian, M., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1007-1016

White, Ralph E. see Haran, Bala S., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p997-1006

Whitehead, Kevin K.
Computational Modeling of Fluid Dynamics in Aortopulmonary Shunts: Comparison to In Vitro Studies, (Engimeering Mechanics, Y. K. Lin and T. C. Su, 1996), with
Theresa A. Tacy and Edward G. Cape, p334

Whitehouse, Richard J. S.
see Simons, Richard R., (Coastal Dynamics '95, William
R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p161-172

Whitescarver, John see Espey, William H., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2810-2814

Whiting, David R.

see Lee, Brian E., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p197-198

Whitley, R. J.

see Hromadka, T. V., II, IR Jan/Feb. 96, p15-18

Whitlock, A. Rhett

Foundation Design Considerations for Construction o Marshlands, with Shahzad S. Moosa, CF Feb. 96, p15-22

Whitman, Robert L., Jr. see Reutter, David S., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p753-758

Whitman, Robert V.
FEMA-NIBS Earthquake Loss Estimation Methodology, (Natural Disaster Reduction, George W. Housner, dand Riley M. Chung, ed., 1997), with Henry J. Lagorio and Philip J. Schneider, p113-114

Organizing and Evaluating Uncertainty in Geotechnical Engineering, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1-28

Whitmore, David W.

Whitmore, David W.

Electrochemical Treatment of Concrete: A New Approach to Extend the Service Life of Chloride Contaminated, Carbonated, or Alkali Silica Reactive Concrete Structures, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Keith Stewart, p1504-1511

Whitney, M. W.
Barge Collision Design of Highway Bridges, with I. E.
Harik, J. J. Griffin and D. L. Allen, BE May 96, p47-58

see Rojahn, Christopher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p331-332

Whittaker, John see Gibson, Nancy, ME Nov./Dec. 96, p34-39

Whittaker, T. J. T. see Müller, G., WW Jan/Feb. 96, p55-58

Whittle, Andrew J.

Application of Numerical Limit Analyses for Shallow Foundations on Clay, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Boonchai Ukritchon, p132-135 see Hashash, Youssef M. A., GT June 96, p474-486

Wichelns, Dennis

Wichens, Jeanus Economic Issues Regarding Water Quality Objectives in the Grassland Basin, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Laurie Houston, p661-666

Bathala, ed., 1996), with Laurie Houston, p661-666
A Regional Management Plan to Improve Water Quality in the Grassland Basin, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Laurie Houston, Dan Nelson and Joseph McGahan, p655-660
see Cone, David, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p406-411

Widdowson, Mark A. see Waddill, Dan W., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996). p466-477

Widhalm, Clemens

Anisotropic Thermal Expansion Causes Deformation of Marble Claddings, with Elmar Tschegg and Walter Ep-pensteiner, CF Feb. 96, p5-10

Wiegand, Nancy K.
DBMS Implementation of a Linear Referencing Model, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Teresa M. Adams and Alan P. Vonderohe, p179-185

Wiegel, Robert L. History of Coastal Engineering in the USA, (History and Heritage of Coastal Engineering, Nicholas C. Kraus, ed., 1996), with Thorndike Saville, p513-600

Wieland, Lisa M.

see Klingeman, Peter C., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p673-678 Wiesner, Mark R.

Editorial, with Thomas L. Theis, EE Feb. 96, p89-90

Wigand, Robert C.

Facilities for the Earth-Moon Test Range, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p956-962

Wiggert, David C.

see Andersland, Orlando B., EE Mar. 96, p212-216
see Chevalier, Lizette R., (Non-Aqueous Phase Liquids
(NAPLs) in Subsurface Environment: Assessment
and Remediation, Lakshmi N. Reddi, ed., 1996), p357-368

Wijedasa, Hewa A.
see Kemblowski, Marian W., (Risk-Based Decision Making
in Water Resources VII, Yacov Y. Haimes, ed.,
David A. Moser, ed. and Eugene Z. Stakhiv, ed.,

Wijnberg, K. M.

One-Dimensional Modelling of Individual Breaking Waves, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with L. C. van Rijn, p341-354

Wikberg, Peter
Indirect Evidences for Quantification of Groundwater Flow: Groundwater Flow.

Assessment of the Consistency of Geohydrological Groundwater Flow Models and Hydrochemical Mixing/
Reaction Models of the Aspö Hard Rock Laboratory, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Ingvar Rhen, p145-147

Wilbur, B. Christopher

Hazard Assessment of Debris Fans at Rico, Colorado, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p1432-1445

Wilbur, Ralph E.

Discussion of Environmental Engineering Forum:
Backflow Prevention and Water Quality in Residential
Sprinkler Systems (September/October 1993, Vol. 119,
No. 3, by Thomas M. Walski (Environmental Engineering Forum)), EE Jan. 96, p80-82

Slowly-varying Components of Hydrodynamic Field at the Wall of Breakwater of Gdańsk North Port, (Coastal Dy-namics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Eugeniusz Sobierajski, p69-80

see Lin, W., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p122-124

Wilderer, Peter A.

see Eisner, Peter, (disc), EE Sept./Oct. 94, p1109-1131

Wildermuth, Mark J.

Changes in Ground Water-Surface Water Interaction in the Santa Ana River Caused by Independent Water Resources Management Activities, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Timothy F. Moore and Traci Stewart, p3300-3313

Wiley, William E.

Containing Spills and Fire, CE Mar. 96, p53-55

Wilhelms, Steven C.

see Clauss, Charles, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1305-1310

Wilhite, Donald A.

see Hayes, Michael J., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p371-372

Wilke, K.

The Last Two Extreme Floods in Germany - Analyses and Consequences, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1716

Wilke, Paul S.

see Fosness, Eugene R., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p228-231

see Fosness, Eugene R., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1176-1182

Wilkening, Craig R.

Flood Damage Estimates Using GIS Spatial Analysis, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3405-3410

Constitutive Driver for Cohesive-Frictional Materials, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with M.-M. Iordache, p751-760

Willam, Kaspar see Münz, Thomas, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1046-1049

Willam, Kaspar J. see Frangopol, Dan M., EM Dec. 96, p1174-1182

see Kang, Hong D., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1054-1057

Willard, Daniel E.

Some Thoughts About Ecosystems: Management, Control, and Uncertainty, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p191-206

Willardson, L. S.

see Allen, Richard G., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p899-904

see Sandell, J. F., EE Jan. 96, p34-40

Willett, Keith D.

see Andrews, Craig D., EY Aug. 96, p41-60

Willey, R. G.

Modeling Water-Resource Systems for Water-Quality Management, with Donald J. Smith and James H. Duke, Jr., WR May/June 96, p171-179

Williams, A. N.

A Dynamic Submerged Breakwater, with W. G. McDougal, WW Nov/Dec. 96, p288-296

see Zhang, S., WW Jan./Feb. 96, p38-45

Williams, A. Neil

see McDougal, William G., WW Jan./Feb. 96, p27-33

Williams, Charles R.

Constructed Wetlands for Metals Removal, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p1184-1189

Williams, Dameron H.

Feedback Letter, ME Nov./Dec. 96, p5

Williams, David J.

Preparing for Project Management, 1996, 0-7844-0175-6,

see Morris, Peter H., HY June 96, p311-315

Williams, David T.

Industry Standards for Erosion Control Products - Future Tools for Civil Engineers, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3349-3354

chayya Bathala, ed., 1996), p3349-3354
Selection of Sediment Transport Relations Part III: Numerical Ranking of Sediment Transport Relations, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Pierre Y. Julien, p2843-2848
see Doeing, Brian J., (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p365-372
see Smith David S. (North American Water and Environ-

see Smith, David S., (North American Water and Environment Congress & Destructive Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2837-2842 see Teal, Martin J., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2831-2836

Williams, F. L.

see Andres, R. J., (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), Williams, Frederick M.

Discussion of Environmental Engineering Forum: Long-Term Effects of Wetland Treatment of Mine Drainage (November/December 1993, Vol. 119, No. 6, by Thomas M. Walski (Environmental Engineering Forum)), with Lloyd R. Stark, EE Jan. 96, p84-85

Williams, K.

see Majer, E., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p151-154

Williams, Mark Modified Jar Test Studies for Removal of Disinfection By-Products (DBPs) and Color Compounds from Groundwater, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Badri Badriyha, Shih-Chieh Tu, Jamal Awad and Massoud Pirbazari, p1009-1014

Williams, Mike

Williams, Shike ALPS: The Automated Lift Planning System, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), with Craig Bennett, p812-817 Graphical Simulation for Project Planning: 4D-Planner™, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p404-409

Williamsen, Joel E.

see Schonberg, William P., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1-7

Williamson, Helen

see Torfs, Hilde, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p749-758

on, Mark

see Saquib, Najmus, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3515-3520

Williamson, R. Bruce

Watershed Riparian Management and Its Benefits to a Eu-trophic Lake, with Christine M. Smith and A. Bryce Cooper, WR Jan./Feb. 96, p24-32

Williamson, Randall D.

South Carolina Department of Transportation's Statewide Program of Bridge Scour Evaluation, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Dean D. Hatfield and Michael A. Ports, p729-735

Williamson, Thomas A

see Kroschel, Max, CE May 96, p64-66 see Stark, Timothy D., GT Mar. 96, p197-203 Williamson, Ton

Editor's Letter, SC Aug. 96, p59

Willis, Robert

see Firor, Susan, WR May/June 96, p205-212

Willoughby, Alan J.

Sample Returns to Enable Asteroid Mining, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Alan L. Friedlander, Darla J. German, Mark K. Jacobs, Jeffrey A. George and Kurt J. Hack, p840-846

Willsey, Jamie

see Huston, Dryver R., (Building an International Commu-nity of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p704-710

Willson, Clinton S.

Framework for a Screening Model for DNAPL Contamina-tion of Porous Media, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with James W. Weaver, Tissa Illangasekare and Randall J. Charbeneau, p407-418

Wilmot, R. D.

see Galson, D. A., (High Level Radioactive Waste Management, Technical Program Committee, 1996), p231-

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see Lee, M. M. K., ST Aug. 96, p893-904

Wilson, Chuck

Embankment Dams in the Piedmont/Blue Ridge Province, (Design with Residual Materials: Geotechnical and Construction Considerations, Gordon Matheson, ed., 1996), with Ray Martin, p27-36

Wilson, David G.

Optimized Input Shaping for a Single Flexible Robot Link, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Dennis Stokes, Gregory Starr and Rush D. Robinett, p1225-1229

Wilson, Edward L.

Parallel Structural Analysis with Computers and Engineers, (Analysis and Computation, Franklin Y. Cheng, ed.,

Wilson, G. J.

see Pinchuk, L., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p192-195

Wilson, Ian

see Vogel, Richard M., HE Apr. 96, p69-76

Wilson, James C.

see Granata, Richard D., IS Sept. 96, p139-144

Wilson, James H.

see DePaoli, David W., EE May 96, p399-406

Wilson, John L.

Computational Support for Distributed and Concurrent Design Team, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with Chenggang Shi, p544-550

Wilson, John M.

see Selby, Alan R., (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), p188-199

see Weaver, James W., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p707-718

Wilson, K. C.

see Shook, C. A., (disc), HY Jan. 95, p72-76

Wilson, L. G.

see Quanrud, David M., EE Apr. 96, p314-321

Wilson, Michael L.

Lateral Diversion in the PTn Unit: Capillary-Barrier Analysis, (High Level Radioactive Waste Management, Technical Program Committee, 1996), p111-113

Wilson, Paul R. see Ghiocel, Dan M., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p18-21

see Ghiocel, Dan M., (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p620-623

Wilson, R.

see Peck, T. M., (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p1024-1034

Wilson, Robert F.

see Rojahn, Christopher, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p7-8

Plywheels for Energy Storage in Space Using Superconducting Bearings, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with W. K. Chu, K. Ma and H. Xia, p355-359

see Chu, W. K., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p540-544

Wilson, Thomas L.

Astrophysical Cosmology Using a Lunar Ligo, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Hans-Joachim Blome and Norman LaFave, p861-863

Observational Cosmology from the Moon, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), with Hans-Joachim Blome, p864-270

see Blome, Hans-Joachim, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p328-333

Wilson, Tim

Urban Water Conservation Efforts of the Irrigation Association, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 1996), p911-916

Wilson, Vance

see Reitsma, René, WR Jan./Feb. 96, p64-70

Winchell, F. C.

Results of Field Evaluations of the New Modular Inclined Fish Diversion Screen, (North American Water and En-vironment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with S. V. Amaral, E. P. Taft, T. C. Cook, A. W. Plizga, E. M. Paolini and C. W. Sullivan, p881-886

Winchell, Michael

see Steenhuis, Tammo S., IR May/June 95, p234-238

Wingle, William L.

Evaluating Subsurface Uncertainty Using Zonal Kriging, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Eileen P. Poeter, p1318-1330

Winistorfer, Steve G.

Product Champions in Government Agencies, ME Nov./ Dec. 96, p54-58

WIPP TRU Waste Transportation— A Circle of Safety, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with O. R. Spooner, p360-

Winowich, Stephen see Borovetz, Harvey, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p35

Winter, R. M.

see Cross, W. M., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p356-365

Winterstein, S. R.

see Bazzurro, P., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p202-205

Winterstein, Steven R.

Winterstein, Steven R. Ocean Environment Contours for Structural Response Analysis and Experiment Design, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Todd C. Ude, Paolo Bazzurro and C. Allin Cornell, p592-595 see Lange, Clifford H., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p58-61

Wipf, T. J.

see El-Arabaty, H. A., BE Aug. 96, p104-111

Wipf, Terry J.

Dynamic Behavior of Glued Laminated Timber Girder Bridges, (Building an International Community of Struc-tural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Michael A. Ritter and Douglas L. Wood, p260-267

Construction Project Control through Risk Management, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), with J. H. M. Tah and R. Howes, p28-34

Wirsching, P. H.

Probability-Based Design Requirements with Respect to Fatigue in Ship Structures, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with A. E. Mansour, B. M. Ayyub and G. J. White, p114-117

see Kuo, C.-J., (Probabilistic Mechanics & Structural Reli-ability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p466-469
see Shen, C. L., (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p462-465
see Shen, C. L., (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p470-473
see White, G. J., (Probabilistic Mechanics & Structural Re-liability, Dan M. Frangopol, ed. and Mircea D. Gri-goriu, ed., 1996), p110-113 see Kuo, C.-J., (Probabilistic Mechanics & Structural Reli-

Wirsching, Paul H.

see Ayyub, Bilal M., (Probabilistic Mechanics & Structural
Reliability, Dan M. Frangopol, ed. and Mircea D.
Grigoriu, ed., 1996), p102-105
see Mansour, Alaa E., (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea
D. Grigoriu, ed., 1996), p98-101

Wise, Louise P.

The Watershed Approach: A Framework for Action, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Janet D. Pawlukiewicz, p3574-3579

Wisniewski, Robert T., II

see Moskowitz, Joel, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), p322-331

Wistrom, Anders O.

Automatic Control of Flocculation Processes, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Jay A. Farrell, p997-1002

Witczak, Matthew W.

see Decker, Dale S., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1418-1428

see Young, Ken, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3393-3398

Wittek, Udo

Nonlinear Behavior of RC Cooling Towers and Its Effects on Strains, Stresses, Reinforcement and Cracks, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Anmin Ji, p287-297

Witteveen, Norman D.

Lessons Learned from Planning and Developing New Denver International Airport, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), p45-52

Witteveen, Norman D., P.E. Tall, Taller, Tallest, CE Oct. 96, p39

Wittgren, H. B.

see Hakansson, B., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3276-3277

Wittler, R. J.

Dam Foundation Erosion Study: the Design of a Sidewall Orifice for Simulation of a Free Trajectory Overtopping Jet. (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with S. R. Abt, T. L. Lewis, J. F. Ruff and K. Adhya,

Dam Foundation Erosion Study: Pit 4 Scale Model Simulation, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with S. R. Abt, T. L. Lewis, J. F. Ruff and K. Adhya,

p3829-3834

Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p111-116

Siting Low Profile Grade Control Structures for the Muddy Creek Demonstration Stream Restoration Research Project, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with D. R. Eby, S. D. Keeney, C. C. Watson and S. R. Abt, p105-110 Wnek, Janusz

see Sczepanik, Witold, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p845-851

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Education Can End Bidding Evils, CE Jan. 96, p30-31

Wojtkiewicz, S. F.

see Yi, W., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p685-688

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see Galloway, Duncan, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p13-25

see King, Brian, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), p192-203

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Woldt, W. E.

see Tannehill, Crystal C., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1003-1008

Woldt, Wayne

see Bowling, Sandra, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2230-2235

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see Hagemeister, Michael E., EE Apr. 96, p248-258

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Static Stiffness of Unbounded Soil by Finite-Element Method, with Chongmin Song, GT Apr. 96, p267-273 see Song, Chongmin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p176-179

see Song, Chongmin, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p306-309

Wolf, Lisa J.

Hydrodynamic Model and Sensitivity Analysis for San Juan Bay, P. R., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Gavin Gong, p505-517

see Finn, P. A., (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), p390-

Wolfe, Dennis D.

see Takaichi, Lynn M., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p412-417

Wolfe, N. L.

see Burris, David R., EE Aug. 96, p685-691 see Hatfield, K., EE Aug. 96, p676-684

Wolfe, Raymond W.
Computer Analysis, Vincent Thomas Bridge, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with Hany J. Farran, p311-312

Repetitive Member Adjustment for Wood Structural De-sign, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Steve Cramer, p804-811

Probabilistic Slope Stability in Theory and Practice, (Un-certainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p419-433

son, ed. and Mary J. S. Roth, ed., 1990), p419-433 Reliability Assessment of Dike and Levee Embankments, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nei-son, ed. and Mary J. S. Roth, ed., 1996), with Edward C. Demsky, Jeffrey Schauer and Edward Perry, p636-650

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Merit Shop Recruitment and Selection Practices in Ala-bama, with Rebecca C. Burleson, CO June 96, p152-157

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Wong, C. F.

see Lee, Joseph H. W., EM Jan. 96, p19-29

Wong, Daniel O.

Lateral Earth Pressures on Deep Braced Walls, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p746-758

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Communication Breakdown, with Jeremy Isenberg, CE Jan. 96, p52-54

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GT Dec. 96, p1023

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Wong, Tommy S. W.

Time of Concentration and Peak Discharge Formulas for Planes in Series, IR July/Aug. 96, p256-258

Wong, Virgina

Nopal I Uranium Deposit: A Study of Radionuclide Migra-tion, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Elizabeth Anthony and Philip Goodell, p43-45

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see Kim, Yang-Su, (disc), WR Sept./Oct. 94, p651-673

Woo, Michael H.

Development of an Interactive Multimedia and Database Model, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chinowsky, ed., 1996), p767-773

Wood, A. L.

see Annable, M. D., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Reme-diation, Lakshmi N. Reddi, ed., 1996), p212-220

Robustness of Reservoir Storage Reallocation Decisions to Climate Change, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with Dennis P. Lettenmaier and Richard N. Palmer, p19-37

Wood, Craig A.

Mitigation Wetland Losses for a Major Transportation Im-provement Project in New Hampshire, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with William J. Barry, Albert S. Garlo and William Arcieri, p982-987

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see Wipf, Terry J., (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p260-267

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Wood, Sharon L.

Performance of Precast Parking Garages in the Northridge Earthquake: Lessons Learned, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with John F. Stanton and Neil M. Hawkins, p1221-1227

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see Schroeder, Herbert P., CR June 96, p93-117

Wood, William L.

see Riley, James H., (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996). p583-595

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Woodell, John M.

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see Roseboom, D. P., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2879-2884

Woods, Richard

see Michaels, Paul, ed., Case Histories of Geophysics Ap-plied to Civil Engineering and Public Policy

Woods, Richard D.

see Chu, HsienShen S., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p269-280

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Search for Physically Based Runoff Model—A Hydrologic El Dorado, HY Mar. 96, p122-129

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Foodula, Parade A. (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p1918-1923

see Darrah, J., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p32-45

Work, P. A

South Carolina Coastal Erosion Study: Inlet Morphodynamics and Sediment Transport, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with W. E. Rogers and E. J. Hayter, p1047-1058

Wörman, Anders

disc. (of Design Relationship for Filters in Bed Protection, by K. J. Bakker, H. J. Verheij and M. B. de Groot, HY Sept. 94, p1082-1088), HY Mar. 96, p177-178

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see Ghumman, A. R., (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3794-3799

Worthington, Will Acoustic Monitoring to Enhance Pipeline Safety at Cross-ings, (Pipeline Crossings 1996, Lawrence F. Catalano, ed., 1996), with William J. DiMarco, p1-13

Worthington, William E., Jr.

Wortungton, Winam E., Jr.
The Engineer and the Smithsonian Institution's Civil Engineering Collections, (Civil Engineering History: Engineers Make History, Jerry R. Rogers, ed., Donald Kennon, ed., Robert T. Jaske, ed. and Francis E. Griggs, Jr., ed., 1996), p34-43

Wortley, C. Allen

Wortley's Winter Wanderings: A Narrative, (Cold Regions Engineering: The Cold Regions Infrastructure—An In-ternational Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p837-854

Wotton, Corinne L.

Risk-Equivalent Seasonal Discharge Programs for Ice-Covered Rivers, with Barbara J. Lence, WR May/June 95, p275-282

disc: Michael G. Ferrick and Darryl J. Calkins, WR Nov./Dec. 96, p442-444

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Investigation of Interwell Tracer Tests Used with Cosolvent investigation of interwell fracer lests Used with Cosolver Flooding, (Non-Aqueous Phase Liquids (NAPLs) in Sub-surface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with Cindy M. Lee, John T. Coates and Ronald W. Falta, p151-162 see Falta, Ronald W., (Non-Aqueous Phase Liquids ((NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p257-268.

Wright, David W.

Infrastructure Planning and Sustainable Development, UP Dec. 96, p111-117

Wright, Kenneth R.
Climate Variability Impact on the Water Resources of Ancient Andean Civilizations, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with John A. Dracup and Jonathan M. Kelly, p1840-1845

Wright, Leonard

Ree Heaney, James P., (Risk-Based Decision Making in Water Resources VII. Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p219-248

Wright, Stephen G.
Stability of a Steep Slope Supporting a Building, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Frank G.

son, ed. and mary J. S. Rodii, ed., 1730/, mar rains Spryant, pd34-450
disc. (of Unified Formulation for Analysis of Slopes with
General Slip Surface, by R. D. Espinoza, P. L. Bourdeau
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Wright, William Fabrication and Testing of High Performance Steel I-Girders Research in Progress, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1571-1578

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Wu, Guoxi

Seismic Pressures Against Rigid Walls, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), with W. D. Liam Finn, p1-18

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see Sasthoff, P., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p1131-1134

Wu. H. C.

Utilization of Recycled Fibers in Concrete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Y. M. Lim, V. C. Li and D. J. Foremsky, p799-808

see Reddi, Lakshmi N., EE Dec. 96, p1115-1119

Wu, J. C.

see Yang, J. N., ST Jan. 96, p69-75 see Yang, J. N., ST Feb. 96, p179-186

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Systematic Evaluation of Pollutant Removal by Urban Wet Detention Ponds, with Robert E. Holman and John R. Dorney, EE Nov. 96, p983-988

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see Stallard, W. M., EE Aug. 96, p692-699

Model for Water Quality in Periphery of Distribution Systems, (North American Water and Environment Con-gress & Destructive Water, Chenchayya Bathala, ed., 193464-3469

Wu, S. Submerged Flow Regimes of Rectangular Sharp-Crested Weirs, with N. Rajaratnam, HY July 96, p412-414 Transition from Hydraulic Jump to Open Channel Flow, with N. Rajaratnam, HY Sept. 96, p526-528

Wu, Shouhong Va., abdulloug disc. (of Nonunique Water-Surface Profiles in Open Chan-nels, by Subhash C. Jain, HY Dec. 93, p1427-1434), HY Mar. 95, p296-297

Erosion and Stability of a Mine Soil, with Alan T. Stadler and Chin-wah Low, GT June 96, p445-453

Use of Geologic Information in Site Characterization, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Mohamed A. Abdel-Latif, Michael A. Nuhfer and B. Brandon Curry, p76-90

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Wu, 1-1-1.
Nondestructive Evaluation of Elastic Constants and Crack Depth in Concrete Using Transient Elastic Waves, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with J.-S. Fang, p861-868

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see Ou, Chang-Yu, GT May 96, p337-345 see Ou, Chang-Yu, GT Sept. 96, p709-716

May 1. S. On Calibration of the UZ Site-Scale Model of Yucca Mountain, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with T. M. Bandurraga, C. F. Ahlers, S. Finsterle, G. Chen, C. Haukwa, G. S. Bodvarsson, E. Kwicklis, J. Rousseau and L. Flint, 272, 66 p73-75

On Seismic Displacements of Rigid Retaining Walls, (Analysis and Design of Retaining Structures Against Earthquakes, Shamsher Prakash, ed., 1996), with Shamsher Prakash, p21-37

Wu. Y .- T.

Wu, Y.-1. A New Method for Efficient Reliability-Based Design Optimization, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with W. Wang, p274-277

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Modified Bang-Bang Control Law for Structural Control Implementation, with T. T. Soong, EM Aug. 96, p771-

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Analysis of Crack Propagation in Concrete Structures by Markov Chain Model and R-curve Method, (*Probabilis-*tic Mechanics & Structural Reliability, Dan M. Frango-pol, ed. and Mircea D. Grigoriu, ed., 1996), with Zdeněk P. Bažant, p358-361

F. Dazam, p.336-301 Effect of Aggregates on Fracture Process Zone of Concrete, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Felix E. Amparano, pl 185-1188 Representative Volumes of Composite Materials, (Engi-neering Mechanics, Y. K. Lin and T. C. Su, 1996), –225-739.

Representative Volumes of Composite Materials, EM Dec. 96, p1159-1167

see Sujata, K., (Materials for the New Millennium, Ken P. Chong, ed., 1996), p1669-1676

see Chu, W. K., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p540-544

see Wilson, T. L., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p355-359

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Suspended Sediment Loads in Dry and Wet Years, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Mis-ganaw Demissie, p1442-1446

see Bhownik, Nani G., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2849-2854

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Xiang, Yanyong Application of the Limit-State Method for Probabilistic Un-Apprication of the Limit-State Method for Probabilistic Un-saturated Flow Modeling, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Srikanta Mishra, p108-110 see Vallikat, Vinod, (High Level Radioactive Waste Man-agement, Technical Program Committee, 1996), p293-294

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Dynamic Response Analysis of High Arch Dam-Water-Foundation System, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Chen Houqun and Hou Shunzai, p987-988

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Exterior Reflections in Elliptic Harbor Wave Models, with Vijay Panchang and Zeki Demirbilek, WW May/June 96, p118-126

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GIS Application for Miami Transportation System Hurri-cane Emergency Preparedness, (Natural Disaster Reduc-tion, George W. Housner, ed. and Riley M. Chung, ed., 1997), p107-108

see Ariaratnam, S. T., ST Jan. 96, p110-111

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Xu, Weiming

Some Computational Issues in the Control of Distributed Systems, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Sami F. Masri and Bingen Yang, p747-

Xu, Xin-Sheng

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Wind-Induced Fatigue Loading and Damage to Hip and Gable Roof Claddings, ST Dec. 96, p1475-1483

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Looping Behavior and Strength of Prestressed Arches, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Amir Mirmiran, p366-369

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Yakowitz, D. S.

Modeling and Solving Water Resources Engineering De-sign Problems as Stochastic Programs to Account for an Uncertain Future, (Risk-Based Decision Making in Water Resources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with W. Elshorbagy and K. Lansey, p106-117

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see Szerdy, Frank S., (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), p245-256

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Yamashita, S.

see Furuya, E. G., EE Oct. 96, p909-916

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see Honjo, Yusuke, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p942-945

Yan, Liping
Seismic Response of a Block on an Inclined Plane to Vertical and Horizontal Excitation Acting Simultaneously,
(Engineering Mechanics, Y. K. Lin and T. C. Su, 1996),
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Are Bridge Conditions Improving Under Bridge Management: A Panel Discussion, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p282-289

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Yang, Chih Ted

Sediment Transport in the Yellow River, with Albert Moli-nas and Baosheng Wu, HY May 96, p237-244

Implementation of Runtime Visualization for Tough2, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Srikanta Mishra, p308-309

Tang, Rul Equilibrium Network Traffic Signal Setting under Condi-tions of Queuing and Congestion, (Applications of Ad-vanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p578-582

YAU

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Bathala, ed., 1996), p3411-3416

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Storm Drainage GIS, Modeling, and Master Plann the City of Berkeley, (North American Water and Envi-ronment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with J. Egeberg and D. Akagi, p4239-4244

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chayya Bathala, ed., 1990), p3153-3157
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see Sun, Yung-Hsin, (North American Water and Environment Congress & Destructive Water, Chenchayya
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Stochastic Modeling of Imperfections in Beams, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p676-679

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Abwasser-Hydraulik: Theorie Und Praxis (Sewer Hydraulics: Theory and Practice) by Willi H. Hager, HY Oct. 96,

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Evaluation of Service Load Behavior of Small Bridges Using Strain Measurement, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p667-673

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Biopolymers for Geotechnical Applications, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Iris C. Y. Yang, Shiva Karimi and Geoffrey R. Martin, p1602-1607 see Kwon, Sung-Hyun, (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p794-799

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ble Pressure, EM June 96, p580-584

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Mechanics & Structural Reliability, Dan M. Frangopoj, ed. and Mircea D. Grigoriu, ed., 1996), with B. F. Spen-cer, Jr. and L. A. Bergman, p10-13 Application of the Infinite Element Method to Solution of the Fokker-Planck Equation, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with S. F. Wojtkiewicz, L. A. Bergman and B. F. Spencer, Jr., p685-688

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Simulating Nature Wind Waves in a Wave Flume, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with C.-R. Chou and M.-Y. Lai, p45-56

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Modeling the Ecological Impacts of Flaming Gorge Dam Operations, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with K. E. LaGory, J. W. Hayse, I. Hlohowskyi, R. A. Van Lonkhuyzen and H. E. Cho, p1911-1917

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Subjective Probability Assessment in Water Resources Planning, (Risk-Based Decision Making in Water Re-sources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), p294-314

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see Horiguchi, T., (Engineering, Construction, and Opera-tions in Space, Stewart W. Johnson, ed., 1996), p621-629

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Effect of Soil-Structure Interaction on Structural Response, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with R. C. Zhang and J. Yu, p1098-1101

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Radwaste Management in Reracking of Korean Nuclear Power Plants, (High Level Radioactive Waste Manage-ment, Technical Program Committee, 1996), with Young Ho Shin, Chan Do Kim and Do Soon Jun, p379-381

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Design Model Bias Factors for Driven Piles from Experi-ments at NGES-UH, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackel-ford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Michael W. O'Neill, p759-773

Estimation of Driven Pile Resistance at an Overconsolidated Clay Site Using Geostatistical Methods, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Michael W. O'Neill, p950-953

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Survival of Coliform Microorganisms in Sediments from a
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Optimization of Groundwater Remediation with DES, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Christine A. Shoemaker, p622-627

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Hostizawa, Intropulation on Concrete Members Having Externally Bonded Carbon Fiber Sheet, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with Toru Myojo, Masayoshi Okoshi, Mutuki Mizukoshi and Howard S. Kliger, p1608-1616

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3D Numerical Modeling of Cohesive Sediments, (Estuarine and Coastal Modeling, Malcolm L. Spaulding and Ralph T. Cheng, 1996), with Nikolaos D. Katopodes, p478-489

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Radiation Hardening of Robotic Control Components Against Terrestrial Radiation, (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), with J. S. Tulenko, H. Liu and H. Zhou, p248-254

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Dynamic Response of Flexible Retaining Walls, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), with A. S. Veletsos, p310-313

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Sand Variability from Ground Penetrating Radar Data, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996), with Jon P. Doucette, p368-382

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The Changing Role of the Civil Engineer in the Past 25
Years, (Civil Engineers Influencing Public Policy, Maureen K. Cotton, ed., 1996), p55-62

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Recent Advances in the Development of High Performance Cement-Based Materials, (Materials for the New Millen-nium, Ken P. Chong, ed., 1996), p1101-1110

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Economic Risk Analysis as a Research Directing Paradigm,
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Destructive Water, Chenchayya Bathala, ed., 1996), with
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Congress & Destructive Water, Chenchayya Bathala,
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Pulsatile Flow Circuitry for Dynamic Study of a Volume Plethysmograph, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Jeff Raines and Ned H. C. Hwang, p204-207

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Design and Construction of the Santa Ana River Wash Crossing of the Inland Feeder, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with Jay Arabshahi, Birger Schmidt and Roy Cook, p1789-1795

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Yu, Da-hal Modeling of Wind-Structure Interactions, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), with Ahsan Kareem, p1005-1012

Numerical Simulation of Flow Field Around Buildings, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Ahsan Kareem, p490-493

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see Reed, Dorothy A., (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p215-216

Breaking Waves in Surfzones, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), with Ib A. Svendsen, p329-340

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Lake/Reservoir Restoration Activities in Taiwan, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), with Jan-Tai Kuo, Ching-Gung Wen, Shang-Lien Lo and Jen-Yang Lin, p4208-4213

see Liao, Shih-long, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p2462-2467

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see Shan, M. Y., ST Aug. 96, p854-859

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The Influence of Peak-Regulation of the Three Gorges Power Plant on Navigation, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Xiang Fu and Changming Ji, p3863-3868

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Finite Analytic Method for Mild-Slope Wave Equation, EM Feb. 96, p109-115

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see Nazarian, S., (Case Histories of Geophysics Applied to Civil Engineering and Public Policy, Paul Michaels, ed. and Richard Woods, ed., 1996), p56-72

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see Hurd, Stephanie, (Materials for the New Millennium, Ken P. Chong, ed., 1996), p243-250

Mapping Groundwater Vulnerability to Nitrate and Pesti-cide Contamination in the Salinas Valley, Monterey County, California, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with Joe LeClaire, Ali Diba, Michael Ina-da and Matt Zidar, p1099-1104

see Raad, Luth, (Cold Regions Engineering: The Cold Re-gions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p203-214

Fundamental Solutions for Bimaterials with Inextensible Interface, with Y. H. Yin, EM Nov. 96, p1052-1059

Yuhr, Lynn

Achieving a Reasonable Level of Accuracy in Site Characterization in the Presence of Geologic Uncertainty, (Unterization in the Presence of Geologic Uncertainty, (Un-certainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nel-son, ed. and Mary J. S. Roth, ed., 1996, with Richard C. Benson and Devraj Sharma, p195-209 see Benson, Richard C., (Uncertainty in the Geologic Envi-ronment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), p91-103

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Damage Estimation Using Substructural Identification in Time Domain, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Hyeong-Jin Lee, p846-849

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eb Buckling in Thin Webbed Castellated Beams, with Richard Redwood, ST Aug. 96, p860-866

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Three Dimensional Design and Construction at the Auburn VPS Recycle Fiber Mill, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), p482-491

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clo:

err:

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Zakishani, Mansour see Hsieh, Bernard B., (North American Water and Envi-ronment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p2218-2223

Zakrzhevsky, Michael Stable Forced Vibrations Near Unstable Positions, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p384-387

Zaloum, Ronald

A Simplified Process Audit to Design an Affordable Pollu tion Prevention and Waste Management Plan - Part 1, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Pierre Sylvestre, p87-92

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Bathala, ed., 1996), p99-104

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Terraforming Mars, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1311-

Energy from Paper Sludge: Criteria and Hazardous Air Pol-lutants, with Thomas L. Theis and Michael Brennan, EE Aug. 96, p758-760

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Optimization Sensing and Control in Design of Antennas, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with Joseph Antebi, p147-153

Ultimate Strength of Underwater Pipe-Soil Systems, (Pipe-line Crossings 1996, Lawrence F. Catalano, ed., 1996), p230-236

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Surface Modifications to Reduce Thaw Degradation of Per-mafrost. (Cold Regions Engineering: The Cold Regions Infrastructure—An International Imperative for the 21st Century, Robert F. Carlson, ed., 1996), with Jasper Rajesh, p46-59

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Benefits of the Santa Ana River Mainstern Project, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p2176

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Network Transfer Function Model with a Markovian Prior for Tracer Tests Evaluation, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with Alvin Shapiro, p70-72

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The Effect of Measurement Scale on the Worth of Hydrauilic Conductivity Data: Slug Tests and Pumping Tests, (Uncertainty in the Geologic Environment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Roger Beckie, p1034-1051

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see Aminti, Pierluigi, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p617-628

see Dally, William R., ed., Coastal Dynamics '95

see Kaczmarek, Leszek M., (Coastal Dynamics '95 liam R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p664-675

see Kolodko, Jerzy, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), Dally, ed

see Ostrowski, Rafalł, (Coastal Dynamics '95, William R. Dally, ed. and Ryszard B. Zeidler, ed., 1996), p963-974

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Identification of Nonlinear Systems under Random Excita-tion, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with P. D. Spanos, p168-171

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Stream Instability in Loess Base Channels, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Rollin H. Hotchkiss and Thomas Franti, p3369-3374

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see Richards, Dennis L., (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), p3920-3926

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Evaluation of Bond Strength with Polypropylene Fiber Re-inforced Concrete, (Materials for the New Millennium, Ken P. Chong, ed., 1996), with V. Ramakrishnan, V. N. Rajpathak and S. Yu, p123-132

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Spatial Seismic Coefficients, Some Sensitivity Results, EM Apr. 96, p379-382

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Hysteresis Effect of Karst Vadose Zone in Spring Kr5, Mt. Kräuterin, Austria, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Rudolf Pavuza, Karl Mais and Hans Fischer, p1754-1759

Preliminary Studies of a Karst Warm Spring in Mt. Kräuterin, Austria, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with Rudolf Pavuza, Hans Fischer and Karl Mais, p1279-1284

Mechanism Study of Landslides, (Engineering Mechanics, Y. K. Lin and T. C. Su. 1996), with Mostafa A. Foda.

Zhang, Hua

Effect of Finite Source on Vertical Round Dense Jets, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Raouf E. Baddour, p919-922

Dominant Eddy Simulation in Turbulent Flow, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with V. H. Chu, p438-441

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see Ye, Zitong, (North American Water and Environment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), p3869-3873

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see Wang, Dunchun, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p456

SFE-Based Structural Reliability Analysis, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Bruce Ellingwood, p170-173

SFEM for Reliability of Structures with Material Nonlin-earities, with Bruce Ellingwood, ST June 96, p701-704

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Maximum Shear Strengths of Reinforced Concrete Struc-tures, (Worldwide Advances in Structural Concrete and Masonry, A. E. Schultz, ed. and S. L. McCabe, ed., 1996), with Thomas T. C. Hsu, p408-419

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Common and Variable Characteristics in Spatially Recorded Seismic Ground Motions, (*Probabilistic Mechanics & Structural Reliability*, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Aspasia Zerva, p628-

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see Gunturi, Surya K., (Natural Disaster Reduction, Georg W. Housner, ed. and Riley M. Chung, ed., 1997), p15-16

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Statistical Seismic Responses of Structures using Response Spectrum Matching Technique, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Masanobu Shinozuka, p527-530

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Flexible Boundary for Discrete Element Simulation of Granular Assemblies, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Stein Sture, p723-726

Zhang, S.

Wave Scattering by Submerged Elliptical Disk, with A. N. Williams, WW Jan./Feb. 96, p38-45

Zhang, X.

Analysing Road Traffic Movement Patterns by Image Analysis Using an Array of Transputers, Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), with R. E. Allsop and M. R. B. Forshaw, p109-

Zhang, Xiao

Zhang, Asio

A Diffusion-Type Adsorption Batch Test Method for De-termination of Benzene Adsorption on Regina Clay, (Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation, Lakshmi N. Reddi, ed., 1996), with S. Lee Barbour and John V. Headley, p175-186

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see Ju, J. W., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p727-730
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Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p648-651

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see Shen, Liyin, CO Dec. 96, p319-323

Zhang, Zhongjie The Reliability of Soil Classification Derived from Cone Penetration Test, (Uncertainty in the Geologic Environ-ment: from Theory to Practice, Charles D. Shackelford, ed., Priscilla P. Nelson, ed. and Mary J. S. Roth, ed., 1996), with Mehmet T. Tumay, p383-408

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Mucertainty and Risk Analyses for FEMA Alluvial Fan Method, (Risk-Bosed Decision Making in Water Re-sources VII, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene Z. Stakhiv, ed., 1996), with Larry Mays,

Uncertainty and Risk Analyses for FEMA Alluvial-Fan Method, with Larry W. Mays, HY June 96, p325-332

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Zhao, D. H.
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Zhao, Yong

Synthesis of Correlated and Vector-Valued Time Series Based on Random Vibration for Nuclear Piping, (*Proba-*bilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with D. A. Gasparini, p748-751

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zee Haldar, Achintya, (Probabilistic Mechanics & Structur-al Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), p364-367

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A Three Dimensional Oil Spill Model, (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Poojitha D. Yapa, p3764-3769

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Zhong, Wan-Xie

Direct Solutions of The Saint Venant Problems, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Xin-Sheng Xu, p1151-1154

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A Method to Study Suspended Sediment Induced Flow Characteristics Changes, (North American Water and Environment Congress & Destructive Water, Chen-chayya Bathala, ed., 1996), with C. Mendoza, p1447-1452

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see Youk, G. U., (Robotics for Challenging Environments, Laura A. Demsetz, ed., 1996), p248-254

Water Use "Recession" in San Diego Region, (North Amer-ican Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), with Kenneth A. Steele and Richard C. Pyle, p2958-2963

Fatigue Model of Asphalt Concrete, (Engineering Mechan-ics, Y. K. Lin and T. C. Su, 1996), with Robert Y. Liang, p563-567

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Compass: A Source Term Code for Investigating Capillary Barrier Performance, (High Level Radioactive Waste Management, Technical Program Committee, 1996), with M. J. Apted, p276-278

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Load Testing and Strength Evaluation of a Non-Composite Steel Plate Girder Bridge, (Building an International Community of Structural Engineers, S. K. Ghosh, ed. and Jamshid Mohammadi, ed., 1996), p884-891

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Analysis and Design of Liner System for a Large Ash Re-sidual Landfill, (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), with Luis E. Vallejo and Daniel C. Hsu, p114-129

see Vallejo, Luis E., (Engineered Contaminated Soils and Interaction of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996),

Zhou, Yunshen
Reliability of Ocean Structure Using Spectrum-Consistent
Excitation, (Probabilistic Mechanics & Structural Reliability, Dan M. Frangopol, ed. and Mircea D. Grigoriu, ed., 1996), with Zhikun Hou, Mikhail F. Dimentberg and Mohammad Noori, p982-985
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Effect of Maxwell Binder on Two-Phase Materials, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Jeff W. Rish, III and William C. Dass, p576-579

3-D Elastodynamic Green's Functions of Laminated Plates, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with A. H. Shah, p1159-1162

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see Malcherek, A., (Estuarine and Coastal Modeling, Mal-colm L. Spaulding and Ralph T. Cheng, 1996), p695-706

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Zimbelman, Darell D.

Drought Management in Northeastern Colorado, (North American Water and Environment Congress & Destruc-tive Water, Chenchayya Bathala, ed., 1996), p863-868

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Development of Performance Models for PMS, (Meeting the Challenge: Rebuilding Inner City Airports, Prianka Seneviratne, ed., 1996), with Margaret R. Broten, p.254-

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see Moo-Young, Horace K., GT Sept. 96, p768-775

see Moo-Young, Horace K., Jr., (Cold Regions Engineer-ing: The Cold Regions Infrastructure—An Interna-tional Imperative for the 21st Century, Robert F. Carlson, ed., 1996), p745-756

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Structuring Cases in a Case-Based Design Aid, (Computing in Civil Engineering, Jorge Vanegas, ed. and Paul Chi-nowsky, ed., 1996), with Sonit Bafna and Ellen Do, p308-313

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A Norm-Based Approach to the Quantification of Model Uncertainty. (High Level Radioactive Waste Management, Technical Program Committee, 1996), with G. E. Apostolakis, p252-254

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see Liu, Jinglian J., (North American Water and Environment Congress & Destructive Water, Chenchayya

Bathala, ed., 1996), p2212-2217
see Liu, Jinglian J., (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3668-3673

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Zofnass, Paul J. Big Business, CE May 96, p52-55

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Zoghi, M.
 Effects of Earthquakes on Highway Bridge Abutments, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with J. M. Hastings and D. W. Fenza, p193-194
 The Integrated Flood Control System of the Great Miami Valley, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), with K. A. Rinehart, p384-385

Zografos, Konstantinos G. Evaluating the Potential of ATT Technologies in Hazardous Materials Transportation Risk Management, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filip-pi, ed., 1996), with George M. Vasilakis, p480-484 see Karlaftis, Matthew G., TE Mar./Apr. 96, p96-104

BDS Implementation of AASHTO LRFD Design Philoso-phy, (Analysis and Computation, Franklin Y. Cheng, ed., 1996), with Richard Pickings and Karim Valimohamed, p453-463

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see Steenhuis, Tammo S., IR May/June 95, p234-238

Zoppou, C. disc. (of Conservative Characteristics-Based Schemes for Mass Transport, by C. W. Li and T. S. Yu, HY Sept. 94, p1089-1099) with S. Roberts, HY Feb. 96, p117-118

p1089-1099) with S. Roberts, HY Feb. 96, p117-118
disc. (of Uncertainty Analysis of Dredge Production with
Correlation, by Said M. Easa, WW Sept./Oct. 94, p499507) with K. S. Li, WW Mar./Apr. 96, p104-105
disc. (of Unsteady Finite-Analytic Method for Solute
Transport in Ground-Water Flow, by Whey-Fone Tsai
and Ching-Jen Chen, EM Feb. 95, p230-243) with J. H.
Knight, EM June 96, p587-588

Zorzi, Michele

see Pupolin, Silvano, (Applications of Advanced Technologies in Transportation Engineering, Yorgos J. Stephanedes, ed. and Francesco Filippi, ed., 1996), p271-275

see Parr, A., (Engineered Contaminated Soils and Interac-tion of Soil Geomembranes, Jay N. Meegoda, ed., Luis E. Vallejo, ed. and L. N. Reddi, ed., 1996), p70-81

Zrinji, Zolt

Regional Flood Frequency with Hierarchical Region of Influence, with Donald H. Burn, WR July/Aug. 96.

Zubrin, Robert

A Comparison of Alternative Methods for the Mars Sample Return Mission, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p724-

Zubrin, Robert M.
see Connolly, John F., (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p706-716

Zui, Hiroshi

Practical Formulas for Estimation of Cable Tension by Vibration Method, with Tohru Shinke and Yoshio Namita, ST June 96, p651-656

Zundel, Alan K.

A Graphical Environment for Multi-Dimensional Surface Water Modeling, (North American Water and Environ-ment Congress & Destructive Water, Chenchayya Batha-la, ed., 1996), with Norman L. Jones, p207-212

Zuo, Jiahong Jane

Time-Dependent Degradation of Structural Systems During Fire — A Method for Failure Prediction, (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), with Jamshid Mohammadi, p1042-1045

Zupka, Dusan

see Kuroiwa, Julio, (Natural Disaster Reduction, George W. Housner, ed. and Riley M. Chung, ed., 1997), p84-85

Zuppero, A.
Discovery of Abundant, Accessible Hydrocarbons Nearly Everywhere in the Solar System, (Engineering, Con-struction, and Operations in Space, Stewart W. Johnson, ed., 1996), p791-799

Zureick, Abdul-Hamid

see Littles, Jerrol W., Jr., (Engineering Mechanics, Y. K. Lin and T. C. Su, 1996), p959-962

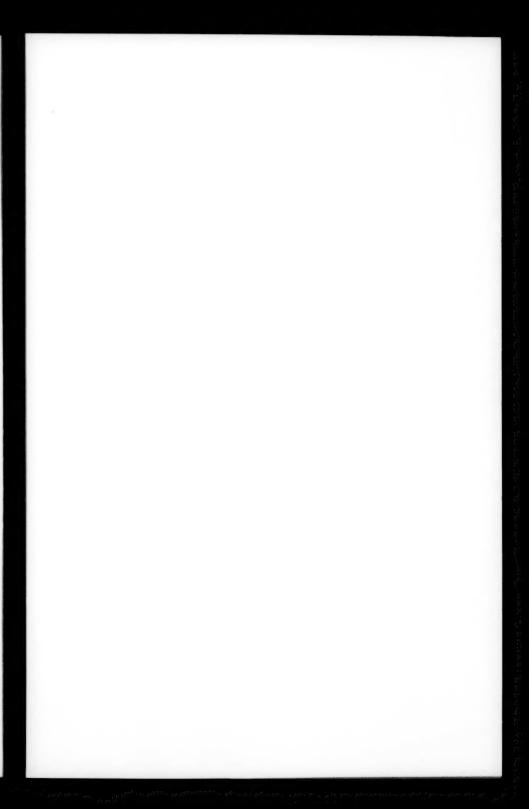
Zutavern, Zachary

Artificial Gravity, (Engineering, Construction, and Operations in Space, Stewart W. Johnson, ed., 1996), p1315-1318

Zutraun, Hermann, P.E. Green Light for Whom?, CE Sept. 96, p38

Influence of Flooding Events on Suspended Matter Quality of the Meuse River (The Netherlands), (North American Water and Environment Congress & Destructive Water, Chenchayya Bathala, ed., 1996), p3273-3274





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